REPUBLIC OF YEMEN

DIAGNOSTIC TRADE INTEGRATION STUDY UPDATE

DRAFT

February 2015

The Enhanced Integrated Framework

The Integrated Framework (IF) for Trade-Related Technical Assistance (TRTA) to Least Developed Countries was established in October 1997 under the auspices of the World Trade Organisation (WTO). The IF was conceived as a country-driven process leading to the integration of trade policy into national development strategies, and to co-ordinated delivery of trade-related technical assistance by development partners in response to identified needs. Yemen's first DTIS was conducted under the IF in 2003. The Enhanced IF (EIF) was developed on the basis of lessons learnt from early IF experiences, particularly given the need to improve the institutional framework for delivery of Diagnostic Trade Integration Study (DTIS) recommendations and the imperative of building supply-side capacity. Accordingly, the EIF can be seen as an instrument to ensure optimal use of scarce resources in support of Least Developed Countries (LDCs) to participate in the world economy and the multilateral trading system. Six core agencies, the International Monetary Fund (IMF), the International Trade Centre (ITC), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Program (UNDP), the World Trade Organisation (WTO) and the World Bank, combine their efforts with those of LDCs and donors to respond to the trade development needs of beneficiary countries.

The DTIS forms the analytical foundation for policy recommendations and actionable TRTA/capacity-building interventions. The current update is based partly on lessons from previous experience. The DTIS has five major components:

1. A review and analysis of the country's economic and export performance.
2. A description and assessment of the country's macroeconomic environment and investment climate.
3. A focus on the international policy environment and specific constraints that exports from the country face in international markets.
4. A focus on a small number of key labour-intensive sectors where the private sector can contribute to a significant expansion of output and exports and a good a priori case can be made that the poor stand to benefit.
5. A set of policy reform priorities and required capacity-strengthening at the sectoral level to capitalize on the major opportunities identified in the strategy.

The EIF has two funding facilities. Tier 1 supports the establishment of the national EIF structure and funds the DTIS and the DTIS Updates. Tier 2 funds Action Matrix priority projects to build up trade-related and supply-side capacities. While the funds support some priority small-scale projects that build trade related and supply-side capacities, the bulk of AfT funding to implement the Action Matrix and the country's trade strategy and action plan should originate from other modes of donor support.

The DTIS update process in Yemen

Security considerations and political instability have hampered the completion of the DTIS update, particularly during 2014 when working conditions in Yemen deteriorated, with power often intermittent and national and international travel sometimes became impossible. Chapter authors are to be congratulated for the successful completion of the work under such circumstances.

The DTIS update process began with preliminary preparations in 2013 including the engagement of national stakeholders in defining the scope of the DTIS, and seeking EIF financing and approval. The UNDP in its capacity as lead agency recruited the team leader, Daniel Gay, in late 2013. The team leader undertook a preliminary mission to Sana'a in March 2014 with the support and assistance of EIF Focal Point Iqbal Bahadir, Deputy Minister of Industry and Trade, and EIF Project Officer Mohammed Humaid.

A concept note was finalised on the basis of this mission, reflecting consultations with senior government officials and donor partners. Following approval of the concept note nine national consultants were recruited to write background reports in a range of trade-related areas. Due to security considerations and the difficulty in achieving travel approval for international consultants it was not possible to conduct the main mission as planned in mid-2014. At this stage, a national coordinator, Hamed Al-Ghazali, was recruited to work in-country to support the team leader. National consultants took the lead in the analysis and draft chapters, with support and review from international agencies, the national coordinator and the team leader, who oversaw their work from his home base.

The national consultants and their areas of specialism were: Tarek Kayed Mohamed (agriculture); Hamed Al-Ghazali (trade, poverty and human development); Ammer Aamer (manufacturing and mining); Ahmad al Biel (tourism); Yahya al-Mukatwel (trade policy, the macroeconomic environment and labour mobility); Taha Al-Fussail (the business environment and infrastructure); and Ali Saif (services).

Special thanks should go to Rebecca Whiting, who edited the reports for English and who helped format and finalise the DTIS report. Bushra al-Shirae and Wafa al-Eryani of UNDP Sana'a oversaw the process, providing operational and administrative support and liaising with chapter consultants. Luisa Bernal of the Trade and Human Development Unit in Geneva provided support throughout.

The aim was to build on the original DTIS and to learn lessons from its implementation by making the recommendations relevant, actionable, practical and capable of execution by government. Considerable attention was devoted to ensuring government ownership throughout the process and the text, with explicit links made to the key planning documents, including the Fourth Five Year Plan 2011-2015 and the Transition Program for Stabilization and Development 2012-2014.

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Table of Content

EXECUTIVE SUMMARY

Yemen faces numerous economic and developmental challenges, including political instability, the decline of oil revenues, weak domestic demand owing to high unemployment, and the existence of a large non-traded agricultural sector. To a large extent the growth of trade and its improved contribution to development hinge on increased stability and security. Commercial productive activities have been disrupted by political and social unrest, while damage to infrastructure, including sabotage of oil pipelines and power transmission lines, has worsened the impact. Investment, both domestic and foreign, has been obstructed by security concerns and the uncertainty surrounding the business environment. As in many Least Developed Countries (LDCs), long-term trade-related challenges lie chiefly in the shortage of productive capacity and deficiency of domestic demand and investment rather than primarily with market access.

Should political stability and an improvement in the trade environment be achieved, significant economic potential lies in mineral production; agricultural resources; and an unspoilt and attractive natural environment as well as historical and cultural sites which, given increased security, have proven tourism potential. Manufacturing and processing activities, currently at low levels, can potentially increase significantly. The country has a large and prosperous diaspora that appears eager to re-invest in the event of improved stability. Yemen's long mercantile history and its geographical position next to busy shipping routes are factors that suggest that trade can greatly contribute to development.

Partly as a result of political and social instability, long-term economic growth has been low and volatile. Gross Domestic Product (GDP) achieved an average growth rate of 2.8 per cent from 2001 to 2012. GDP growth peaked at 5.7 per cent in 2010 and then fell to -12.8 per cent in 2011 during the popular uprising. In 2012 GDP growth rose only 2 per cent and the situation remains unstable. The World Bank estimated GDP growth at 4.2 per cent in 2013. Gross National Income (GNI) per capita reached US$ 1,270 in 2012, according to the World Bank Atlas method, a slight increase from three years earlier but still below the regional average.

In order to address the long-term challenges confronting the country, the Government of Yemen (GoY) has embarked on a number of development initiatives. Comprehensive economic, administrative and financial reforms began in 1995. The first Diagnostic Trade Integration Study (DTIS) was completed in 2003. Subsequently the Third Five-Year Development Plan for Poverty Reduction 2006-2010 was put in place, followed by the Fourth Five-Year Plan 2011-2015 and more recently the Transitional Programme for Stabilization and Development 2012-2014. One of the main outcomes of the National Dialogue process was a move toward a federal system consisting of six regions, a decision which, if enacted, will have profound implications for trade and the economy.

Yemen still faces significant challenges in the final phases of the transitional process. The transitional plan included a first phase of electing an interim president and forming a national unity government, which was successfully completed in February 2012. The second phase entailed an inclusive national dialogue that will lead to the drafting of a new constitution. The National Dialogue Conference was established with participation from various political parties, youth and women's groups. The conference concluded in January 2014 with a consensus on the Dialogue Outcome Document, which was intended to serve as the basis for drafting the new constitution. The transitional period was extended by an additional year. At the time of writing, the constitution drafting committee had committed to submitting the draft constitution.

Public sector reforms were stalled during the transitional period due to instability and weakening government control. Diminishing oil production, traditionally the main source of government revenues, and the declining global price of oil, coupled with weakening support from regional donors, have also worsened the fiscal outlook.

Trade trends and policy

Despite political and security concerns, total trade has risen in absolute terms and as a proportion of economic output, reaching 71.4 per cent of GDP in 2013. Exports grew by an annual average of 7.9 per cent between 2003 and 2013, almost doubling over the period in absolute terms. This increase was dampened by the decrease in oil exports that started in 2007 due to the gradual decline in oil production. Oil exports made up on average 89.6 per cent of total exported goods during the period.

Non-oil exports comprise fresh and frozen fish, at 40 per cent of non-oil exports, according to the latest data; agriculture goods, including coffee, honey, fresh fruit and vegetables, accounting for 17.3 per cent; and manufactured goods, including canned fish, biscuits, juices, soft drinks, tanned leather, food salt, gypsum, cement, stones, marble and granite, together constituting 42.6 per cent of non-oil exports.

Imports grew faster than exports between 2003 and 2013, although they fell slightly during the global economic crisis. Imports are dominated by food, medicine and oil derivatives, which together accounted for an average 60 per cent of the total value of imports over the period.

The trade deficit reached its highest recorded level in 2013. The top countries receiving Yemeni oil exports were China, India, Thailand, South Korea, Singapore, Japan and Malaysia. Non-oil exports were mainly destined for Arab countries. Yemen is also increasingly exporting services, with trade in services increasing at an annual average of 11.5 per cent from 2003 to 2013.

Imports from the United Arab Emirates (UAE) were the highest of any country, accounting for 22 per cent of total imports in 2013, compared to 14 per cent in 2003. This was largely a result of the Greater Arab Free Trade Agreement (GAFTA) and points to increased re-export activity in the Dubai Free Zone. Saudi Arabia ranked second, accounting for 8.5 per cent of total imports in 2013, down from 11 per cent in 2003. Imports from the Netherlands, mainly solar and petrol products, rose to 8 per cent of total imports in 2013, compared to 2 per cent in 2003. Imports from China increased, making China the fourth highest source of imports by country, accounting for 7 per cent of the total. Yemen has also been importing oil derivatives from Switzerland over the last decade.

The establishment of free zones is seen as an increasingly important component of trade strategy, with one zone currently in operation in Aden. Areas of particular importance are Taiz, Al-Hodeidah and Hadramout, where industrial zones are expected to contribute to job creation and poverty alleviation.

Successive governments have prioritized the importance of trade in poverty reduction and economic development, and trade is promoted in all economic strategies and plans. Efforts are underway to develop a targeted trade strategy, and projects aimed at promoting exports are seen as an important priority, supported first and foremost by the Enhanced Integrated Framework (EIF).

After a decade of negotiations Yemen finally joined the World Trade Organization (WTO) at the Bali Ministerial in December 2013, formally becoming a full member the following year. The GoY hoped through accession to gain new trade and economic opportunities as well as a more predictable and open trading regime, while benefiting from the special and preferential treatment accorded to LDCs. Certain challenges need to be overcome, including the spread of knowledge about the WTO among the private sector and government officials. The enhancement of domestic productive capacity and economic diversification are additional priorities if Yemen is to take full advantage of trade potential. Post-accession opportunities are particularly important, and a transition period has been agreed until December 2016 for the implementation of a number of the WTO agreements, including the Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS), customs valuation and Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreements. The European Union (EU) has established a project to support Yemen's post-accession implementation plans.

In addition to its multilateral arrangements, Yemen is party to a number of regional and bilateral agreements. The GAFTA has resulted in an increase in trade with countries in the region, but exports have been limited by non-tariff and quantitative restrictions with the result that Yemen runs an increasing trade deficit. Gulf Cooperation Council (GCC) membership is inhibited in part by some countries' objection to Yemen's membership as well as by economic and income inequalities between Yemen and the member states.

Yemen has signed bilateral trade agreements with Ethiopia (in 1997), Turkey (1998), Indonesia (1998), Malaysia (1998), Djibouti (1998), Algeria (1999), Morocco (1999), Sudan (1999), Lebanon (1999), Qatar (2000) and Eritrea (2001). As with its multilateral and regional agreements, Yemen's limited productive capacity inhibits it from taking advantage of the export opportunities available under these agreements. Preferential free trade agreements with Iraq and Saudi Arabia have also been signed, with the latter leading to a significant increase in bilateral trade as the result of the exemption from customs requirements.

Trade preferences as a result of Yemen's LDC status exist with the EU, India, China and South Korea. Yemen is also a member of the Sana'a Forum for Cooperation with Sudan and Ethiopia. Although Yemen is member of the Organization of Islamic Cooperation, it has not yet joined the preferential trade system among the 15 member countries. Yemen is a founding member of the 20-strong Indian Ocean Rim Association for Regional Cooperation but is not party to the preferential trade agreement.

On the institutional side, the main government agencies responsible for trade policy and implementation are the Ministry of Industry and Trade (MOIT), the Customs Authority and the Federation of Chambers of Commerce and Industry (FCCI), each of which has received some capacity-building assistance. The overlapping of responsibilities has been a particular challenge in the past. Initiatives to improve human resources, policy formulation and trade negotiations are underway and should be prioritized. Federalism will present particular challenges, most notably in coordinating and enacting policy, and the new constitution and policymakers will have to take these issues into account.

Trade, poverty reduction and human development

Economic growth driven by trade can make a substantial impact on poverty reduction and human development. However in Yemen policy with respect to both trade and human development needs to improve. Yemen ranked 154th out of 187 countries on the United Nation's (UN) 2013 Human Development Index (HDI), placing it in the low human development group. In 2011 54.5 per cent of the population was estimated to live below the poverty line, representing a considerable increase in poverty since 1998 when the level was 40 per cent. Large gender disparities are apparent in the significant gaps between men's and women's access to economic, social and political opportunities. Two-fifths of young people are unemployed, ten million children are malnourished and Yemen is considered the seventh most food insecure country in the world.

Yemen is behind schedule on all of the Millennium Development Goals (MDGs). Progress has been slow in addressing poverty and hunger (MDG 1), gender equality (MDG 3), maternal health (MDG 5) and environmental sustainability (MDG 7). However, relative advancements have been made in education (MDG 2), combating diseases (MDG 6) and developing a global partnership for development (MDG 8).

Yemen's population of 24 million features a high annual growth rate of 3 per cent. It is estimated that over 45 per cent of the total population is below the age of 15 and around 25 per cent of the population are aged between 15 and 24 years. This youthful population puts a strain upon the country's limited basic services such as education, health and water; yet it has the potential to be a source of dynamism if appropriate education policies and job opportunities are in place.

Improving tertiary level and vocational education and stimulating promising economic sectors can contribute to generating employment opportunities for young people. Emphasis should be placed on building the capacity and skills of the young population in order to meet the demands of labour markets in the Gulf countries, which will also help increase remittance inflows.

Socio-economic inequality was one of the main triggers for the 2011 protests across Yemen. Inequality is an impediment to development and contributes to political instability. The Gini coefficient, which measures income inequality, puts Yemen at 37.7, roughly the median level, although this figure may understate the number of people living in extreme poverty. Inequality is particularly manifested along gender lines, with the majority of women still excluded from many economic, social and political opportunities.

Environmental issues constitute key obstacles to development and trade. Water scarcity continues to be a fundamental challenge, with the rapidly depleting water tables having serious repercussions on the agriculture sector and creating long-tern development challenges across all sectors. Yemen relies heavily on underground water, the levels of which are rapidly diminishing, and permanent surface water is non-existent.

Small and medium-sized enterprises (SMEs) constitute the vast majority of enterprises in Yemen and provide crucial employment for millions of economically disadvantaged people. The performance of SMEs is thus heavily intertwined with poverty and human development. Challenges include the overall economic and security environment, regulatory constraints, intermittent electricity and water supplies, increased input prices, transport challenges and limited access to credit. The GoY has adopted two strategy documents related to the agriculture and fisheries sectors, based on pro-poor job creation. SMEs should be supported in exploring export opportunities and clusters should be formed and equipped with market information and export knowledge and tools. For all companies, not just SMEs, energy security is critical, particularly given the economy's heavy reliance on oil export revenues and the prospect of further decline in oil production. The power sector suffers from low capacity, lack of investment and frequent sabotage. Investment is needed to modernize the distribution and transmission systems and to install new generation capacity through gas and renewable sources such as wind and solar.

Business and investment environment

Some of the main challenges confronting the business environment include the absence of sound and efficient infrastructure (physical and services), a robust legal system and reliable law enforcement. Incoming investment has declined in recent years due to political instability. Political crises have not only negatively impacted new investment projects but have also been detrimental to ongoing projects. The years 2006, 2007 and 2008 were the best years for private investment, with an annual average of more than 320.3 billion Yemeni rial. The sums have declined significantly since then.

Yemen has signed 37 bilateral investment agreements and seven international investment agreements. However, Yemeni nationals account for the majority of investment, representing 76.5 per cent of total private investment registered at the General Investment Authority (GIA) between 1992 and 2013. Investments made by Arab nationals accounted for 21 per cent and other nationalities only 2.5 per cent. Local private capital and that of the Diaspora remain the main sources of private investment.

New laws and amendments have led to improvements in the legal environment, although enhancements still need to be made, including amendments to the banking and investment law (2010). The institutional framework for investment also needs to be streamlined.

Yemen ranked 137th out of the 189 economies covered by the 2015 Doing Business Report, a significant drop since the achievements of 2008 and 2009. Business start-up procedures are a significant area of underperformance, despite earlier progress in this field. Yemen also underperforms in the power sector, tax administration and trading across borders.

Yemen was included for the first time in the Global Competitiveness Index (GCI) Report 2011-2012 and ranked 138th out of 142 countries. In the GCI 2014-2015 report Yemen ranked 142nd out of 144 countries, scoring 3 on the 1-7 scale.

The World Bank conducted Investment Climate Assessments (ICA) of Yemen in 2001, 2005 and 2010. The leading constraints identified by firms operating in Yemen in 2010 were corruption, electricity, land access, political instability and uncertainty concerning regulatory policy. Secondary constraints included the court system, tax rates and tax administration, absence of security (theft, disorder and crime) and financing. Corruption was the top concern in the 2010 ICA, having increased in ranking since the earlier surveys. Electricity was the second most mentioned constraint in 2010, compared to ranking seventh in 2005. Access to land was the third leading constraint, up from ninth place in 2005.

Electricity is Yemen's greatest infrastructural challenge. Access is limited and unreliable across much of the country, inhibiting economic growth and poverty reduction, as well as hindering the development of the business environment. Road transport, conversely, is reasonably good between urban areas, though not in rural locations. The domestic air transport network is small; most international flights depart from and arrive at Sana'a International Airport. Sea ports, despite having a long and distinguished heritage, are undeveloped and few in number. Information Communications Technology (ICT) infrastructure is at a nascent stage although it has significant business potential. Agreements were signed in the past to develop a railway connecting Yemen with regional neighbours but these plans are on hold.

Despite the GoY's efforts since March 1995 to open up economic activities to the private sector that had previously been monopolized by the state, considerable difficulties and challenges continue to hinder the private sector activities. The relationship between the government and private sector remains suboptimal. In order to improve the relationship, a comprehensive policy needs to be developed that recognizes the importance of public-private partnerships, with a clear vision, institutional mechanisms and a sound regulatory framework. Throughout any reform efforts, political economy concerns must remain paramount.

Agriculture

Agriculture is the second main source of export revenue (as far as productive sectors are concerned) after oil and gas production. Most agricultural exports are horticultural products. The Third Five-Year Development Plan for Poverty Reduction 2006-2010 viewed agriculture as a key sector, identifying the main constraints as inadequate agricultural marketing facilities and road infrastructure; modest food/crop processing capacity; a lack of data; and a limited capacity to monitor and enforce produce/food quality control and agricultural resources management regulations. Yemen's Strategic Vision 2002-2025 considered the development of agriculture and rural areas as an important step towards mitigating migration to urban areas, while the Poverty Reduction Strategy Papers 2003-05 affirmed that fisheries and agriculture are the most promising sectors.

While the 2003 DTIS provided valuable insight, it would have been beneficial to have provided more detailed coverage of water aquifers, the participation of women in agricultural production and the rapid growth in the production and consumption of qat, which is using up water resources at an unsustainable rate.

Agriculture accounts for 11 per cent of the national GDP, and 8.6 per cent if qat production is excluded. An estimated one-third of the national workforce is directly employed in agriculture. From 2006 to 2010 the average annual growth rate in production of value-added agriculture was 7.5 per cent. All crops showed positive growth from 2005 to 2010, with the largest increases in grain, coffee and honey.

Yemen does not produce sufficient livestock for domestic demand and depends heavily on imports of live animals, meat and dairy products. Over 57 per cent of livestock products consumed are imported. Current markets for mangoes, melons, onions, coffee, honey and okra present opportunities for increased export activity.

Barriers to agricultural market access exist, but as is the case with other products and services, the key obstacles to trade lie with productive capacity. Yemen's WTO accession and membership of bilateral and regional trade agreements have created opportunities for trade, but these opportunities can only be realized with supportive policies and strategies and expanded public and private participation and partnerships. With enhanced linkages to other productive sectors of the economy, growth in the agriculture sector will increase incomes for the economically disadvantaged and increase GDP growth.

The development of a system of quality grades and standards, developed either by the government or private sector, would elevate the image of Yemeni products in foreign markets and lead to stronger demand and higher prices. Standards are particularly important. To command the higher prices paid by supermarkets in Dubai, Saudi Arabia and Kuwait, producers will need to ensure that Yemeni fruit and vegetables consistently meet consumers' quality demands. Okra, onions, melons, bananas, mangoes and pomegranates face stringent health and safety controls in Dubai, Saudi Arabia and Kuwait, as well as in EU supermarkets.

Capacity building programmes for public and private institutions and production value chains need continuous financial and technical support through existing service providers backed by donors over the long term. In addition, official bodies at all levels should develop and promote well-tailored media programmes and extensive national campaigns to cover all aspects of export.

Fisheries

Around 65 commercially important marine species can be found in Yemeni waters, with the potential to produce 840,000 tonnes of fish each year. The fisheries sector contributes up to 3 per cent of the country's GDP and is a major source of employment, income and food security in coastal areas. However, the industry is relatively underdeveloped and consists largely of individual fishermen in small boats. As noted above, Yemen's Strategic Vision 2002-2025 identified the fisheries sector as one of the most important high-potential economic sectors, as did the Poverty Reduction Strategy Papers 2003-2005 and the Third Five-Year Plan for Socioeconomic Development and Poverty Reduction.

Currently over 43 fish processors/exporters are operating, of which 16 hold EU import certificates. These enterprises export an average 89,000 tonnes/year of products to more than 50 countries. Despite the Ministry of Fish Wealth's (MFW) conflicting statistics on exports of fish products, it is clear that the size of sector is still limited. Fisheries exports do not exceed 2 per cent of total exports, despite a recent increase in export to neighbouring Arab states such as Saudi Arabia and the UAE. A recent reduction in exports to the EU appears to be the result of Yemen's inability to consistently meet EU quality criteria. Yemen has long recognized the importance of developing aquaculture in order to cover the needs of the domestic market and also to increase exports, although production in the sector is currently very limited.

In general, regulations related to the fisheries sector are weakly enforced and inspectors are poorly trained, underequipped and lack the necessary budget to fulfil their duties. Regulations are difficult to enforce due to the presence of contradictory rules and the absence of a system of administrative fines.

Policy development at the MFW, which oversees fisheries sector operations, needs to improve, as does management of the sector and its legal framework. The revised structure approved in October 2010 involves four decentralized fisheries authorities, based in different governorates, and the Fisheries Research Authority, based in Aden with branches in Al-Hodeidah and Hadramout. Although the structure of these institutions has been improved, the MFW lacks organization and needs to be restructured, as do a number of other related fisheries institutions. It is also necessary for each institution's role to be clearly defined so as to avoid overlapping responsibilities.

Other issues include the poor quality of raw product due to unhygienic facilities on boats and at landing centres; difficulties in accessing credit, particularly from the commercial banking sector; the imposition of export levies; preferential fish auctioning practices whereby private sector buyers are charged "unofficial" fees by the cooperative associations; badly equipped and maintained landing sites, auction areas and markets; poor aviation infrastructure and freight capacity; and shortages of certain raw products.

The fisheries sector is likely to benefit from WTO accession through the anticipated improvement in the investment environment leading to increased investment throughout the value chain. However, international standards are a challenge. SPS issues are of particular importance, and improvements need to be made in a number of areas, including landing sites and auction facilities, the domestic market and distribution system, processing for export, quality control and assurance.

Facilities at local markets should be developed. Technology related to fish processing and fish products can be acquired through cooperation with regional and international institutions, leading to value-adding activities.

In addition, an efficient research service should be established and priority given to fish stock assessment, ensuring environmental sustainability, and supporting the management and development of marine capture fisheries. Women's participation in the fisheries sector needs to be encouraged so as to decrease gender disparity. This can be achieved through legal reforms and enhancing the capacities and performance of the MFW's Coastal Women Department. Finally, improvements to the business environment, as well as measures aimed at supporting SMEs, will also assist in the development of fisheries.

Tourism

Yemen is one of the oldest centres of civilization in the Middle East and has great potential to again attract tourists, as has been proven in the past. It lies in a strategic geographical location and boasts an array of diverse attractions, including four world heritage sites: Shibam-Hadramout, Old Sana'a, Zabid and the natural heritage site, Socotra Archipelago, which is relatively isolated from instability on the mainland.

The sector was performing well until a tragic kidnapping incident in 1998 led to a drop in tourist arrivals of over 50 per cent. The security situation currently means that tourism is at extremely low levels after a peak in 2010. Hotel occupancy rates rose 40 per cent in 2010, compared to the year before. Yemen's tourism receipts increased to US $347 million in 2010, 28 per cent up from 2009. In addition to direct income and taxation revenues, tourism generated employment for around 74,000 people, although more than 80 per cent of staff employed in private sector tourism have now lost their jobs. The impact of the downturn in tourism has also been severe for other sectors such as agriculture, manufacturing and fisheries.

In addition to security issues, inward tourism investment is hindered by a lack of technical knowledge, insufficient infrastructure, scarcity of capital and high interest rates. Disputes over land and property ownership also discourage tourism investment, both foreign and domestic.

A number of plans and strategies exist, including the National Tourism Strategy Plan 2010-2025 and the Strategic Action for Sustainable Tourism Development Plan 2011-2015. Each report is detailed and helpful, although a number of minor shortcomings need to be addressed. Government policy also needs to improve and be made more consistent.

Identifying and developing tourist sites is essential, as is the application of laws and regulations. Easing the entry process with visas granted at border points, as was previously allowed, would help to increase visitor numbers. Other measures that should be initiated to support the sector include improving facilities at touristic sites; enhancing the performance of staff in the Ministry of Tourism's regional offices and also of tourist guides and drivers; integrating tourism into the school curriculum; an awareness-raising campaign about tourism and its importance; establishing rest stops along routes; and encouraging adventure tourism through the establishment of relevant facilities. The Yemen Tourism Promotion Board should take responsibility for implementing a "Yemen Identity" project incorporating a website, photos and videos produced by a professional agency. It must also engage the services of public relations agencies in Europe, America and East Asia.

Labour mobility and Diaspora engagement

A shortage of decent employment opportunities is one of the biggest challenges Yemen is facing, as it undermines political stability and security. Almost 18 per cent of Yemen's labour force is unemployed, with particularly high rates of joblessness among young people and women. Over the next two decades the demographic pressure on Yemen's labour market is likely to continue and could potentially become more pronounced.

Outmigration must therefore become a central part of economic strategy. Migration is essential for economic prosperity and therefore needs to be properly managed, with adequate policies put in place to ensure migrants are treated fairly and the returns from their labour are maximized. Remittance inflows have stalled in recent years, their contribution to GDP declining from 25 per cent in 1990 to only 4.7 per cent in 2013.

Most Yemeni migration is circular and may be temporary or informal, with Saudi Arabia being the main recipient of emigrants. However, Riyadh has recently passed new regulations on the labour market, restricting the entry of Yemeni migrants. Rising anti-immigrant sentiment in Saudi Arabia resulted in the mass deportation of Yemeni migrants during 2012 and 2013. Saudi Arabia is building a stronger border and restricting access to Yemenis, which may also serve to undermine labour migration.

The majority of Yemeni migrants are not highly skilled, although there is also simultaneous emigration of skilled workers, such as physicians, a form of brain drain it may be difficult to counteract. However, the encouragement of circular migration should lead to greater remittance inflows and the return of skilled migrants. The large diaspora community that results from migration is a useful source of skills, remittance and investment capital.

A successful transition into the federal system will increase Yemen's chances of integration into the GCC. A labour mobility partnership framework that allows more Yemeni migrants to work in the GCC countries could be the first step towards economic integration. The Horn of Africa also represents a potential future market for emigrants.

The Ministry for Technical, Educational and Vocational Training should put measures in place to help migrants become more competitive in international markets and increase their earnings. With 78.8 per cent of migrants dependent on the Yemen-Saudi Arabia migration corridor, policy should prioritize political convergence and security. Given that Yemeni migration is mostly circular, programmes should focus on mobility agreements with the GCC countries and on services and products that maximize remittance and minimize remitting costs, including institutional and financial services and outreach to migrants.

The GCC can extend work visas and permits to skilled and unskilled Yemeni migrants. Yemen needs to undertake serious measures to combat illegal border crossing, smuggling and the activities of armed groups. In return, Saudi authorities could commit through bilateral agreements to offer preferential treatment to Yemeni circular migrants, as was the case until 1990. The GoY must offer political support to the migration policy, build capacity and provide financial resources.

Manufacturing and mining

The Yemeni industrial sector's contribution to economic growth has been minimal. After the protection and subsidies for manufacturing ended in 1995 when the government reduced tariffs and lifted restrictions on import licenses, many companies went out of business.

According to the Central Bank of Yemen, at constant market prices, the manufacturing sector registered a growth rate of 7.2 per cent in 2012 as it recovered from the previous year's crisis, during which manufacturing contracted 13.5 per cent. The contribution of manufacturing to GDP rose from 5.4 per cent in 2011 to 5.6 per cent in 2012.

Manufacturing establishments are predominantly located in the main cities of Sana'a, Taiz, Ibb and Hadramout. There is limited manufacturing in the strategic port cities of Aden and Al-Hodeidah, mostly due to the centralization of decision making in Sana'a.

Reasons for the limited contribution of manufacturing to economic output include the small size of enterprises, the high geographic concentration of industry, family and private ownership, a low ratio of value added to inputs, and self-financing of investment and activities. Almost 50 per cent of establishments are involved in food processing. Other trades include construction, clothing, woodwork and furniture.

Mining and quarrying are among the most promising and untapped of Yemen's resources. A range of metallic minerals, industrial metals and natural stones exist in Yemen, with the potential to contribute significantly to economic growth. There are currently 292 mines and quarrying sites, accounting for 2 per cent of employment, but the natural stones sector remains underdeveloped and needs additional support and promotion. Only nine local and international companies work in mineral exploration and exploitation

While manufacturing and mining exports are low, Yemen possesses potential competitive regional advantages in food, tobacco, textiles, garments, natural stones, furniture and woodwork production. Yemen can improve its regional economic position if it addresses product quality, prices, human resources, marketing strategy and the business environment. Infrastructure is another serious challenge, particularly power, roads and water.

The two main national manufacturing and mining institutions are the MOIT and the Yemeni Geological Survey and Mineral Resources Board (YGSMRB) under the Ministry of Oil and Minerals. A number of other institutions influence policy and decision making in the sector. Together, these institutions can create and foster an environment more conducive to the development of manufacturing and mining.

Measures should include reactivating the approved micro, small and medium-sized enterprises (MSME) strategy; establishing regional industrial support centres; accelerating the negotiation process of the management contracts for the industrial zones in Al-Hodeidah and Aden; establishing a fund for rehabilitating existing and establishing new industrial and economic zones; improving the capacity of the MOIT; updating the YGRSMB laboratories and building institutional capacity at the Yemen Standardisation, Metrology and Quality Control Organization; studies on the technical skill needs of the labour market; and strengthening coordination between the private and public sectors.

Services

The services sector has expanded in recent years, accounting for an average 43.6 per cent of GDP from 2001 to 2012. Although statistics are somewhat questionable, it is estimated that nearly 40 per cent of the labour force is employed in the services sector. Trade in services, at 21.6 per cent of total exports, is reasonably high compared with other countries in the region but lags behind the 55 per cent and 33 per cent recorded in Lebanon and Jordan, respectively. Yemen's services trade balance, however, was slightly in deficit from 2008 to 2013.

As part of its WTO accession package Yemen made commitments in 11 main service sectors and 78 sub-sectors. Horizontal commitments included restrictions on the minimum level of foreign investment; limitations on the rights of foreigners to rent land and real estate; preferential treatment for Yemeni service providers and services; and limitations on the maximum number of foreign workers in a business.

Should political stability be achieved, WTO accession is expected to impact the services sector through the anticipated increase in inward investment. Enhanced competition is expected to raise standards, although many sectors are already competitive, including telecoms, finance and accounting, all of which feature some form of foreign ownership.

In order to maximize the opportunities afforded through WTO accession, services sector policies need to be developed. No strategies exist for the communications and information technology sectors, despite their importance for the economy and human development. The National Strategy for Transportation 2008-2010 is well developed but needs to be updated and implemented. Challenges in the health sector relate largely to outdated administrative systems and a lack of financial resources.

Spending and policy in education need to improve, and current strategies have not been implemented. There is no strategy to enhance and develop legal services or accounting, while tourism policy must be augmented, as noted above. A number of tax and investment incentives exist for the services sector, although in practice these are not always provided.

One of the main priorities for the services sector is the undertaking of a survey to estimate the contribution of each industry to GDP, employment generation and foreign trade. The current method is inaccurate. The Strategic Action Plan for Sustainable Tourism Development 2011-2015 needs to be enacted. A detailed strategy must be put in place for each service industry, including updating legislation, restructuring relevant departments, improving infrastructure and fostering private sector involvement. The transportation sector requires particular support, including the incorporation of the transportation network in development plans; the establishment of logistics centres; and taking advantage of Yemen's location as a centre for trans-shipment; as well as building on and strengthening regional and international cooperation.

ACTION MATRIX – YEMEN

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
Trade Policy				
Advance mainstreaming of trade in national development plans and sectoral strategies	1. Formulate a trade strategy consistent with other strategies, particularly the export strategy, taking into consideration promising sectors	High/ Short term	Ministry of Industry and Trade (MOIT)	Trade Related Assistance to Yemen (TRAY)
	2. Integrate trade priorities into development plans and strategies	High/ Short term	Ministry of Planning and International Cooperation (MOPIC), MOIT	Enhanced Integrated Framework (EIF), United Nations Conference on Trade and Development (UNCTAD), United Nations Development Programme (UNDP)
	3. Establish a trade policy committee involving all stakeholders, including private sector representatives	High/ Short term	MOIT	TRAY, EIF
	4. Establish partnerships with research institutions, think-tanks and universities as a means to access expertise and analysis on trade-related issues	Medium/ Short term	MOIT	
Enhance the institutional capacity of the MOIT and related institutions to formulate, implement, monitor and evaluate trade and trade-related policies	1. Conduct a capacity needs assessment of the MOIT and identify gaps in technical expertise	High/ Medium term	MOIT	UNDP
	2. Restructure or clearly redefine the responsibilities of all MOIT departments, including the Communication and Coordination Office with the World Trade Organization (CCO WTO)	High/ Short term	MOIT	TRAY
	3. Upgrade the General Directorate for Intellectual Property Rights (IPR) into an IPR Authority	Medium/ Long term	MOIT	Bilateral donors
	4. Enhance the capacity of the EIF unit within the MOIT; evaluate and monitor its work on a regular basis	High/ Short term	MOIT	EIF
	5. Train MOIT staff in economic analysis, trade policy, trade negotiations and other critical areas under the ministry's mandate	High/ Short term	MOIT	EIF, UNCTAD
	6. Establish data bases and information systems in the policy areas related to the MOIT's mandate	High/ Medium term	MOIT	International Trade Centre (ITC)

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
Enhance capacity for trade promotion and trade negotiations	1. Establish a trade promotion organization; conduct a feasibility study and define structure and financial sustainability	Medium/ Medium term	MOIT, Ministry of Finance (MOF)	ITC, EIF
	2. Finalize the national export strategy	High/ Short term	MOIT	ITC, European Union (EU)
	3. Define negotiation priorities and targets for various stakeholders	Medium/ Medium term	MOIT	TRAY, UNCTAD, ITC, EIF
	4. Formulate and implement a capacity development plan to enhance the negotiation capacity of trade-related stakeholders	High/ Short term	MOIT, Ministry of Foreign Affairs	TRAY
	5. Establish mechanisms for monitoring implementation of World Trade Organization (WTO) accession commitments across relevant organizations[1]	Medium/ Short term	MOIT	WTO, EIF, UNCTAD
	6. Establish an entity with the authority to implement antidumping and safeguard provisions according to the WTO agreements	Medium/ Long term	MOIT	UNCTAD
Customs and Trade Facilitation				
Restructure and enhance the capacity of the Customs Authority	1. Complete plans on restructuring the Customs Authority; define duties, responsibilities and job descriptions	High/ Medium term	MOF, Customs Authority	World Customs Organization (WCO)
	2. Restructure the Customs Institute and provide adequate equipment and financial resources for its operation	Medium/ Medium term	MOF, Customs Authority	
	3. Define personnel training needs; formulate and implement training plans in response to needs	Medium/ Medium term	Customs Authority	WCO, World Bank, UNCTAD, Bilateral donors
	4. Introduce regulations and instructions as laid out in the amended Customs Law no. 12 (2010)	High/ Short term	MOF, Customs Authority	
	5. Enhance transparency, including through the maintenance of an up to date website	High/ Short term	Customs Authority	
Improve customs procedures and reduce delays in goods handling and clearance	1. Install Automated System for Customs Data (ASYCUDA) World Upgrade hardware and equipment Reform/upgrade internal and external networks Provide backup power plants to address intermittent power supply Gradually connect all border crossings to the ASYCUDA system	High/ Medium term	Customs Authority, Ministry of Communications and Information Technology	UNCTAD, World Bank

[1] The National Committee for Preparation and Negotiation with the WTO is headed by the minister of industry and trade

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
	2. Introduce customs risk management systems for goods inspection and clearance	High/ Medium term	Customs Authority	
	3. Improve inspection procedures - Install modern testing facilities - Issue inspection regulations	Medium/ Medium term	Customs Authority	
	4. Establish a one stop shop system to facilitate and accelerate customs procedures - Review legislation to address overlaps and duplication of functions across relevant authorities - Establish institutional mechanisms for cooperation among relevant authorities at ports and other border crossings - Promote cooperation with the private sector including carriers, insurance companies, banks, etc.	Medium/ Medium term	Customs Authority, Yemen Standardization, Metrology and Quality Control Organization (YSMO), Ports Administration, Ministry of Agriculture and Irrigation (MAI), Ministry of Public Health and Population (MOPHP), Ministry of Interior	International Finance Corporation (IFC), World Bank
Promote the establishment of free trade zones to facilitate trade	1. Restructure and upgrade Aden Free Zone in keeping with current investment trends and practices		Free Zones Public Authority (FZPA)	
	2. Establish new economic zones[2], particularly in Taiz, Al-Hodeidah and Hadramout		Free Zones Public Authority (FZPA)	
Diversify and enhance revenue collection	1. Reform tax system and legislation	High/ Medium term	MOF, Customs Authority	
	2. Combat smuggling through the tightening of sanctions; enhancing coordination with armed forces and the coast guard; and improving cooperation with neighbouring countries	Medium/ Medium term	MOF, Customs Authority, Ministry of Interior, Ministry of Defence, Ministry of Foreign Affairs	
Trade, Poverty and Human Development				
Increase livelihood and employment opportunities through trade, including for women and young people	1. Support the development of export-oriented activities in rural areas	High/ Medium term	MAI, Ministry of Fish Wealth (MFW)	Food and Agricultural Organization (FAO), United Nations Industrial Development Organization (UNIDO), ITC, International Fund for Agricultural Development (IFAD)
	2. Adapt regulatory requirements for enterprises to suit the needs of small and medium-sized enterprises (SMEs) and promote clustering of companies involved in export activities	High/ Short term	MOIT	International Finance Corporation (IFC), ITC, UNCTAD

[2] Economic or industrial zones, in which companies can be taxed, differ from free trade zones, which feature certain tax advantages.

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
	3. Encourage and strengthen women's entrepreneurship	High/ Medium term	MOIT, Small and Micro Enterprise Promotion Service (SMEPS)	IFC, ITC, UNCTAD
	4. Enhance young people's skills through partnerships between the private sector and universities, Ministry of Technical Education and Vocational Training (MTEVT), etc.	Medium/ Medium term	MTEVT, Universities	Chamber of Commerce and Industry (CCI)
	5. Implement the Youth Employment Action Plan	High/ Medium term	Ministry of Social Affairs and Labour (MOSAL), MTEVT, Ministry of Civil Service and Insurance (MCSI)	International Labour Organization (ILO)
Enhance access to essential services	1. Increase basic education enrolment rates, encourage female enrolment and reduce drop-out rates	High/ Medium term	Ministry of Education	International organizations and donors
	2. Expand coverage and enhance quality of health services	High/ Medium term	MOPHP	International organizations and donors
Promote the sustainable management of natural resources	1. Strengthen the legislative and institutional framework for the sustainable management of natural resources, particularly water and oil	High/ Medium term	Ministry of Water and Environment, Ministry of Oil and Minerals	United Nations Environment Programme (UNEP), UNDP, World Bank
Business Environment				
Improve the business environment to encourage private investment	1. Accelerate the reform agenda to improve rankings in the Doing Business Report indicators - Reactivate the Netherlands information technology infrastructure project for the MOIT -Expand the IFC business start-up simplification project (phase II) into other areas covered in the Doing Business Report	High/ Medium term	MOPIC, MOIT, Ministry of Public Works and Highways (MPWH), Private sector	IFC, German Federal Enterprise for International Cooperation (GIZ), Department for International Development (DFID), Government of the Netherlands
Improve the policy and institutional framework for investment promotion	1. Formulate a national facilitation and promotion strategy, including a national investment map	Medium/ Medium term	General Investment Authority (GIA), MOPIC	GIZ, IFC
	2. Strengthen the capacity of the GIA in outreach activities and service provision to potential investors	Medium/ Medium term	GIA, MOPIC	GIZ, IFC
Enhance the legal and institutional framework for public-private partnerships (PPP)	1. Enact draft legislation (August 2014) on private sector participation in infrastructure projects and public services	High/ Short term	MOIT, MOPIC, CCI, Private sector organizations	IFC, World Bank
	2. Formulate a strategy for PPP outlining principles of engagement, priority areas, objectives, etc.	Medium/ Medium term	MOIT, MOPIC, CCI, Private sector organizations, Yemen Geological Survey and Mineral Resources Board (YGSMRB), Federation of Yemen Chambers of Commerce and Industry (FYCCI), Yemeni Industrialists Association (YIA)	IFC, World Bank
	3. Clarify the roles and responsibilities of various government agencies on PPP	High/ Short term	MOIT, MOPIC	

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
	4. Enhance the capacity of the private sector and government entities in assessing, formulating and managing/implementing PPP projects	High/ Long term	MOIT, MOPIC, CCI	IFC, World Bank
Power and electricity infrastructure				
Increase the efficiency and performance of electrical power production	1. Increase investments in rehabilitation and maintenance of existing electricity generation, transmission and distribution infrastructure	High/ Medium term	Public Electricity Corporation (PEC), Ministry of Energy and Electricity (MOEE)	World Bank
	2. Reactivate the Yemen Electricity Distribution Loss Reduction project to enhance efficiency in the electricity system, rehabilitate plants, install meters, etc.	High/ Short term	PEC, MOEE	World Bank
	3. Connect isolated grids to the main public grid	Medium/ Medium term	PEC, MOEE	
	4. Conduct a loss reduction study and energy audit (feeder wise) of the distribution system	High/ Short term		World Bank
Expand electricity generation capacity, including through the promotion of alternative energy sources	1. Complete construction of Marib 2 power plant	High/ Short term	PEC, MOEE	
	2. Complete construction of Al-Mokha 60 MW wind farm	High/ Short term	PEC, MOEE	
Enhance governance of the electricity sector	1. Implement reforms outlined in the electricity Law no. 1 (2009) and its bylaws - Divide the PEC to separate responsibility for generation, transmission and distribution of electricity - Establish an independent regulatory entity for the sector	High/ Medium term	PEC, MOEE	World Bank
	2. Formulate and implement a plan for the generation, transmission and distribution of electricity at national and regional levels	High/ Medium term	PEC, MOEE	World Bank
	3. Enhance the financial sustainability of the PEC through: - Increasing the bill collection rate - Carrying out a study to review electricity fees, taking into account implications of fee reforms on access to electricity for the poor - Improve financial management and audit control - Improve customer service - Development capacity of the PEC’s personnel	High/ Medium term	PEC, MOEE	World Bank

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
Transport				
Develop and improve existing transport infrastructure, facilitating connectivity and efficiency of trade-related activities	1. Formulate a comprehensive national transport strategy and integrated sector plans	Medium/ Medium term	MPWH, MOPIC, Road Maintenance Fund (RMF)	
	2. Enhance road maintenance, including through strengthening the capacity of the RMF and MPWH in road asset management	Medium/ Medium term	MPWH, RMF	
	3. Complete construction of the Sa'adah-Aden International Corridor Highway	Medium/ Medium term	MPWH, RMF, MOPIC	
	4. Promote Yemeni construction and consultancy	Medium/ Long term	MPWH, RMF, MOPIC	
	5. Reactive the Open Skies policy in the main airports (Aden, Al-Hodeidah, Taiz and Al-Mukalla)	Medium/ Medium term	Ministry of Transportation, Civil Aviation and Meteorology Authority (CAMA)	
	6. Review, update and finalize the National Strategy for Sea Transport	Medium/ Medium term	Ministry of Transportation, MOPIC, Maritime affairs authorities	
Ports				
Improve marine ports infrastructure	1. Undertake a study to assess current conditions of marine ports, especially Al-Hodeidah and Aden	Medium/ Medium term	Ministry of Transportation, Yemen Red Sea Ports Corporation, Yemen Gulf of Aden Ports Corporation	
Information and Telecommunications (ICT) Infrastructure				
Provide a legal and institutional framework for the development of ICT	1. Formulate a telecommunications law and implement regulations	Medium/ Medium term	Ministry of Telecommunications and Information Technology, Ministry of Legal Affairs	International Telecommunication Union (ITU)
	2. Establish Yemen Telecoms Regulatory Authority (TRA)	Medium/ Medium term	Ministry of Telecommunications and Information Technology, Ministry of Legal Affairs	ITU, World Bank
Agriculture				
Expand and diversify agricultural production and exports	1. Increase agricultural productivity in priority sectors, including for export	High/ Long term	MAI/ Agricultural Research and Extension Authority (AREA), Universities, MOIT	FAO, IFAD, World Bank
	2. Improve production methods and marketing of cash crops such as coffee and honey	Medium/ Medium term	MAI/AREA, Universities, MOIT	FAO, IFAD, World Bank, EIF (Tier 2 project on honey)
	3. Implement the water harvesting investment programme to facilitate access to water for agricultural production	High/ Medium term	MAI, Ministry of Water and Environment, Social Development Fund (SDF), Agricultural and Fisheries Production Promotion Fund (AFPPF)	FAO, IFAD, World Bank

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
	4. Enhance the reach and quality of agricultural extension services for priority sectors for agricultural diversification and export	High/ Medium term	MAI/AREA, Universities, MOIT	
	5. Facilitate access to credit for small agricultural producers	High/ Medium term	AFPPF, SDF	
	6. Expand the distribution of solar panel-powered water pumps	High/ Medium term	MAI	
Enhance the functioning of agricultural markets	1. Enhance the quality and availability of agricultural production and marketing information (Marketing Information System (MIS) project)	High/ Medium term	MAI, General Directorate of Marketing and Agricultural Trade (GDAMT), Agricultural Cooperative Union (ACU), Cooperative Association, AFPPF, others	IFAD, FAO
	2. Expand the MIS coverage to new areas of agriculture	High/ Medium term	MAI, GDAMT, ACU, Cooperative Association, AFPPF, others	IFAD, FAO
	3. Improve marketing infrastructure to reduce waste and losses	High/ Medium term	MAI/AREA, PHTC in Aden, GDMAT, AFPPF	IFAD, FAO, United Nations Industrial Development Organization (UNIDO)
	4. Promote and strengthen administrative and institutional capacity of producers' organizations	High/ Medium term	ACU in coordination with MAI (FYCCI)	FAO, ITC
Strengthen the impact of agricultural production and trade on development	1. Build women's capacity for increased participation in agricultural production and marketing	High/ Medium term	MAI, MOPIC, ACU, Rural Women Development General Directorate, Women's associations and non-governmental organizations (NGOs)	
	2. Support capacity development of Rural Women Development General Directorate's personnel in planning, designing, implementing and evaluating women's and community projects on production and marketing of agricultural products	High/ Short term	MAI, MOPIC, ACU, Rural Women Development General Directorate, Women's associations and NGOs	
Increase the quality and value of agricultural products	1. Support training of small agricultural producers in post-harvest practices; preparation centres need to be better equipped and skills and practices improved	High/ Medium term	MAI/AREA, PHTC in Aden, GDAMT, AFPPF	IFAD, FAO, UNIDO
	2. Develop Yemeni standards and specifications - Raise awareness of these standards among producers and operators	High/ Medium term	YSMO, MAI, GDAMT	UNIDO, FAO
	3. Reduce regulatory overlap and enhance capacity in key trade-related functions regarding standards	High/ Medium term	YSMO, MAI, MOIT, MOPHP and National State Government (Under the federal system, this function will be conducted by federated states)	
	4. Launch an awareness-raising campaign regarding food safety, quality assurance and regulatory compliance among producers, especially those at maritime outlets		YSMO, MAI, MOIT, ACU, FYCCI, Cooperative Association	UNIDO, FAO
	5. Develop grades and standards for horticultural products and create a grade certification programme	High/ Medium term	MAI/AREA, General Directorate of Agricultural Affairs (GDAA), DGPP, ACU, AFPPF, private traders, FYCCI	

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
Manufacturing				
Strength the policy and institutional framework for micro, small and medium-sized enterprises (MSMEs)	1. Reactivate the implementation of the MSME strategy (already approved by Cabinet) and raise awareness on it	High/ Short term	MOIT	
Promote the development of industrial capacity	1. Establish regional industrial support centres	Medium/ Medium term	MOIT	
	2. Define a sustainable finance strategy for the rehabilitation of existing economic and industrial zones and the establishment of new ones	Medium/ Medium term	MOIT	
	3. Reactivate the Industrial Development Council		MOIT, MOPIC, CCI, Private sector organizations, YGSMRB, FYCCI, YIA	
Improve safety and quality of industrial products	1. Upgrade YGSMRB laboratories and build institutional capacity	Low/ Long term	YGSMRB, Ministry of Oil and Minerals	UNIDO
	2. Establish and equip laboratories for electrical and mechanical testing - Enhance cooperation with technical institutes	Low/ Long term	YSMO, Local universities and educational institutes	UNIDO
Fisheries				
Strengthen the policy, legal and institutional framework for the sustainable development of fisheries	1. Review and update the policy, legal and regulatory framework of the sector	High/ Medium term	MFW, Fisheries Associations (FAs), Cabinet	IFAD, Economic Opportunity Fund (EOF), EU, FAO
	2. Ensure alignment of policies and regulations with WTO provisions	High/ Medium term	MFW, FAs, Cabinet	FAO
	3. Develop the institutional, managerial and technical capacity of the MFW staff and other sector stakeholders and organizations for the sustainable management of fisheries	Medium/ Medium term	MFW, FAs	IFAD, EU via EOF, FAO
	4. Develop research and analytical capacity, including adequate information systems, for the assessment of fisheries resources in order to encourage sustainable management and exploitation	High/ Long term	MFW	EU via EOF

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
Develop fisheries marketing and other infrastructure to support fishing communities	1. Develop infrastructure in designated landing sites, including facilities for standard inspection	High/ Medium term	MFW, FAs	IFAD, Islamic Development Bank via EOF
	2. Establish cold storage facilities on boats and in landing/marketing sites	High/ Medium term	MFW, FAs	IFAD, UNIDO
	3. Improve local market facilities	High/ Medium term	MFW, FAs	IFAD, FAO
Enhance the participation of women in the fisheries sector	1. Build the material, technical and financial capacity of the MFW's Department of Coastal Women Development to support participation of and benefits to women in fisheries activities	Medium/ Medium term	MFW	IFAD, EU, FAO
	2. Improve access to finance for women involved in fisheries activities	High/ Medium term	MFW	IFAD via EOF
	3. Promote the organization of women's and community groups to better coordinate/ leverage technical assistance, finance, infrastructure, etc.	Medium/ Medium term	MFW	IFAD via EOF
Promote the development of aquaculture	1. Clarify roles and responsibilities among organizations involved in the development of aquaculture	High/ Medium term	MFW, Fisheries Research Authority, MAI, Marine Science and Biological Research Authority (MSBRA), Aquaculture Research Centre (ARC)	
	2. Promote private investment in aquaculture, including SMEs, by enhancing dialogue and cooperation and improving the business environment	High/ Medium term	MFW, MSBRA, ARC	
Tourism				
Enhanced the institutional framework for tourism development	1. Support staff development at the Ministry of Tourism (MOT), including in regional offices	Medium/ Medium term	MOT	
	2. Define mechanisms for supporting the capacity of private sector operators (e.g. tourist guides)	Medium/ Long term	MOT	
	3. Include tourism education in the school curriculum and integrate tourism concepts into illiteracy education	Medium/ Medium term	MOT, Ministry of Education	
	4. Devise and implement campaigns to raise awareness about tourism across the country	Medium/ Medium term	MOT, Ministry of Information	
Develop touristic sites and products to attract and host more tourists	1. Develop camping facilities in priority areas across the country	Medium/ Medium term	MOT, Local councils	
	2. Renovate guest houses, eco-lodges and handicraft centres in order to improve hospitality facilities for tourists	Medium/ Medium term	MOT, Local councils	
	3. Enhance touristic sites through pilot projects	Low/ Long term	MOT	

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
	4. Improve infrastructure and rehabilitate areas and roads surrounding sites	Low/ Long term	MOT	
	5. Develop rest stops and motels along road sides and near land ports	Medium/ Medium term	MOT, Local councils	
Dispora Engagement and Labour Mobility				
Enhance legal, policy and institutional framework for the protection of migrants' rights and promote labour mobility	1. Enact human trafficking law and national anti-human trafficking strategy	High/ Short term	Ministry of Defence, Ministry of Information, Ministry of Foreign Affairs, Ministry of Justice, National Security Authority (NSA), Political Security Agency (PSA)	International Organization for Migration (IOM), ILO, Gulf Cooperation Council (GCC)
	2. Establish a working group to formulate a new migration policy paper	High/ Medium term	Ministry of Immigration Affairs (MIA), MTEVT	IOM, ILO
	3. Enhance capacity of migration/labour mobility institutions - Establish a new ministry in charge of employment, technical education and vocational training, and migration - Create a national secretariat for youth employment - Establish a unit on mobility - Reactivate the labour market information system	Medium/ Medium term	MIA, MTEVT, MCSI	IOM, ILO, UNDP
	4. Formulate a comprehensive skill development strategy, taking into account labour mobility considerations	Medium/ Medium term	MTEVT, MOIT	World Bank, ILO, United States Agency for International Development (USAID)
	5. Review and restructure the Skills Development Fund	High/ Short term	FYCCI	World Bank, ILO, USAID
Promote cooperation with GCC countries on labour mobility and migration issues	1. Define lines of and formalize cooperation mechanisms (i.e. bilateral cooperation agreements) with GCC countries for the hosting of Yemeni labour, including defining a minimum quota	High/ Short term	MOSAL, Ministry of Education, MOPIC, FYCCI	IOM, Kuwait Fund, Abu-Dhabi Fund, GCC
	2. Establish training programmes for Yemeni labourers in GCC countries	High/ Medium term	MOSAL, Ministry of Education, MOPIC, FYCCI	IOM
	3. Establish seasonal employment programmes with receiving countries	High/ Short term	MOSAL	IOM
	4. Establish a reliable skills accreditation and certification system	High/ Medium term	MTEVT, FYCCI, SDF	ILO, GIZ, GCC
	5. Establish an apprenticeship system with close involvement of the private sector in defining strategies and programmes	Medium/ Medium term	MTEVT, FYCCI, Private sector organizations	ILO
Engage Diaspora participation	1. Develop hometown associations (HTAs) and Local Cooperative Associations for Development (LCAD) to promote networking among migrants	Medium/ Medium term	MIA	IOM

OBJECTIVE	RECOMMENDED ACTION	PRIORITY/TIMELINE	RESPONSIBLE AGENCY AND ENTITIES CONCERNED	POTENTIAL PARNERS
	2. Promote remittance and financial - and other - flows from the Diaspora	Medium/ Medium term	GIA, MIA	IOM, ILO, World Bank, UNDP
	3. Enhance partnerships between relevant institutions to reduce remittance costs	High/ Medium term	HTAs, LCAD, SDF, Central Bank of Yemen	IOM, World Bank
Services				
Enhance knowledge and understanding of the contribution of the services sector to the economy	1. Undertake a survey of the services sector	High/ Medium term	Central Statistics Organization (CSO), MOIT, MOPHP, MOPIC, MOSAL	Islamic Development Bank
Improve services sector strategies, planning and legislation	1. Develop strategies for each area of the services sector	High/ Medium term	MOIT, MOPHP, MOPIC, MOSAL	
	2. Improve legislation relating to ministerial structure in services-related ministries; ensure compliance with international requirements		MOIT, MOPHP, MOPIC, MOSAL The CCI and representatives of civil society organizations should be involved in drafting legislation	
	3. Build a database and a comprehensive and accurate information network that aids planning, analysis and studies	Medium/ Medium term	CSO	
	4. Conduct a capacity needs assessment for services-related ministries, making provisions for restructuring and training	Medium/ Long term	MOIT, MOPHP, MOPIC, MOSAL, Ministry of Higher Education and Scientific Research	
Improve access to financial services	Expand and support the financial services network to reach new areas, especially those that have touristic attractions; new financial services such as mobile banking should be a key component	Medium/ Long term	Central Bank of Yemen, Private banks	World Bank, International Monetary Fund, IFC
Improve ICT infrastructure and policymaking	Develop an ICT strategy drawing on international best practices and integrate it with the ICT strategies of regional neighbours	High/ Medium term	MOIT, MOPIC	

Abbreviations and acronyms

ACU	Agricultural Cooperative Union
ACT	Aden Container Terminal
AFPPF	Agricultural and Fisheries Production Promotion Fund
AIP	Agricultural Improvement Programme
ARC	Aquaculture Research Centre
AREA	Agricultural Research and Extension Authority
ASYCUDA	Automated System for Customs Data
ATA	Aid to Artisans
BOP	Balance of Payments
BOT	Build-Operate-Transfer
CA	Customs Authority
CASH	Competitive Agriculture Systems for High Value Crops
CAMA	Civil Aviation and Meteorology Authority
CBOs	Community-Based Organizations
CCI	Chamber of Commerce and Industry
CCO WTO	Communication and Coordination Office with the WTO
CI	Competitiveness Index
CSO	Central Statistical Organization
DAH	Department of Animal Health
DG Sanco	Directorate General for Health and Consumer Protection
DPI	Dubai Ports International
DRC	Domestic Resource Cost
DTIS	Diagnostic Trade Integration Study
EDSP	Economic Diversification Support Programme
EEZ	Exclusive Economic Zone
EFARP	Economic, Financial and Administrative Reform Programme
EIF	Enhanced Integrated Framework
EOF	Economic Opportunity Fund
EOSC	Economic Observatory for Studies & Consultancy
EPZ	Export Processing Zone
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FA	Fisheries Authority
FAO	Food and Agricultural Organization of the United Nations

FC	Fisheries Cooperative
FYCCI	Federation of Yemen Chambers of Commerce and Industry
FCU	Fisheries Cooperative Union
FDA	Food and Drug Administration
FFI	Formal Financial Institutions
FIAS	Foreign Investment Advisory Service
FOB	Freight on Board
FRA	Fisheries Research Authority
FTA	Free Trade Agreement
GAFSP	Global Agriculture and Food Security Programme
GAFTA	Greater Arab Free Trade Area
GAFZ	General Authority for Free Zones
GAHCP	General Authority for Historical Cities Protection
GALSUP	General Authority for Land, Survey and Urban Planning
GAOAM	General Authority for Antiquities and Museums
GATT	General Agreement on Tariffs and Trade
GCC	Gulf Cooperation Council
GCI	Global Competitiveness Index
GDMAT	General Directorate of Marketing and Agricultural Trade
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
GIA	General Investment Authority
GNP	Gross National Product
GTZ	German Agency for Technical Cooperation GmbH
HACCP	Hazard Analysis and Critical Control Point
HDI	Human Development Index
IDA	International Development Association
IDC	Industrial Development Council
IF	Integrated Framework
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFI	Informal Financial Institution
IFPRI	International Food Policy Research Institute
ILO	International Labour Organization
IMF	International Monetary Fund

IMI	International Migration Institute
IPOA	International Plans of Action
IPRs	Intellectual Property Rights
ITC	International Trade Centre
IUU	Illegal, Unreported and Unregulated
LCAD	Local Cooperative Associations for Development
LDC	Least Developed Country
LNG	Liquefied Natural Gas
MAI	Ministry of Agriculture and Irrigation
MCSI	Ministry of Civil Service and Insurance
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MFN	Most Favoured Nation
MFW	Ministry of Fish Wealth
MIA	Ministry of Immigration Affairs
MIS	Marketing Information System
MOEE	Ministry of Energy and Electricity
MOF	Ministry of Finance
MOHE	Ministry of Higher Education and Scientific Research
MOIT	Ministry of Industry and Trade
MOPHP	Ministry of Public Health and Population
MOPIC	Ministry of Planning and International Cooperation
MOSAL	Ministry of Social Affairs and Labour
MOT	Ministry of Tourism
MPWH	Ministry of Public Works and Highways
MRAs	Mutual Recognition Agreements
MRI	Mitsubishi Research Institute
MSBRA	Marine Science and Biological Research Authority
MTEVT	Ministry of Technical Education and Vocational Training
NAB	National Accreditation Board
NAES	National Agriculture Export Strategy
NAHOTI	National Hospitality and Tourism Institute
NAPA	National Adaptation Programme of Action
NASS	National Agriculture Sector Strategy
NEC	National Economic Corporation

NFSS	National Food Security Strategy
NGOs	Non-Governmental Organizations
NIP	National Irrigation Programme
NTS	National Tourism Strategy
NWSSIP	National Water Sector Strategy and Investment Programme
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OIC	Organization of Islamic Cooperation
OIE	World Organization for Animal Health
PEC	Public Electricity Corporation
PIP	Public Investment Programme
POL	Petroleum, Oil and Lubricant
PPP	Public-Private Partnership
QFFI	Quasi-Formal Financial Institution
RMMS	Regional Mixed Migration Secretariat
RWDGD	Rural Women Development General Directorate
SAPSTD	Strategic Action Plan for Sustainable Tourism Development
SFC	Sana'a Forum for Cooperation
SMEs	Small and Medium-Sized Enterprises
SPC	Yemen Ports Corporation
SPS	Sanitary and Phytosanitary
STB	Supreme Tourism Board
TAD	Transboundary Animal Disease
TBs	Treasury Bills
TBT	Technical Barriers to Trade
TPSD	Transition Programme for Stabilization and Development
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UAE	United Arab Emirates
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children’s Fund
UNIDO	United Nations Industrial Development Organization
UNWTO	United Nations World Tourism Organization
USAID	United States Agency for International Development
VAT	Value Added Tax

WB	World Bank
WTO	World Trade Organization
YAI	Yemeni Industrialists Association
YCG	Yemen Coast Guard
YGSMRB	Yemen Geological Survey and Mineral Resources Board
YSEA	Yemeni Seafood Exporters Association
YSMO	Yemen Standardization, Metrology and Quality Control Organization
YTPB	Yemen Tourism Promotion Board

A. OVERALL TRADE POLICY ISSUES

Macroeconomic environment, trade policy and institutions

Introduction

This chapter portrays developments in Yemen's economy over the last decade. Challenges to trade policy are also addressed, and improvements suggested.

The Government of Yemen (GoY) in 1995 adopted an economic, financial and administrative reform programme (EFARP) to address development challenges. Obstacles included price distortions, the structure of the economy, governance issues, high population growth and scarce water resources. The ultimate objective was to restructure the economy, identify its comparative advantages and explore its trade potential. Despite relative progress in several macroeconomic indicators during the first few years of the EFARP, the economy witnessed many setbacks due to selectivity in implementation. Business environment and economic freedom indicators portray an unfavourable climate, even compared with regional neighbours. The low levels of economic growth and development and the very limited production base contribute to Yemen's low ranking in development indices.

Yemen's transition since the popular uprising in 2011 represents a great opportunity for real reform, for the state and the people to accept political, economic and social changes and for the issues that have undermined the economic portfolio in times of stability as well as in crisis to be addressed. Politics had always influenced the economic agenda, augmenting problems and challenges. However, as politicians and numerous studies now agree that many of Yemen's political, social and economic difficulties have economic roots, this bias is starting to shift. The National Dialogue that concluded in January 2014 represents a mechanism and vehicle for change.

Macroeconomic performance and competitiveness

Yemen is a least developed country (LDC) with low human development. Gross domestic product (GDP) achieved an average growth of 2.8 per cent from 2001 to 2012. It dropped from 5.9 per cent in 2001 to 3.5 per cent in 2007, peaked at 5.7 per cent in 2010 and then fell to -12.8 per cent in 2011 due to the popular uprising. In 2012 GDP growth rose only 2 per cent and the situation currently remains unstable.

Growth trends have varied widely across the economic sectors. Telecommunications, fisheries, construction, agriculture and trade attained relatively high rates from 2001 to 2012, averaging 19.9 per cent, 12.1 per cent, 7.6 per cent, 5.7 per cent and 5.5 per cent, respectively. Other sectors recorded lower growth rates, the lowest of which were in hotels and restaurants at an average of 1.9 per cent and in transport and storage at 1.8 per cent. Extractive industries, the leading economic sector, recorded a negative performance over the period with an average decrease of 6.6 per cent, influenced by declining oil production and lately by frequent pipe line sabotage. Local markets have witnessed severe shortages in the supply of oil derivatives during the last three years and export activities also decreased significantly.

Table (1): Real GDP growth by economic activity per cent.

Item	2001	2005	2010	2011	2012
Agriculture, forestry and fisheries	4.7	3.9	7.1	3.8	3.2
Agriculture and forestry (without qat)	3.2	3.8	7.5	2.9	3.0
Qat	2.9	2.6	2.0	8.0	5.6
Fisheries	24.2	6.8	12.4	2.1	1.0
Mining and quarrying	0.2	-0.9	4.2	-18.6	-14.7
Quarrying	6.0	5.4	4.9	-19.6	4.4
Oil and gas	0.2	-0.9	4.1	-18.6	-15.0
Manufacturing	3.0	2.3	10.3	-13.5	7.2
Manufacturing (without refining)	2.9	1.9	11.0	-14.1	7.0
Oil refining	5.4	7.9	-0.4	-3.5	10.1
Electricity and water	7.3	9.1	6.7	-12.4	1.9
Construction	3.1	19.3	2.6	-25.2	9.1
Wholesale and retail trade	25.6	7.8	5.9	-16.3	5.6
Restaurants and hotels	-4.8	-8.1	9.8	-19.3	11.0
Maintenance	5.8	-2.9	-0.1	1.9	-16.6
Transport and storage	3.7	3.3	3.0	-27.1	-3.0
Communications	57.0	48.9	5.7	-25.9	9.5
Financial institutions	0.9	32.1	13.7	-11.3	7.1
Real estate and business services	3.7	3.4	9.9	6.5	6.4
Community, social and personal services	10.5	14.4	1.5	-10.9	-2.9
A- Total industries	5.8	5.6	5.9	-14.3	1.7
B- Producers of government services	6.0	4.8	3.8	3.7	3.6
General management	6.0	4.8	3.8	3.7	3.6
Health	6.0	4.8	3.8	3.7	3.6
Education	6.0	4.8	3.8	3.7	3.6
C- Household sector (services)	3.0	3.3	3.0	-19.6	3.0
D- Producers of private non-profit services	36.4	1.5	1.6	-30.7	2.6
E- Import duties	11.5	-16.8	3.4	-21.7	11.1
GDP at market prices	5.9	5.1	5.7	-12.8	2.0
Non-oil output	8.6	7.0	5.9	-11.9	4.4

Government policies between 2001 and 2012 incorporated several attempts to partly resume reform, focusing on restructuring the economy through new legislation to improve the investment environment and support sustainable growth.[3] The two five–year development plans extending from 2001 to 2010 attempted to stimulate growth and enable the private sector to lead economic development by taking advantage of the gains made by promising sectors. Policies also aimed to integrate the national economy into regional and global economies.

Table (2): Investment (as per cent of GDP)

Item	2001	2005	2010	2011	2012
Total investment	21.3	26.7	21.2	19.5	24.1
Productivity of investment	4.7	3.7	4.7	5.1	4.1
Investment by ownership per cent					
A- Total industries	88.9	90.1	89.7	88.5	86.9
Public sector	35.2	40	31.8	33.6	29.6
Private sector	53.7	50.1	57.9	55	57.3
B- Government services	9.2	8.4	9.2	10.6	11.8
C- Household sector	0.1	0.1	0.1	0	0
D- Private non-profit	0	0	0	0	0
E- Import duties	1.8	1.4	1	0.8	1.2
Total	100	100	100	100	100

Sources: Central Statistical Organization (2012) *Calculated

The GoY adopted a new investment and tax package to encourage private investment. Total investment increased from 21.3 per cent of GDP in 2001 to 26.7 per cent in 2005 and then fell to 24.1 per cent in 2012. Private investment was the greatest contributor, hovering between 50.1 per cent and 57.3 per cent of total investment in all industries. Public investment was not constant, increasing from 35.2 per cent of total investment in 2001 to 40 per cent in 2005 and then declining to 29.4 per cent in 2012. Investment in government services fell from 9.2 per cent of total investment in 2001 to 8.4 per cent in 2005 before climbing to 11.8 per cent in 2012 (Table (2)). Public and government services investment has been unstable as a result of the volatility of revenues.

Investment trends mirror Yemen's economic system and investment policies, which are consistent with the overall government approach of enhancing the role of the private sector and strengthening development partnerships among stakeholders. Government investment did not succeed in providing the necessary infrastructure while private investment continued to concentrate on projects in trade and services, passing over high value added and employment projects.

The lack of accurate investment statistics categorized according to ownership and economic activity prevents accurate estimations of sectoral productivity. Assuming that each sector's productivity was equal,[4] investment productivity fell from 4.7 Yemeni rial for each Yemeni rial invested in 2001 to 3.7 Yemeni rial in 2005, climbing back to 4.7 Yemeni rial in 2010 then to 5.1 Yemeni rial in 2011 before slipping to 4.1 Yemeni rial in 2012. Surprisingly, the estimate during 2011, the year of the popular uprising, recorded an improvement.

An obvious gap exists between the relatively high and stable 3 per cent population growth and the volatile economic performance. Real per capita GDP growth has been negative in most years, leading to decreased purchasing power and the inability of most citizens to meet their needs. Inflation increased to 12.5 per cent in 2010 and reached 23.2 per cent in 2011 before declining to 5.8 per cent in 2012. These rates have been much higher than growth in per capita income, resulting in a decline in real income. Recent improvements in inflation raise concerns about the accuracy of these estimates, given the relative stability of the exchange rate over the last three years.

Table (3): General economic indicators

	2001	2005	2008	2009	2010	2011	2012
GNP per capita (USD)	589.8	863.1	1287.9	1197.4	1253.2	1190.7	1264.1
Growth in GNP per capita per cent *		18.5	13.9	-7.0	4.7	-5.0	6.2
Inflation per cent			5.81	10.98	12.49	23.17	5.81
Growth of total current expenditures per cent*		38.4	38.0	-20.8	18.4	8.0	15.3
Growth of capital and investment expenditures per cent*		20.2	-3.1	-10.2	2.0	-46.1	26.4
Share of current expenditures in total expenditures per cent*		72.1	83.0	80.0	82.7	90.1	87.1
Share of capital and investment expenditures per cent*		21.3	13.4	14.6	13.0	7.1	7.5
Investment productivity *	4.7	3.7	4.0	4.6	4.7	5.1	4.1
Growth of total investment per cent*		41.1	11.3	-18.7	16.4	-9.9	29.7
Growth of GDP per cent*		26.4	19.1	-4.9	18.6	-1.9	4.8

Source: Central Statistical Organization (2012) *Calculated

The accumulated effects of the necessary economic reforms not being implemented exacerbated these trends, leading to lower incomes and standards of living. The Arab Spring and the popular uprising in Yemen, coupled with the lack of security, culminated in deteriorating economic conditions and higher rates of poverty. By 2012 food insecurity affected about 10.5 million people[5].

There are many challenges preventing increased growth and development, the most important of which are the population growth across Yemen and widespread illiteracy. Also, investment in development is very limited in relation to need, falling from 21.3 per cent of total public spending in 2005 to 13 per cent in 2010 and to 7.5 per cent in 2012. Given the severity of the situation, Yemen must eliminate obstacles to growth before seeking to further export activity through trade agreements and free trade zones, and not vice versa.

Growth in the agriculture sector averaged 5.7 per cent from 2012-15, despite obstacles such as water scarcity, traditional production and harvesting tools and means, the prevalence of field crops and absence of effective policies. Grain production dominates the cultivated areas, although it declined slightly from covering 58.7 per cent of the total cultivated land in 2010 to 56.9 per cent in 2012. It is followed by fodder production, which remained almost constant at about 11 per cent. Qat crops increased from covering 10.1 per cent of the cultivated areas to 11.2 per cent over the same period.

The contribution of the oil sector to GDP fell from about 30 per cent in 2001 to 22.3 per cent in 2005 and to 10.3 per cent in 2012, due to the continuous decline in oil production since 2005 and recent sabotage of oil pipelines. The decline in oil revenues has had a significant effect on the national budget.

The contribution of trade to GDP increased from 11.9 per cent in 2001 to 16.2 per cent in 2012. Extractive industries and transportation and storage fell during the same period from 30 per cent and 9.8 per cent of GDP to 10.3 per cent and 8.95 per cent, respectively. The contributions of real estate and business services, construction, and communications were varied, growing from 5.8 per cent, 3.8 per cent and 1.1 per cent of GDP to 7.5 per cent, 6.3 per cent and 6 per cent, respectively (Table (4)).

Table (4): Structure of real GDP by economic activity per cent.

Item	2001	2005	2010	2011	2012
Agriculture, forestry and fisheries	11.9	11.6	13.4	16.0	16.2
Agriculture and forestry (without qat)	7.5	6.8	8.3	9.8	9.8
Qat	3.3	3.0	2.8	3.4	3.6
Fisheries	1.1	1.8	2.4	2.8	2.8
Mining and quarrying	30.0	22.6	13.5	12.6	10.5
Quarrying	0.2	0.2	0.2	0.2	0.2
Oil and gas	29.8	22.3	13.2	12.4	10.3
Manufacturing	5.0	4.9	5.4	5.4	5.6
Manufacturing (without refining)	4.7	4.5	5.1	5.0	5.3
Oil refining	0.3	0.3	0.3	0.3	0.4
Electricity and water	0.6	0.6	0.7	0.7	0.7
Construction	3.8	5.5	6.9	5.9	6.3
Wholesale and retail trade	14.3	18.6	19.3	18.5	19.2
Restaurants and hotels	1.7	1.7	1.6	1.4	1.6
Maintenance	1.3	1.1	1.0	1.1	0.9
Transport and storage	9.8	10.5	11.2	9.3	8.9
Communications	1.1	2.7	6.5	5.6	6.0
Financial institutions	2.8	3.1	3.4	3.5	3.7
Real estate and business services	5.8	5.5	5.9	7.2	7.5

Item	2001	2005	2010	2011	2012
Community, social and Personal services	1.1	1.3	1.2	1.2	1.2
A- Total industries	89.2	89.6	90.0	88.5	88.2
B- Producers of government services	8.9	8.9	8.8	10.5	10.7
General management	5.1	5.1	5.1	6.0	6.1
Health	0.4	0.4	0.4	0.5	0.5
Education	3.4	3.4	3.4	4.0	4.1
C-Household sector (services)	0.1	0.1	0.1	0.0	0.1
D-Producers of private non-profit services	0.0	0.0	0.0	0.0	0.0
E- Import duties	1.8	1.4	1.0	0.9	1.0
GDP at market prices	100	100	100	100	100
Source: Central Statistical Organization (2012)					

Yemen's trade performance is skewed by the high dependence on imports for food needs, production equipment and inputs. Commodities such as food, live animals, mineral fuels, machinery and equipment together account for more than 75 per cent of total imports. Exports are totally dominated by fuel products, which accounted for 87.4 per cent of total exports in 2010 and 86.9 per cent in 2012.

Table (5): Importance of main commodity groups.

as per cent of total trade*							**as per cent of exports and imports***					
Commodity	**Exports per cent**			**Imports per cent**			**Exports**			**Imports**		
	2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Food and live animals	15.2	14.5	10.6	84.8	85.5	89.4	6.4	6.7	6	24.9	29.3	31.6
Beverages and tobacco	18	16.8	9.2	82	83.2	90.8	0.4	0.3	0.2	1.3	1.2	1.4
Raw materials other than fuels	20.9	19.9	15	79.1	80.1	85	0.4	0.3	0.2	1.1	1	0.9
Mineral fuels and lubricants	72	67.5	66.8	28	32.5	33.2	87.4	86.3	86.9	23.7	31.1	27.1
Petroleum products	100	100	100	0	0	0	68.1	64.6	75.5	0	0	0
Coal and oil	19.8	9	7.6	80.2	91	92.4	8.3	4	3.5	23.4	30.8	26.8
Animal fats and vegetable oils	1.8	5.1	4.1	98.2	94.9	95.9	0.1	0.1	0.2	3.3	2.1	2.2
Chemical materials	12.9	26	21.1	87.1	74	78.9	1.6	3.2	3.3	7.4	6.9	7.6
Manufactured goods	4.1	7.2	5	95.9	92.8	95	0.8	1	0.9	13.6	9.9	11
Machinery and transport equipment	6.8	7.9	8.2	93.2	92.1	91.8	2.2	1.8	2.1	20.9	15.3	14.5
Miscellaneous manufactured goods	4.3	5.9	3.1	95.7	94.1	96.9	0.2	0.3	0.2	3.7	3.2	3.7
Non- classified commodities	67.2	7.3	24.8	32.8	92.7	75.2	0.4	0	0	0.1	0	0.1
Source: Central Statistical Organization (2012)										***Calculated**		

In 2009 the trade deficit became more pronounced at 18.9 per cent of total trade. It then reached 23 per cent in 2012. The increasing deficit portrays the obstacles to enhancing trade's role in supporting development and improving the international competitiveness of local products.

Public finance and oil revenues

In the framework of implementing the EFARP the GoY sought to adopt policies to manage the budget deficit while simultaneously supporting economic growth and development projects. However, public expenditure as a percentage of GDP increased from 30 per cent in 2003 to 31 per cent in 2005 and to 34.1 per cent in 2012, exceeding public revenue each year despite the latter's increase from 26.3 per cent in 2003 to 29.2 per cent in 2005 and to 29.3 per cent in 2012. The budget deficit widened to 4.7 per cent of GDP in 2012.

Current spending rose to an average 80.7 per cent of public expenditure and peaked at 90.1 per cent in 2011, exceeding public expenditure by an annual average of 17.4 per cent. Investment spending was limited to an average 14.4 per cent of public expenditure. It dropped from 25.8 per cent in 2003 to its lowest level of 7.1 per cent in 2011. This trend completely contradicted government policies aiming to direct more investment towards production industries, enhance sustainable development, social protection and economic diversification, and improve infrastructure to provide a better investment environment.[6]

Table (6): Public budget as percentage of GDP*

Year	2003	2004	2005	2009	2010	2011	2012
A) Total revenue	26.3	27.6	29.2	21.6	25.0	24.5	29.3
B-Total revenue (excluding grants and aid)	26.0	27.0	28.8	21.1	24.4	24.0	26.4
1-1 Current revenue	26.0	27.0	28.7	21.1	24.4	24.0	26.4
a-Tax revenue	7.7	8.2	7.5	6.8	6.3	5.3	7.1
- Direct taxes	4.6	4.8	4.3	3.5	3.0	2.6	3.4
- Indirect taxes	3.1	3.3	3.2	3.3	3.2	2.8	3.7
b- Non-tax current revenue	18.3	18.8	21.3	14.4	18.2	18.6	19.3
1-2 Capital revenue	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1-3 Grants and aid	0.3	0.6	0.4	0.5	0.5	0.5	2.9
a- Current grants (foreign)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b- Capital aids (foreign)	0.3	0.6	0.4	0.5	0.5	0.5	2.9
Total expenditures (including net lending)	29.9	29.5	30.7	30.1	28.7	28.9	34.1
1-Central subsidies	4.4	5.2	7.5	6.6	7.8	7.5	5.3
2- Current transfers	2.3	2.2	1.9	2.6	2.3	2.5	3.4
3- Investment and capital expenditures	7.9	7.1	6.6	4.5	3.8	2.1	2.6
Third: Net lending	1.5	1.4	1.7	1.3	0.8	0.2	1.4
Forth: Net external debt commitment	0.1	0.1	0.5	0.2	0.0	-0.3	0.7
5-1 Deficit/surplus (overall)	-3.6	-1.9	-1.5	-8.6	-3.8	-4.4	-4.7
6-2 Local financing (net)	3.5	1.8	1.0	8.4	3.7	4.7	4.0
Expenditure/ Total revenues	113.6	106.8	105.3	139.6	115.1	117.8	116.1
Source: Central Statistical Organization (2012)					***Calculated**		

Public revenue grew at an annual average of 13.8 per cent, mainly due to oil revenue. Public revenue is totally dependent on current revenue, which exceeded 98 per cent of total revenue in some years. Non-tax current revenue increased from 69.3 per cent of total revenue in 2003 to 72.9 per cent in 2005 before falling to 65.8 per cent in 2012. This trend implies reliance on investment assets or non-tax revenue, not on services provided to the community. In contrast with many Arab countries, such as Syria, Lebanon and Egypt, non-tax revenue accounted for about 75 per cent of total revenue. As for collected taxes, direct taxes on income and profits amounted to 45 per cent of total taxes, with indirect taxes making up the remaining 55 per cent. In some Arab countries, including Jordan and Lebanon, indirect taxes are an important source of public revenue, exceeding 70 per cent of total revenue.[7] The contribution of indirect taxes to total revenue in Yemen remained small, increasing slightly from 11.8 per cent in 2003 to 13 per cent in 2010 before falling to 12.6 per cent in 2012. Overall, the composition of public revenue exhibits an obvious imbalance in the collection process and policies.

Table (7): Revenue items as percentage of total revenue

Year	2003	2004	2005	2010	2011	2012
Total revenue (excluding grants and aids)	98.7	97.7	98.8	97.9	97.9	90.1
1- Current revenue	98.6	97.7	98.5	97.9	97.9	90.1
a-Tax revenue	29.3	29.6	25.6	25.1	21.8	24.3
- Direct taxes	17.5	17.4	14.7	12.1	10.5	11.7
- Indirect taxes	11.8	12.1	10.9	13.0	11.3	12.6
b- Non-tax current revenue	69.3	68.1	72.9	72.8	76.1	65.8
1-2 Capital revenue	0.2	0.0	0.3	0.0	0.0	0.0
a- Fixed assets sales	0.2	0.0	0.2	0.0	0.0	0.0
b- Sales of inventories	0.0	0.0	0.0	0.0	0.0	0.0
c- Sales of non-produced assets	0.0	0.0	0.1	0.0	0.0	0.0
1-3 Grants and aid	1.3	2.3	1.2	2.1	2.1	9.9
a- Current grants (foreign)	0.0	0.0	0.0	0.0	0.0	0.0
b- Capital aid (foreign)	1.3	2.3	1.2	1.9	2.1	9.9
c- Domestic borrowing and treasury bills	0.0	0.0	0.0	0.2	0.0	0.0
Total revenue (including grants and aid)	100	100	100	100	100	100
Source: Central Statistical Organization (2012)			***Calculated**			

Official development assistance (ODA) increased from 1.3 per cent of total revenue in 2003 to 1.9 per cent in 2010 and to 9.9 per cent in 2012. This last increase was due to the efforts of regional and international partners in assisting Yemen during the difficult period of political crisis. Friends of Yemen meetings culminated in total pledges of more than US$ 8 billion as of mid-2014.

As a result, expenditure to revenue ratio averaged 115 per cent over the period, improving from 113.6 per cent in 2003 to 105.3 per cent in 2005 before deteriorating to 116.1 per cent in 2012. Fiscal policy failed to manage the chronic budget deficit, which in many years exceeded safe levels.

At times the GoY attempted to decrease unnecessary expenses in favour of social and development expenditure.[8] Some minor policies were adopted, designed to cut spending in hospitality expenses, diplomatic representation abroad, travel, vehicle purchase and fuel cost. However, the deficit continued to increase due to the lack of political will.

The GoY relied almost entirely on issuing treasury bills (TBs) to manage the budget deficit and to absorb high liquidity in order to control inflation and foreign exchange speculation. Sales of TBs multiplied at an average rate of 23.5 per cent from a mere 18.9 billion Yemeni rial in 2001 to 89 billion Yemeni rial in 2005 and to 193 billion Yemeni rial in 2012. Investors tend to buy short-term TBs, which account for the large majority of total TBs, due to low confidence and a preference for gaining quick yields. Fiscal policy does not focus on encouraging long-term TBs that would allow the funds to be used to enhance development and create jobs.

While at one point the Central Bank of Yemen reduced the issuance of TBs and restricted them to companies and private individuals, the sheer number of TBs absorbed all banking sector surpluses in pension funds and saving deposits. Pension funds owned 50.6 per cent of TBs, banks owned 34.6 per cent and private sector and individuals accounted for a mere 3.3 per cent.

Table (8): Outstanding treasury bills (billion Yemeni rial)

	2001	**2002**	**2005**	**2010**	**2011**	**2012**
Nominal value	121.69	138.49	356.68	647.4	697.66	994.78
Purchase value	118.38	129.15	328.54	590.46	639.78	906.47
	Ratio of TBs to national resources *					
	2003	2004	2005	2010	2011	2012
Nominal value to national resources	30.3	37.5	32.5	36.5	40.8	52.0
Total cumulative TBs		44.2	151.08	227.63	357.77	412.16
Growth rate per cent			43.2	-4.5	57.2	15.2

Source: Central Statistical Organization (2012)	*Calculated

The accumulation of TBs as well as the issuing of other bonds led to a dramatic increase in domestic debt, which grew from 121.7 billion Yemeni rial in 2001 to 356.7 billion Yemeni rial in 2005 and reached an unprecedented 994.8 billion Yemeni rial in 2012. TBs ratio to total revenue almost doubled from 30.3 per cent in 2003 to 52 per cent in 2012. The already strained budget was further burdened by the need to service the growing domestic debt.

While TB issuance was intended to be a short to medium-term strategy, its continuous role weakened the economy and heightened economic stagnation. The high return on TBs influenced the interest rate, which peaked at 30 per cent and then fell gradually to its current rate of 18.7 per cent. These rates are detrimental to new investments and also skew priority investment away from promising sectors.

Finally, the absence of a development vision coupled with weak institutions prevented economic use of the available resources. This is further evidenced by the very low absorptive capacity of donor support since the London Consultative group meeting in 2006. The government desperately needs to improve collection means to raise public revenue and avoid resorting to foreign borrowing.

Monetary policy

The GoY aimed at controlling money supply to curb inflation, but in practice money supply continued to grow at high rates, exceeding GDP growth and putting pressure on the supply of goods and services, which lead to double digit inflation rates. Money supply increased at an average rate of 15.7 per cent from 2001 to 2012. The trend was irregular, declining from 18.8 per cent in 2001 to 13.7 per cent in 2005 and then growing to reach a climax of 21.5 per cent in 2012. In parallel, nominal GDP grew at an average 12.7 per cent over the same period, including achieving -1.9 per cent in 2011. The increase in money supply has been largely due to fiat money, which declined from 42.2 per cent of total money supply in 2000 to 25.2 per cent in 2010 before picking up again to reach 30.9 per cent in 2012.

Table (9) Money supply per cent.

	2001	2005	2010	2011	2012	Average per cent *
Currency outside banks	37.6	29.9	24.1	34.3	29.1	29.0
Deposits under demand	12.3	10.1	10.6	9.5	10.9	10.5
Total currency	49.9	40.0	34.7	43.8	40.1	39.5
Time deposits	8.9	13.7	20.8	19.9	23.3	18.1
Saving deposits	7.2	7.1	5.7	5.6	6.1	6.3
Foreign currency deposits	32.5	32.1	34.3	26.6	26.7	30.1
Earmarked deposits	0.9	1.9	1.6	1.5	1.7	2.5
Pension-fund deposits	0.6	5.2	2.9	2.6	2.1	3.6
Total quasi money	50.1	60.0	65.3	56.2	59.9	60.5
Total money supply	100	100	100	100	100	100
Deposits under demand	12.3	10.1	10.6	9.5	10.9	10.5
Total currency in banks	62.4	70.1	75.9	65.7	70.9	71.0
Currency outside banks	37.6	29.9	24.1	34.3	29.1	29.0
Total money supply	100	100	100	100	100	100
Total money supply growth rate	18.8	13.7	9.2	0.1	21.5	15.7
Interest on commercial bank lending	15-20	15-21	23-29	23-29	21-27	
Interest on deposits	13	13	20	20	18	
	2003	2005	2010	2011	2012	
Money supply/GDP per cent	34.4	30.4	33.1	33.8	39.2	31.8

Sources: Central Statistical Organization (2012), Central Bank of Yemen (2012)	*Calculated

While a solid monetary policy is judged by the ability of the banking sector to mobilize savings and reduce money outside of banks, this has not been the case in Yemen. This can be achieved through many mechanisms, particularly interest rates, which moved gradually from 13 per cent on deposits in 2001 to 20 per cent in 2010 and down to 18 per cent in 2012. As a result, the ratio of money outside banks fell from 37.6 per cent in 2001 to 24.1 per cent in 2010 and then increased to 29.1 per cent in 2012.

The central bank resorts to other instruments, such as reserve ratios, to ensure adequate liquidity for economic transactions and to preserve foreign exchange reserves. The central bank also adopts a managed floating exchange rate policy that corresponds with economic developments and at the same time provides foreign exchange to cover imports of basic commodities.

Investments in Yemen

Investment projects between 2007 and 2012 were concentrated mostly in construction and fixed assets, which increased respectively from 49.4 per cent and 24.1 per cent of gross fixed capital formation in 2007 to 60.6 per cent and 28.4 per cent in 2010, before dropping to 49.9 per cent and 22.4 per cent in 2012. Investment in machinery and equipment decreased from 21.6 per cent of gross fixed capital formation in 2007 to 8.9 per cent in 2010 and then rose to 26.1 per cent in 2012. These trends confirm the structural imbalance in the distribution of investment spending, which only focuses on a few sectors.

By ownership, private sector investment dominated, increasing from 48.8 per cent of gross fixed capital formation in 2007 to 63.7 per cent in 2010 and then falling to 53.9 per cent in 2012. Government investment ranked second, falling from 29 per cent in 2007 to 26 per cent in 2010 and then further to 12.1 per cent in 2012. Ranking third was public sector investment, in both production and services, which dropped from 10.9 per cent in 2017 to only 5.1 per cent in 2010 before climbing to 16.9 per cent in 2012. Mixed (public-private) sector investment ranked lowest, dropping from a mere 0.4 per cent in 2007 to 0.1 per cent in 2010 and then rising to 0.2 per cent in 2012.

Table (10): Gross fixed capital formation by ownership per cent

Item	2007	2008	2009	2010	2011	2012
Government	29.0	26.8	23.9	26.0	26.0	12.1
Public sector	10.9	10.1	7.4	5.1	5.1	16.9
Production	9.4	8.6	5.6	3.6	3.6	12.0
Services	1.5	1.5	1.7	1.5	1.5	4.9
Mixed sector	0.4	0.2	0.1	0.1	0.1	0.2
Private sector	48.8	52.8	61.3	63.7	63.7	53.9
Gross fixed capital formation	100	100	100	100	100	100
Source: Central Statistical Organization (2012)						

Domestic capital dominated newly registered investment from 2011 to 2012, excluding investment in the oil sector. Domestic capital increased from 95 per cent in 2011 to 98.8 per cent in 2012, followed by Gulf Cooperation Council (GCC) countries' investment, which dropped from 3.7 per cent to 0.3 per cent over the same period. Other foreign investment also fell from 1.3 per cent in 2011 to 0.3 per cent in 2012. These figures do not track the implementation of the projects but only certify registration.

Table (11): Investment projects by nationality

	2011	2012*

Nationality of investors	Capital (million Yemeni rial)	per cent	Jobs created	per cent	Capital (million Yemeni rial)	per cent	Jobs created	per cent
Domestic	172488.5	95.0	3557	81.8	70134.8	98.8	2794	88.3
GCC	6637. 2	3.7	112	2.6	213.8	0.3	59	1.9
Arab	63. 1	0.0	162	3.7	471.3	0.7	240	7.6
Foreign	2424.6	1.3	519	11.9	186.1	0.3	72	2.3
TOTAL	181613.3	100	4350	100	71006.1	100	3165	100
Source: Central Statistical Organization (2012)					***Calculated**			

Foreign investment has been very limited and has created very few jobs, even when compared to newly registered investment projects. Of course, significant new investment is not expected until Yemen is able to ensure political stability and security. Investment Law no. 22 (2002) offered certain tax exemptions but was superseded by Law no. 15 (2010), which adopted a different approach to attracting investment. The unstable business environment and the impact of the popular uprising and continued political crisis and unrest, coupled with the deterioration of economic conditions, have not allowed for the impact of this new legislation to be analyzed.

Table (12): Foreign direct investment (million US$)

Item	2005	2007	2008	2009	2010	2011
Direct investment	-302.1	917.3	1,554.6	129.2	-93.3	-712.8
Oil companies' investment	-302.1	876.9	1,002.1	129.2	-135.9	-756.5
Inflows of investment	932.3	2,536.2	2,331.5	1,676.3	2,021.8	1,216.6
Outflows of investment	-1,234.4	-1,659.3	-1,329.4	-1,547.1	-2,157.7	-1,973.1
Growth of direct investment per cent*		74.3	69.5	-91.7	-27.8	664.0
Growth of inflows of investment per cent *		64.9	-8.1	-28.1	20.6	-39.8
Exchange rate	194.94	199.38	199.98	207.19	213.75	213.75
Source: Central Bank of Yemen (2012(				***Calculated**		

Foreign direct investment (FDI) inflows have been irregular and volatile during recent years. FDI increased by an average 64.9 per cent between 2005 and 2007, shrunk by 28.1 per cent in 2009, increased by 20.6 per cent in 2010 and then dropped again by 39.8 per cent in the following year due to the popular uprising and political crisis. These investments were mostly in the oil sector, which remains small in comparison to those of the oil-rich neighbouring countries and invites limited involvement of international companies and investment projects.

Balance of payments

The balance of payments (BOP) is an important indicator of a country's economic relations with other countries. Governments usually work to enhance surplus or minimize deficit through controlling movement of capital, services and foreign exchange.

Current account

Yemen's current account recorded a deficit from 2003 to 2006, which peaked at US$ 2.53 billion in 2009 before improving to a deficit of US$ 985.6 million in 2012. Current account contribution to GDP rose from 1.3 per cent in 2003 to 8.9 per cent in 2009 before falling to 3 per cent in 2013. These changes were mostly influenced by current transfers, which achieved a surplus during those years, supported by a trade surplus in some years.

Balance of trade

Yemen's rate of economic (trade) exposure as a percentage of GDP rose from 52 per cent in 2001 to 57.7 per cent in 2005 and then dropped slightly to 55.9 per cent in 2012. The higher this ratio is, the stronger the correlation between GDP growth and foreign trade variables and the more sensitive the national economy becomes to the volatility of international markets.

Trade grew consistently up until 2010, increasing by 19.2 per cent in 2002 and by 33.6 per cent in 2005. In 2010 it declined by 30.3 per cent and continued to achieve negative growth in 2011, which amounted to 2.4 per cent due to the popular uprising, before rising by 9.4 per cent in 2012.

Overall, the balance of trade is not in Yemen's favour, particularly since 2009 when the deficit became more pronounced, reaching 18.9 per cent of total trade that year and then rising to 23 per cent in 2012. Previously, trade activities had experienced a growing surplus from US$ 367 million in 2003 to US$ 1.7 billion in 2005 before recording a deficit of US$ 1.98 billion in 2009 and of US$ 824.6 million in 2010. During the exceptional circumstances of the years of the uprising and political upheaval, the balance of trade achieved a surplus of US$ 574.2 million in 2011 and recorded a huge deficit of US$ 3.79 billion in 2012. This was mainly due to weak imports activities and then the steep decline of oil exports in 2012.

Balance of services

The deficit in services continued to grow from US$ 544.2 million in 2003 to US$ 883.4 million in 2009 and further to US$ 1.2 billion in 2012. Its relative weight as a percentage of GDP fluctuated, rising from 4 per cent in 2003 to 5.7 per cent in 2006, then dropping to 1.7 per cent in 2010 and increasing again to 3.7 per cent in 2012. Major factors were payments to oil companies, transportation, insurance, construction and medical services abroad, all of which stood against a meagre inflow of foreign exchange from tourism activities.

Balance of income

Balance of income, which accounts for capital movement, recorded a constant deficit from 2003 to 2012. The deficit increased from US$ 1.03 billion in 2003 to US$ 1.61 billion in 2005 and further to US$ 2.34 billion in 2011 before dropping to US$ 1.45 billion in 2012. The trend was primarily dictated by the outflow of capital and proceeds of oil companies operating in Yemen, alongside a steep decline in the investment portfolio.

Balance of current transfers

The balance of current transfers is mainly composed of remittance from Yemenis working abroad, in addition to other private transfers and official government grants. The balance continued to increase year by year, jumping from US$ 1.38 billion in 2003 to US$ 2.13 billion in 2010. In 2012, mainly due to a change in the method of estimating remittance, the figure more than doubled to US$ 5.46 billion. Remittance is a key source of foreign exchange and its relative weight as a percentage of GDP amounted to 16.6 per cent in 2012. Current transfers were also made by donors, although there have been significant delays in receiving some of the funds pledged in the successive Friends of Yemen meetings in Riyadh, New York and London during 2012 and 2013.

Table (13): Balance of payments (million US$)

Item /Year	2003	2005	2009	2010	2011	2012
I- Current account	175.7	646.0	-2527.4	-1054.1	-527.4	-985.6
1- Trade balance	367.0	1700.3	-1986.8	-824.6	574.2	-3786.1
Exports	3924.4	6413.2	5881.0	7648.3	9116.7	7569.8
Imports	-3557.4	-4712.9	-7867.8	-8472.9	-8542.5	-11356.0
2- Services (net)	-544.2	-860.3	-883.4	-533.9	-897.9	-1203.3
3- Income (net)	-1026.6	-1612.5	-1172.1	-1819.0	-2337.4	-1453.2
Credit	94.2	178.2	115.0	54.5	53.3	29.3
Debit	-1120.8	-1790.7	-1287.1	-1873.5	-2390.7	-1482.5
Direct investment returns	-984.9	-1602.7	-926.5	-1509.7	-2025.5	-1117.2
Portfolio returns and other investment	30.6	62.7	43.0	-20.7	-23.4	-47.4
4- Current transfers (net)	1379.5	1418.5	1514.9	2123.4	2133.8	5457.1
Credit	1454.5	1471.2	1628.3	2181.1	2183.4	5517.3
Debit	-75.0	-52.7	-113.4	-57.7	-49.6	-60.2
General government	149.0	153.7	403.2	647.1	774.7	2155.2
Other sectors	1230.5	1264.7	1111.8	1476.3	1359.1	3301.9
II- Capital and financial account	140.6	-253.6	-353.3	28.9	-527.2	2195.7
1- Financial account	140.6	-253.6	-353.3	28.9	-527.2	2195.7
1.1- Direct investment	5.5	-302.1	129.2	188.6	-517.8	685.4
Of which: oil companies	181.8	-302.1	183.8	146.1	-562.1	318.8
Inflow	854.7	932.3	1257.2	2200.9	1507.6	1832.0
Outflow	-672.9	-1234.4	-1073.5	-2054.8	-2069.7	-1513.1
1.2- Other investments	135.1	48.5	-482.5	-159.8	-9.4	1510.2
III- Errors and omissions	19.3	191.9	1587.2	120.0	-343.6	392.8
Overall balance	335.6	584.4	-1293.4	-905.3	-1398.2	1602.9
Financing	-335.6	-584.4	1293.4	905.3	1398.2	-1602.9
A- Net reserve assets (increase= -)	-356.5	-764.3	1283.9	810.7	1391.8	-1644.6
Reserve assets	-326.3	-713.8	1324.4	830.8	1410.0	-1626.4
Source: Central Statistical Organization (2012)						

Capital and financial account

The capital and financial account has also been volatile. It achieved a surplus of approximately US$ 140.6 million in 2003, recorded a deficit of US$ 253.6 million in 2005 and again reached a surplus of US$ 2.2 billion in 2012. This was due to the inflow of direct investment, especially of oil companies, despite continued high outflows of capital, particularly during the last four to five years. The overall trend was negative with rocketing rates, amounting to 1,924.8 per cent in 2011 and 516.5 per cent in 2012. The relative importance of this account as a percentage of GDP dropped from 10.2 per cent in 2003 to 7.4 per cent in 2005 and to 6.8 per cent in 2010 before rising again to 16.6 per cent in 2012. Again, the trend was influenced by irregular capital inflow and outflow, particularly investment in oil.

Overall balance

The overall BOP reflects these changes in its components. It achieved a surplus of US$ 335.6 million in 2003 and of US$ 584.4 million in 2005. In 2009 it recorded a large deficit of US$ 1.29 billion and then US$ 905.3 million in 2010 before reaching a surplus of US$ 1.6 billion in 2012. Its relative importance to GDP reached 2.5 per cent in 2003, 3.1 per cent in 2005, then dropped to 2.9 per cent in 2010 before rising again to 4.9 per cent in 2012. The capital account and the current transfers were the major factors, especially in 2012, as evidenced in investments of foreign oil companies and the doubling of remittance inflow. However, the overall surplus of the BOP in some years conceals many imbalances, most importantly:

- Weak production and services base in addition to growing reliance on oil exports, which increased from 88 per cent of total exports in 2003 to 92.8 per cent in 2005 before declining to 82.1 per cent in 2010 and rising to 82.7 per cent in 2012
- Low level of revenue from tourism, telecommunications and government services, coupled with weak proceeds from transport and insurance services and construction
- High level of error and omissions, which amounted to US$ 1.58 billion in 2009, raising serious questions about the accuracy of many estimates, particularly remittance

Reserve assets

Reserve assets suffered a net deficit of US$ 356.5 million in 2003, rising further to US$ 764.3 million in 2005. A surplus of US$ 1.28 billion was achieved in 2009 and increased to US$ 1.39 billion in 2011 before dropping to a deficit of US$ 1.64 billion in 2012. This account was mainly influenced by proceeds from oil exports, which are unstable and subject to the volatility of international prices. ODA also played a crucial role, particularly in recent years.

External debt

Yemen's external debt is within safe limits. Debt rose from 19.7 per cent of GDP and 66.4 per cent of exports in 2010 to 22.1 per cent of GDP and 84.3 per cent of exports in 2012. Debt service to GDP increased from 0.8 per cent in 2003 to 1.5 per cent in 2005 and then to 3.5 per cent in 2012. Its ratio to exports increased from 2 per cent in 2003 to 2.6 per cent in 2005 and then to 4.8 per cent in 2012 but remains within the safe limits, although growing reliance on ODA can be seen.

Total domestic and external debt as a percentage of GDP increased from 10.6 per cent in 2003 to 11.6 per cent in 2005 and then jumped to 30.1 per cent in 2010 and to 37.2 per cent in 2012. Its ratio to total exports tripled from 33.5 per cent in 2005 to 101.5 per cent in 2010 and then reached 141.8 per cent in 2012. This portrays the start of a worrying trend, given the current economic conditions and public finances conducive to high debt service and expanding budget deficits, which increased annually by an average 15 per cent between 2003 and 2012.

Table (14): Public debt

	2003	2005	2009	2010	2011	2012
Foreign public debt						
As per cent of GDP *				19.71	19.34	22.10
As per cent of exports *				66.4	61.3	84.3
Total Public Debt (domestic and foreign)						
As per cent of exports *	33.5	32.2	43.9	101.5	97.3	141.8
As per cent of GDP *	10.6	11.6	10.8	30.1	30.7	37.2
Foreign debt service to exports per cent	0.48	2.63	0.14	1.02	0.06	0.21
Source: Central Statistical Organization (2012), Central Bank of Yemen (2012)					***Calculated**	

Trade statistics in Yemen depict a decline in competitiveness due to the low level of competitiveness of local products and the limited activity in domestic as well as export markets.

Imports accounted for 42.2 per cent of total trade in 2001 then increased to 48.9 per cent in 2005 and to 61.5 per cent in 2012. Inversely, exports' share of total trade declined from 53 per cent in 2001 to 49.5 per cent in 2005 and then to 37.4 per cent in 2012. The ratio of exports to imports fell from 136.8 per cent to 104.3 per cent and then to 62.5 per cent leading to a trade deficit of 17.9 per cent in 2010 and 23 per cent in 2012. Crude oil exports, which dominate the export list, have been the main driver for this evolution in trade. The trend reflects the absence and/or weak implementation of proper policies, in particular those promoting export activities.

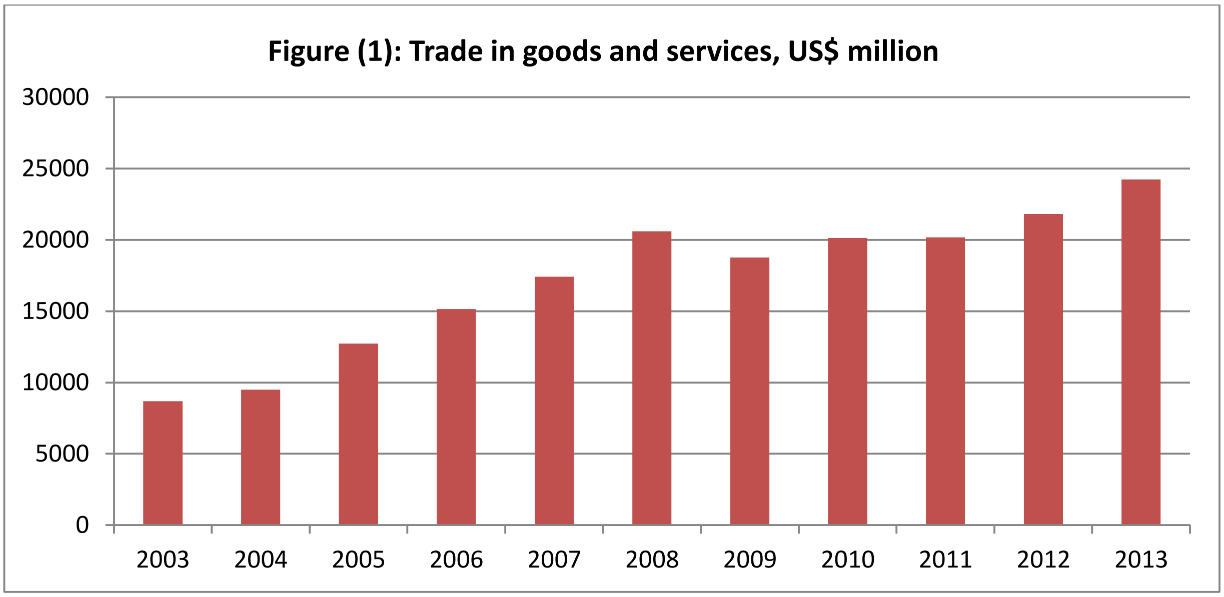
Table (15): Selected trade ratios, per cent*

	2001	2002	2003	2004	2005	2010	2011	2012
Imports	42.2	46.7	49.6	49.4	48.9	59	57.2	61.5
Exports	53	49.2	48.5	49.1	49.5	39.6	41.6	37.4
Re-exports	4.8	4.1	1.9	1.5	1.6	1.5	1.2	1.1
Total trade	100	100	100	100	100	100	100	100
Trade balance	15.5	6.6	0.8	1.1	2.1	-17.9	-14.4	-23
Exposure ratio/GDP per cent *	52	51.1	54.6	51.7	57.7	51.9	53	55.9
Total exports/imports per cent *	136.8	114.2	101.6	102.3	104.3	69.6	74.8	62.5
Growth of trade per cent		19.2	14.4	14.6	33.6	30.3	-2.4	9.4

Source: Central Statistical Organization (2012) ***Calculated**

Developments in foreign trade

Foreign trade in goods and services witnessed continuous growth between 2003 and 2013. It reached its peak in 2013 at US$ 24.2 billion, US$ 20.8 billion of which was in goods, constituting 85.7 per cent of total trade, and US$ 3.5 billion in services, 14.3 per cent of total trade. In 2003, the total value of foreign trade amounted to US$ 8.68 billion, of which US$ 7.4 billion was in goods, 85.3 per cent of total trade. The share of goods in total trade has been almost constant, despite an average annual increase of 11.4 per cent during that period. The contribution of foreign trade to GDP grew marginally from 68.9 per cent in 2003 to 71.4 per cent in 2013, indicating the importance of foreign trade to total local production.



Source: GoY

Structure of foreign trade in goods

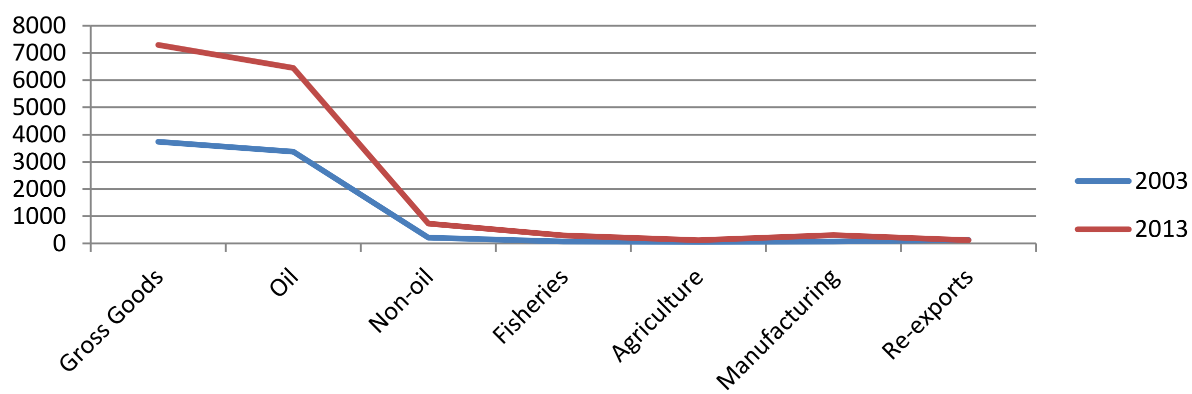
Exports

The export of goods increased continuously from 2003 to 2013, growing from US$ 3.7 billion in 2003 to reach US$ 7.3 billion in 2013. The average annual increase for the period was 7.9 per cent, accumulating to a total increase of 95.4 per cent. This increase was curtailed by the decline in oil exports starting in 2007 due to the gradual decline in oil production. Oil exports made up on average 89.6 per cent of total export of goods during the period.

Non-oil goods exports achieved an average growth of 7.3 per cent, accounting for only 5.4 per cent of the value of imports in 2013. Non-oil exports are limited to the following commodities:

- Fresh. frozen, dried, salted and smoked fish, accounting for 39.9 per cent of total non-oil exports
- Agricultural crops such as coffee, honey, fresh fruit and vegetables, accounting for 17.3 per cent
- Manufactured goods including canned fish, biscuits, juices, soft drinks, tanned leather, salt, gypsum, cement, stones, marble and granite, constituting 42.6 per cent of non-oil exports

Figure (2): Structure of Goods Exports, US$ million

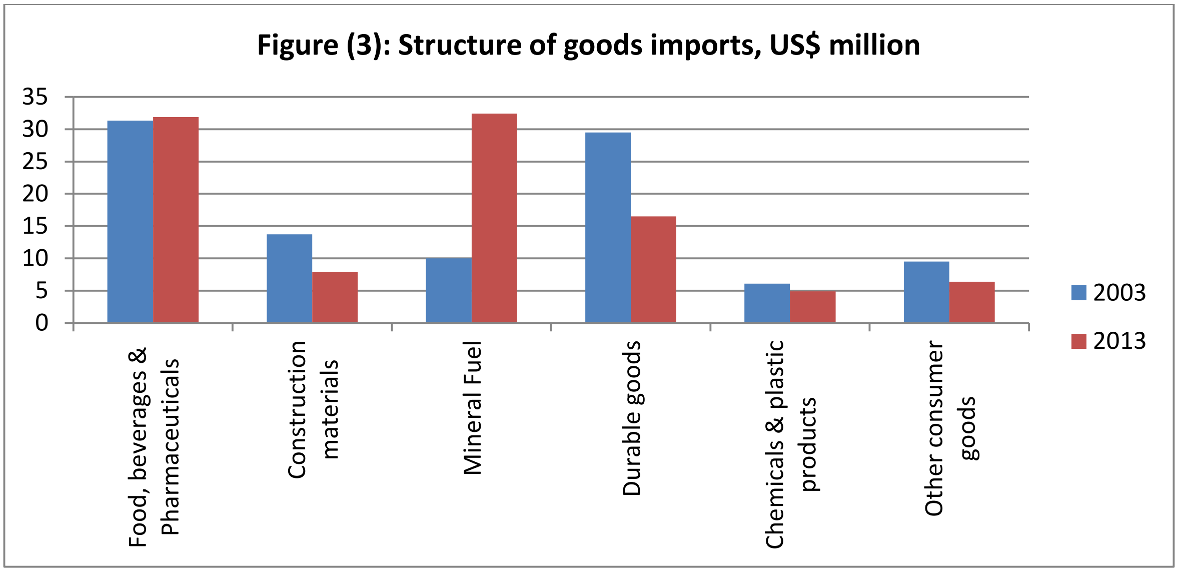


Source: GoY

Imports

The import of goods increased at high rates from 2003 to 2013, as Yemen is a net importer of most of its needs, including consumables and intermediate and capital commodities. Imports reached US$ 13.5 billion in 2013 compared to US$ 3.7 billion in 2003, achieving an annual average growth of 13.6 per cent during the period. Imports fell after 2008 to US$ 9.2 billion in 2009 and US$ 9.5 billion in 2010 as a result of the global financial crisis and decline of international oil prices.

Imports are dominated by food, medicine and oil derivatives, which together accounted for an average 60 per cent of the total value of imports from 2003 to 2013, indicating a growing gap between local production of food items and oil derivatives and domestic consumption.



Source: GoY

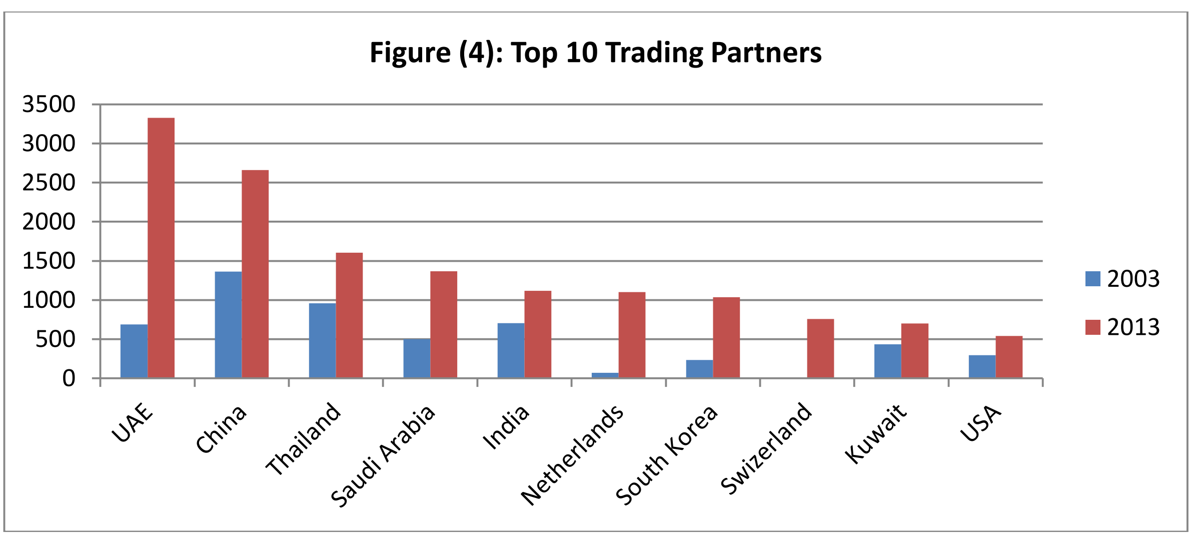
Goods trade balance

Imported goods accounted for an average 48.9 per cent of trade in goods from 2006 to 2013 as a result of increases in the quantity and/or prices of oil exports during those years. In 2007 imports comprised 57.4 per cent of total trade in goods and continued to increase over the following years to reach 64.9 per cent in 2013. This increase was caused by growing local demand for food, medicine, oil derivatives and intermediate and capital goods.

A deficit in the trade balance continued. It recorded US$ 2.2 billion in 2007, US$ 2.8 billion in 2008, US$ 2.9 billion in 2009, US$ 2.8 billion in 2010, US$ 2.3 billion in 2011, US$ 4.2 billion in 2012 and US$ 6.2 billion in 2013. In 2013 imports of goods reached US$ 13.5 billion compared to US$ 7.3 billion in exported goods, which covered only 54.2 per cent of the value of imports. The trade deficit that year was the largest it has ever been. Foreign currency reserves fell to their lowest level, covering five months of imports.

Trends of foreign trade in goods

Yemen's top 10 trade partners accounted for 68.2 per cent of total trade in goods in 2013, down from 70.8 per cent in 2003. Their share was valued at US$ 14.2 billion.

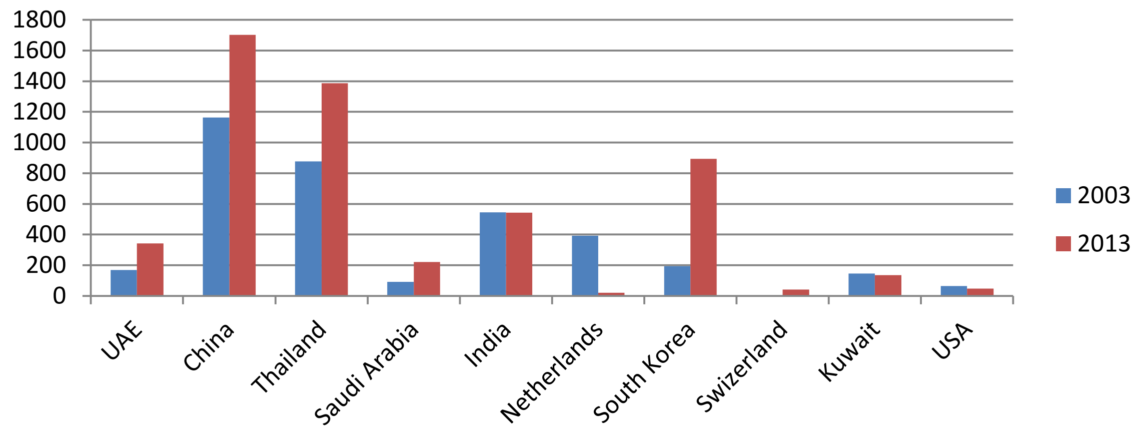


Source: GoY

Export trends

The top 10 client countries receiving Yemeni exports accounted for 81.6 per cent of total goods exported in 2013, compared to 92.3 per cent in 2003. The predominant oil export markets were China, India, Thailand, South Korea, Singapore, Japan and Malaysia with an average share of 76.9 per cent of the total. Non-oil exports were mainly destined to Arab countries, with an average share of 74.5 per cent of the total.

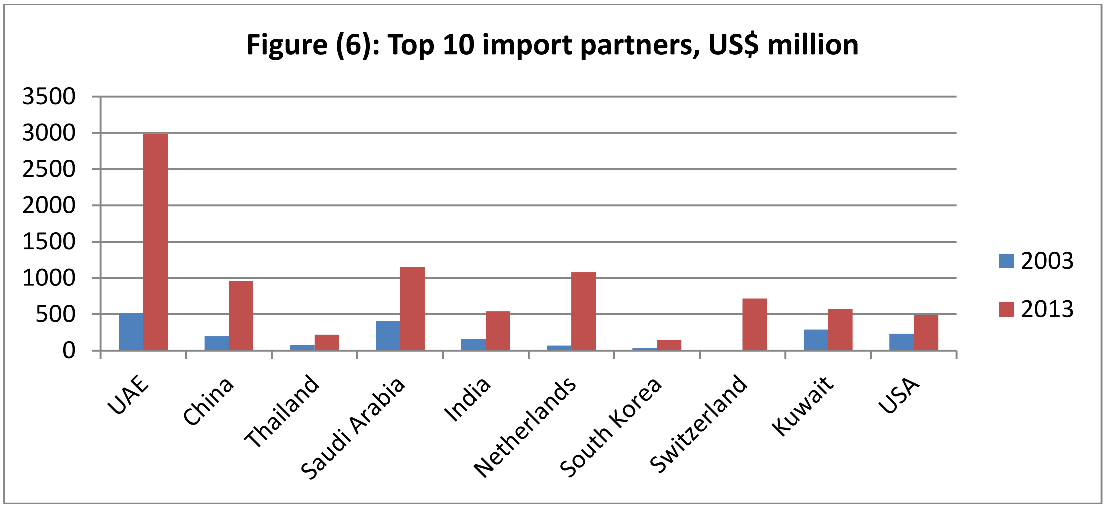
Figure (5): Top 10 export partners, US$ million



Source: GoY

Import trends

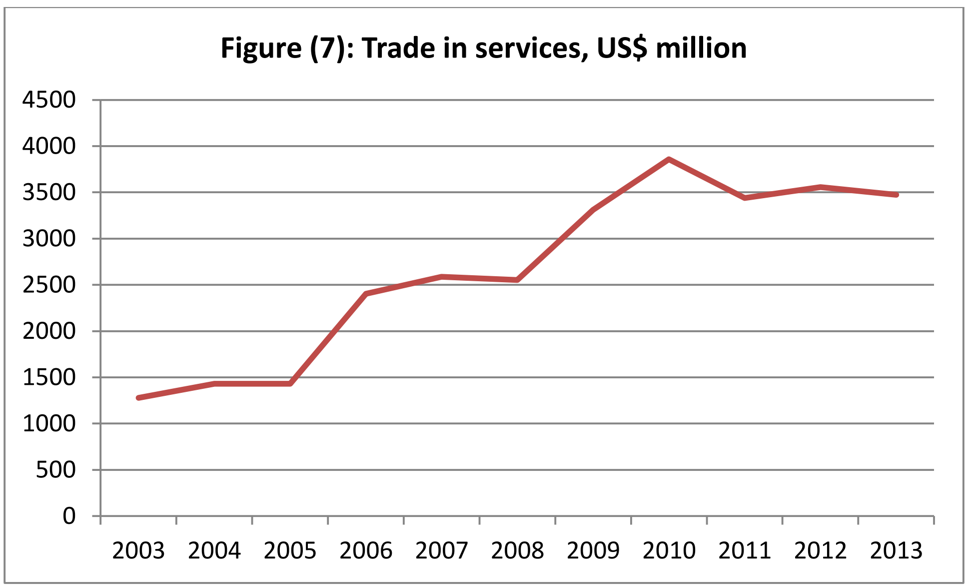
The top 10 countries Yemen imports from accounted for 68.6 per cent of total imports in 2013, valued at US$ 9.2 billion, compared to 57.7 per cent in 2003. Imports from the United Arab Emirates (UAE) accounted for 22 per cent of total imports in 2013 compared to 14 per cent in 2003. This demonstrates how well the UAE is benefitting from the Greater Arab Free Trade Agreement and points to increased re-export activity in the Dubai Free Zone. Saudi Arabia ranked second, accounting for 8.5 per cent of total imports in 2013, falling from 11 per cent in 2003. Imports from the Netherlands multiplied to 8 per cent of total imports in 2013 compared to 2 per cent in 2003, and were mainly solar and petrol products. Imports from China increased, placing China as the fourth top importer to Yemen, accounting for 7 per cent of the total. Yemen started to import oil derivatives from Switzerland in 2004, increasing Switzerland’s share to 5.3 per cent of total imports.



Source: GoY

Trade in services

Trade in services increased from US$ 1.3 billion in 2003 to its highest level of US$ 3.9 billion in 2010 before dropping to US$ 3.5 billion in 2013 with the unstable political and economic conditions. Overall, trade in services increased at an annual average of 11.5 per cent from 2003 to 2013.



Source: GoY

Export of services followed the same trend, increasing from US$ 3.7 million in 2003 to reach its highest level of US$ 1.6 billion in 2010. It then declined to US$ 1.2 billion in 2013. The average annual growth over the period was 21.5 per cent. Services imports increased from US$ 0.9 billion in 2003 to its highest level of US$ 2.2 billion in 2013, growing at an annual average of 11 per cent during this period.

Trade balance in services exhibited a huge deficit during this period, estimated at a US$ 0.8 billion annual average. Yemen is a net importer of most services, particularly transport, tourism, financial services, insurance, construction and personal services.

Domestic trade

Domestic trade witnessed continuous growth between 2003 and 2010, jumping from US$ 2.2 billion in 2003 to its highest level of US$ 5.6 billion in 2010. Its value dropped to US$ 4.8 billion in 2013 on account of the unstable political and economic situation. Nevertheless, domestic trade grew at an average 10.9 per cent per year over the whole period. It played a pivotal role in the economy and in growth, contributing an average 15.3 per cent of GDP and accounting for 19.4 per cent of employment during that period.

Table (16): Domestic trade (million US$)

Year / Item	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	**Average**
Domestic trade	2147.6	2422.5	2825.8	3379.7	3962.7	4421.5	5073.6	5564.4	4350.0	4480.7	4839.1	
per cent increase	-	13.61	20.90	23.06	18.38	12.03	16.52	16.24	22.44-	3.49	8.0	
per cent of GDP	15.8	15.5	14.8	14.8	15.5	14.5	17.8	17.5	13.8	13.6	15.08	15.3 per cent
GDP	12321.0	13873	17506.0	21298	24748	28588	27377	29454	29177	31651	33955	
Source: Central Statistical Organization												

Domestic trade has great potential but also faces many difficulties. It is imperative that the incomplete and obsolete legislative, institutional, technical, administrative and human infrastructure related to trade be updated.

In order to improve efficiency and meet international standards, an up to date and comprehensive trade database must be established. In addition, action is required to upgrade trade policies, measures, specifications and measurements, quality assurance, local markets and trading centres, commercial chains, banking services, insurance, transportation means, freight and storage. The private sector should be encouraged to invest in these activities. This would considerably expand domestic trade and would thereby increase trade's contribution to GDP and employment and mitigate unemployment and poverty. Finally, a trade strategy with clear objectives and goals must be adopted, taking into consideration the need to integrate Yemen's economy with regional and international economies through joining relevant international and regional organizations.

Trade potential

Role of free zones

Despite the recognized importance of free zones in accelerating economic growth and developing maritime services, trade and manufacturing, Yemen has currently only established one zone, at Aden.

Aden was selected to host the first free zone in Yemen because of its historic importance in supporting international maritime activity. The city engulfs one of the world's oldest seaports in a unique, strategic location. It has the required characteristics to serve as a regional and international trade hub for sea shipping and air freight for the Middle East and the world.[9]

Legal and institutional framework

Cabinet Resolution no. 209 (1991) declared Aden city to be a free zone. Republican Decree no. 49 (1991) established the financially independent General Authority for Free Zones (GAFZ) under the direct supervision of the prime minister. The GAFZ head office was in Sana'a and was responsible for managing, investing in and developing free zones in Yemen. The Free Zones Law no. 4 (1993) and the Prime Minister's Resolution no. 65 (1993) specified the territories of the Aden Free Zone,[10] allocating around 32 thousand hectares and 15 sites for projects, outlined in the master plan. Projects include industrial, commercial, storing, housing and public services activities, in addition to the container terminal. The first phase of the project was implemented between 1996 and 1999 and operations for the second phase began in 1999.[11]

The legislative system regulating free zones provided a vision and economic orientation that conforms with global developments and transformation and bolsters the national economy through offering a conducive investment environment including tax holidays, transferring profits and guarantees against confiscation or seizure.

Operational and investment activities

Aden Container Terminal (ACT) started operating in 1999 and in 2005 an agreement was reached with Dubai Ports International (DPI) to develop the ACT. In 2008 the GoY signed a new agreement with DPI for a 25 years lease to develop and operate the ACT, which was ratified by Cabinet Resolution no. 266 (2008) that established a partnership between the two parties to launch a joint venture company with a capital of US$ 220 million to be paid equally by both parties. The newly formed Dubai and Aden Ports Development Company was expected to operate the ACT.

Aden Free Zone granted licenses to 135 investment projects at a total value of US$ 836 million. Of these, 43 were in manufacturing, 32 in storage, 29 in public services, 20 in trade, nine in housing and two in tourism. Twenty-five of the projects are owned by foreign companies.[12] These projects are testament to the high potential for investment opportunities, particularly for FDI.

Performance and cancelation of the agreement with DPI

The Aden Free Zone focused on several strategic and economic objectives, mainly to develop the zone and offer an attractive business environment for FDI while integrating its activities in the global economy. Unfortunately, none of the objectives were met. This failure can be attributed to the following factors:[13]

- Unstable legislative framework for investment
- Incomplete infrastructure in the Aden Free Zone
- Continuous security problems and workers protests
- Weak administration and overlapping responsibilities between different institutions

Lack of qualified staff

These factors and the management strategy of the DPI led to ships moving away from the ACT to neighbouring ports due to the high service charges on ships and containers.[14] The number of containers handled dropped from 350,000 containers in 2006 to 209,000 in 2007 and then to only 64,700 in 2009.[15] The GoY had to cancel the agreement in September 2012 and Aden Port Development Company took over the ACT.[16]

New trends

The constant challenges the Aden Free Zone is facing were discussed in the Sustainable Development Working Group in the National Dialogue Conference. The working group concluded with a set of recommendations addressing the need for funds for infrastructure projects, in addition to the following measures:[17]

- Restore the land allocated for tourism projects and remove the military camps in sections F and D that are allocated for the storage village and air cargo.
- Allocate an amount of ODA to implement projects in the free zone, including the heavy and medium industry area at section L costing US$ 300 million and the storage village and air cargo project at section F costing US$ 32 million for phase one.
- Restructure Aden Free Zone to build its capacities in keeping with new investment concepts.
- Review relevant legislation to attract investments in light of the intense competition with neighbouring countries.
- Improve Aden Port's capacity and rehabilitate its infrastructure, facilities and services to match its historical status and strategic location.
- Develop Aden Free Zone as a model that can be replicated in other locations, particularly in Al-Mukalla and Al-Hodeidah.

If upheld, these recommendations will contribute to addressing institutional and structural problems in Aden Free Zone and supporting required investment funds either from the budget or ODA. They will also help to ensure the political will behind this project. Establishing economic zones is of the utmost importance, particularly in Taiz, Al-Hodeidah and Hadramout, and will contribute to providing jobs and alleviating poverty.

Mainstreaming trade in national development strategies and plans

Trade and development

While growth has helped to boost economic development in some countries, it has not necessarily enabled the eradication of poverty or reduced inequality. Trade has to become an integral part of a country's development strategy and measures must be put in place to ensure that economic growth has a direct impact on poverty reduction. LDCs may not be able to immediately benefit from the opportunities that trade liberalization provides. Countries like Yemen may not have the productive capacity to take advantage of enhanced market access opportunities as they may face difficulties in adjusting to the new economic environment. These countries need assistance in diversifying their product base and enhancing their competitiveness.[18]

Trade in development strategies and plans

Successive Yemeni governments over the years have prepared development plans, strategy papers and national policies including Yemen's Strategic Vision 2002-2025, the Second Five-Year Development Plan 2001-2005, Poverty Reduction Strategy Papers 2003-2005, Third Five-Year Development Plan for Poverty Reduction 2006-2010, a draft Fourth Five-Year Development Plan for Poverty Reduction 2011-2015,[19] Transition Programme 2013-2014 and most recently the outcomes of the National Dialogue Conference. All these documents emphasize the role of trade (internal and foreign) in the economy and regard trade, particularly export, as a promising sector and a means of improving livelihoods and accelerating economic growth.

Trade objectives and policies

Almost all government plans have emphasized the relevance of the trade sector in the following objectives: [20]

- Achieving regional and global integration as well as accession to the World Trade Organisation (WTO)
- Regulating foreign trade within a free and competitive market
- Diversifying non-oil exports
- Increasing the contribution of domestic trade to GDP through improving the business environment to facilitate the flow of goods and protect consumers
- Given the importance of the trade sector, the following policies have been identified as priority structural reforms:
- Enhancing trade liberalization within a free market economy
- Strengthening the legal framework and institutional structure to support competition and prevent monopoly, including establishing an anti-dumping unit
- Developing adequate infrastructure for both domestic and foreign trade
- Encouraging private investment in infrastructure that supports trade, particularly export, including in financial services
- Preparing foreign trade and export strategies
- Establishing a funding and export guarantee system and providing studies and information about foreign markets
- Activating export promotion activities and removing obstacles
- Galvanizing trade agreements so as to take advantage of the available privileges and seeking new agreements with trading partners
- Supporting private sector institutions in undertaking their responsibilities to boost trade
- Completing the establishment of free and specialized zones, particularly in port cities

Assessment of implementation

Most of the above policies have been partly implemented, especially those related to legislation, trade liberalization and restructuring. This partial achievement contributed to improving the business environment, particularly during 2009 and 2010, and supported integration into the regional and global economy.

However, many challenges persist as a result of the reforms not being fully implemented, in particular those that have been adopted repeatedly in official documents since 2000. These include shortfalls in institutional and legislative structures, poor databases and the inability to enhance the competitiveness of Yemeni products.

Export promotion

Most countries have exerted considerable effort towards export promotion, starting by preparing export strategies to augment growth, create jobs and improve the trade balance. Export incentive programmes are not limited to tax exemptions and facilitating measures and procedures. An integrated package of strategies, policies and incentives should be presented to trade promotion organizations. These organizations should adopt a two-tier approach in their programmes, including promotional and development activities.

Box (1): Tiers of trade promotion organization programmes.

Development activities	Promotional activities
Assisting small and medium-sized enterprises (SMEs) in developing institutional capacity for export, marketing and matching grants.	Conducting promotional activities through active participation in international and specialized trade exhibitions.
Conducting surveys and field studies on exportable goods and working towards eliminating obstacles to export.	Organizing trade missions and liaising between exporters and importers in target client countries.
Conducting market studies for target markets and making them available to exporters.	Issuing periodicals and promotional guides for exporters.
Conducting seminars, workshops and specialized consultation meetings for exports.	Providing necessary information for exporters on export opportunities in foreign markets.

Yemen’s Supreme Export Council and its technical secretariat were established by Republican Decree no. 127 (1997) and were mandated to encourage export and remove obstacles. Republican Decree no. 284 (2009) regarding the Ministry of Industry and Trade's (MOIT) executive bylaw merged the technical secretariat with the foreign trade and export promotion sector in the ministry to avoid duplication.

Export strategy

The first attempt to draft a national export strategy was undertaken in 2005 in the form of a study prepared by the Mitsubishi Research Institute (MRI) supported by the World Bank.[21] The study focused on Yemen’s unique situation in the context of global non-oil export development experiences and was intended to make a timely contribution to Yemen’s non-oil export development strategy preparation. However, the GoY did not succeed in delivering a complete export strategy despite the sector’s central role in all economic strategies and plans.

Other attempts to draft an export strategy were undertaken in 2009 within an Enhanced Integrated Framework (EIF) project in coordination with the International Trade Centre (ITC). In 2013 the European Union (EU) took over in coordination with the EIF, a move that culminated in a draft strategy that received strong criticism.[22] Efforts are currently being made to involve the ITC as the specialized agency once more.

National mechanism for export promotion

For the economy to grow and be integrated into regional and global economies, especially after Yemen's accession to the WTO, a set of policies and programmes that make use of opportunities and overcome challenges are required. The promotion of export and strengthening of its institutions are paramount. Export promotion requires three main and integrated components: political will, trade promotion organization and a national export strategy (MRI study).

To reinvigorate the national mechanism for export promotion the following objectives must be pursued in tandem:

1. Strengthening the general directorate of export promotion to enable it to meet its responsibilities, including establishing a policy unit to coordinate the completion of the export strategy and implementing an urgent export promotion programme.
2. Completing the export strategy through: a) forming the administrative structure, national team and a core team; and b) referring to earlier steps and efforts and drawing on them.
3. Establishing a trade promotion organization chaired by the minister of industry and trade with members from both private and public sectors.

Enhanced Integrated Framework and Aid for Trade

Since the launch of the Integrated Framework (IF), Yemen was among the first countries to take advantage of this programme. Three projects were funded in window two of the IF project to: support the export of fruit and vegetables, strengthen industrial and commercial registration procedures, and improve the quality of fish for export purposes.[23]

The second phase of the project, the EIF, began in 2009 with the establishment of a national implementation unit and a project team at the MOIT to work on proposal preparations. The amount spent on the project reached US$ 516,890 between 2009 and 2013[24]. The project has been extended for five more years.

Approved projects in the framework of the EIF:

- A project in collaboration with International Centre of Insect Physiology and Ecology to improve the quality and productivity of honey in the provinces of Shabwah and Al-Hodeidah[25]
- Preparation of a draft anti-pest and disease regulation to protect bees[26]
- Co-financing preparation on the national strategy for exports (the first stage) with the European Union (EU), which is still being prepared by the Caribbean Basin Initiative in coordination with the ITC

- Contributing to a project on resilience, which will begin in early 2015 and aims to strengthen local communities capacities to emerge from crises
- Organizing a workshop to upgrade the skills of officials and consumer associations
- Funding a study to assist consumer associations in Yemen, whereby a committee was formed by the minister of planning and international cooperation to follow up on this issue

Challenges faced by the EIF in Yemen include:

- Lack of coordination with the Communication and Coordination Office with the WTO (CCO WTO) regarding the integration of Yemen into the global trading system
- Lack of coordination between the project and other related sectors at the MOIT regarding integrating trade in national plans and strategies
- Many important activities have not been implemented, according to the project evaluation reports, including updating the trade strategy

Despite donor support towards increasing trade, actual needs are far from being met. In Yemen, the greatest challenges to trade, especially with neighbouring countries, relate to the logistics surrounding storage and transport and the packaging of agricultural products. Another issue is the non-tariff barriers in terms of delay and burdensome procedures leading to the spoiling of goods at borders. A study on restructuring the Yemeni agriculture sector according to its potential and taking into account the scarcity of water is required, in addition to diversifying non-oil exports through implementing the industrial and tourism strategies that were prepared in 2011.

Trade Institutional framework

Ministry of Industry and Trade

Structure

The MOIT was established in 2001 through the merging of the Ministry of Industry and the Ministry of Supply and Trade. Aside from the major task of managing Yemen’s accession to the WTO, the MOIT's activities are dominated by registration and licensing. These activities are carried out by its general directorates of companies, agencies, IPR and trade registration. There is an urgent need to re-organize the structure, regulations, systems, procedures and human resources of the ministry.

A restructuring plan was submitted to the Cabinet and the first phase was approved in 2010, covering the new organizational structure and job descriptions. The new structure was designed to be less complex and procedures among the various administrative levels were modified to be shorter and more straightforward so as to avoid duplications in the performing of tasks. Accordingly, the ministry was divided into four main sectors: industry, foreign trade, internal trade and business services. These sectors oversee 30 general directorates in addition to the CCO WTO and the EIF Unit, which report directly to the office of the minister. The total staff of the MOIT number around 500, of which 350 are active staff. Eight qualified staff work in the CCO WTO, but only one is dedicated solely to the office’s work while the others assume additional tasks and duties within the ministry. All the office staff are integrated in the various departments, particularly those of the foreign trade sector and the general directorate of IPR. The foreign trade division consists of four general directorates and 11 departments.

The MOIT's total budget in 2013 was US$ 9.7 million, of which US$ 2.5 million was spent on salaries in the Textiles Establishment and subscriptions to international and regional organizations. The limited budget is an obstacle to tasks being undertaken and hinders participation in activities overseas. The budget of the CCO WTO was repeatedly reduced, reaching US $17,246 in 2013, which impeded its ability to perform its tasks. However, the office was able to continue its work and finalize the accession process between 2011 and 2014 and complete the constitutional measures towards endorsing the accession protocol.

Mandate and mission

The MOIT is responsible for developing industry so as to effectively increase the sector's contribution to GDP. It is also mandated with formulating and managing trade policy and regulating trade activities. The MOIT, in association with other government agencies, sets the economic policy and prepares the necessary plans and programmes, including the industrial development strategy, to regulate commercial activity. It is responsible for submitting draft laws to regulate trade and industrial activities, encouraging and developing industrial activities, improving relevant data and statistics and conducting necessary studies and research. The MOIT is also expected to take the necessary measures to ensure competition and prevent monopoly and fraud.[27]

Tasks and responsibilities

The foreign trade sector of the MOIT is responsible for supervising and improving foreign trade in the interest of socioeconomic development. It sets and implements trade policies and strategies to improve foreign trade and allow adjustments to developments. The sector also regulates imports and exports based on free trade to ensure stability in the local markets. In this regard, it proposes amendments or new legislation, simplifies procedures and coordinates with other government agencies to access foreign markets. The sector works with the Federation of Yemen Chambers of Commerce and Industry (FYCCI) and other relevant authorities to improve trade and encourage investments while taking all necessary measures to protect national production.[28]

Under the supervision of the national committee for WTO affairs, the CCO WTO is responsible for following up on WTO-related issues. A draft resolution recently submitted to the Cabinet specifies the tasks of the office and the national committee for WTO affairs in the post-accession period. Accordingly, the CCO WTO remains the central national contact point in relation to following up on the implementation of Yemen's commitments, providing notifications and contributing to reviewing and formulating national trade policies. The national committee supervises programmes and plans to maximize benefits from WTO membership. It also reviews and assesses Yemen's needs in terms of technical and financial assistance for the implementation of trade facilitation agreements and prepares for the periodical review of Yemen's trade policies. The first review is expected to take place in 2020.

On 31 December 2012 the MOIT reached an agreement with the EU on support to Yemen in its post-accession phase. The project, Trade Related Assistance Yemen, has a budget of around 1 million Euros and covers a three-year period, ending on 31 December 2015. The project includes providing technical assistance and local and foreign experts to the MOIT and other ministries and agencies, including within the private sector. Project components focus on the implementation of Yemen's commitments, especially action plans related to SPS, TBT, IPR and customs valuation agreements. It also includes capacity building and training and contributing to the analysis and formulation of trade policies. Project activities began in the fourth quarter of 2013 and will continue until the fourth quarter of 2016. National workshops have been conducted such as the workshop on SPS measures and trade facilitation in cooperation with the WTO and United State

Agency for International Development (USAID). The project also organized a study tour to Jordan for intellectual property officers.

Customs Authority

Structure

The organizational structure of the Customs Authority was defined by Republican Decree no. 48 (1993), which laid out specific posts, tasks and responsibilities. The authority operates a number of major outlets, offices and departments including nine sea port outlets, six airports and six land border terminals. Staff number around 3,000 employees.

The organizational structure is outdated and has not adapted to the changes and accelerating developments in the field. Efforts towards restructuring aim to cater to international requirements by focusing on joint work, promoting mutual confidence between the Customs Authority and private sector, and simplifying and automating procedures. Restructuring has not been completed.

Mandate and mission

The Customs Authority is a revenue-generating entity that falls under the supervision of the minister of finance. It proposes and implements customs policies and relevant laws and bylaws within the limits of its legal competencies. The Customs Authority has implemented a package of reforms to augment its role in facilitating trade.

Customs Law no. 14 (1990) was amended by Law no. 12 (2010), which was drafted with a clear vision to modernize systems and meet international requirements. Some of the law's provisions (36, 54, 74, 141, 168, 169, 171, 70 bis, 82 bis and 179) indicated the need to issue bylaws and executive instructions, but many of these have not yet been issued.

The new legislation simplified customs clearance procedures, mainly by eliminating the requirement for certification from Yemeni consulates abroad on customs documents, approving the electronic processing of documents and customs charges, adopting the Revised Kyoto Convention standards and the Arusha declaration issued by the International Customs Organization and approving customs risk management for the purposes of facilitating trade and customs monitoring.

A general department for review and risk management was established and a customs risk management system was introduced at the six main customs outlets, covering more than 80 per cent of trade volume. Selectivity criteria were introduced, adopting green, yellow and red channels for customs declarations. One stop shop systems were established at three main customs outlets. Alongside implementing the Automated System for Customs Data++ (ASYCUDA++), new automated systems linked to ASYCUDA have been introduced to receive manifestos electronically.[29]

Tasks and responsibilities

The General Directorate of Customs Tariffs undertakes tasks related to exploring, proposing and following up on the implementation of the rules and categories of the customs tariff table on imports and exports. It also prepares customs pricing lists and updates them periodically according to international pricing and conducts studies on customs tariffs. The directorate imposes compensatory or detailed fees, submits legal opinions on the classification of commodities and proposes recommendations to upgrade customs legislation and simplify procedures.[30]

The Tariff Council, which was established under Article 11 of Customs Law no. 14 (1990) and its amendments in Law no. 12 (2010), is chaired by the minister of finance and its members include the minister of industry and trade, the chairman of the Customs Authority, relevant deputies of the Customs Authority and the director general of the General Directorate of Customs Tariffs. The council is entrusted with drafting customs tariff policies and reviewing proposals to impose, amend or cancel customs fees submitted by the Customs Authority. However, the bylaws pertaining to the council's activities have not yet been issued and the council's work has thus been halted.

The major obstacle the Customs Authority faces is multiplicity and the poor coordination of monitoring bodies at the customs outlets. Law infringement is widespread, including the import of illegal commodities, breaching intellectual property rights, organized crime and trans-boundary terrorism. The authority has limited technical and human resources with which to address this issue and the multiple and complex laws and agreements that govern customs further obstruct its work.[31]

Federation of Yemen Chambers of Commerce and Industry

Structure

The FYCCI consists of a board of directors, a general manager, an industrial department, a commercial department and departments of information, finance, administrative, public relations, international and businesswomen. It also includes specialized committees, an SME unit and a South-South Global Assets and Technology Exchange unit. The FYCCI includes 21 chambers of commerce and industry in 21 governorates, with its head office in Sana'a. The FYCCI's board of directors consists of 11 members, five from Sana'a, Aden, Taiz, Al-Mukalla and Al-Hodeidah chambers and six members representing the other chambers.[32] The specialized committees include industry, trade, agriculture and fisheries, construction, health, services, businesswomen, transportation, telecommunications and information technology, investment, exports and education and training.[33]

The International Labour Organization (ILO) in 2005 funded a study aiming to augment the role of the FYCCI. The study proposed the development of a strategy that began with restructuring the federation and adopting a new institutional framework. The study recommended comprehensive policies that conform to future trends in which the federation adopts an active role in serving the economy and the community. The study called for a medium-term plan for undertaking legislative amendments and developing the organizational structure of the federation and its executive bodies and identifying training needs of the staff. To date the study has not been made use of.

The FYCCI's financial resources come from 10 per cent of each chamber's revenues, in addition to revenues generated from the trade and industry guide, charges for services provided by the FYCCI, donations and grants provided by members and approved by the board of directors, and other revenues that conform to FYCCI purposes. Chambers' revenues are generated through membership fees, annual subscription fees, revenues from governorate trade and industry guides, revenues gained from facilities owned by the chambers, donations and grants approved by the board of directors and any other revenues that conform to its purposes.[34]

Mandate and mission

The FYCCI represents all chambers of commerce and industry (CCI) on issues that do not fall under a specific chamber's mandate. The FYCCI participates in relevant government councils and bodies concerned with economic policy and proposes bills and laws related to the business sector. The FYCCI coordinates and cooperates with regional and international chambers and federations and exchanges trade and industrial information. The FYCCI's tasks include undertaking studies on economic activities, issuing the trade and industry guide, establishing and managing trade and industrial centres and institutions, and organizing fairs and exhibitions inside and outside the country.

The CCI in the governorates issue certificates of origin for Yemeni products for export and endorse commercial certificates and documents. The chambers undertake studies and provide opinions as needed on trade and industrial information and make them available to interested parties. CCI encourage national and foreign capital and coordinate between themselves to establish new projects and share knowledge. In addition, CCI join government and non-government committees related to drafting economic policies.[35]

Tasks and responsibilities

The Commercial Department at the FYCCI undertakes tasks related to trade policy and conducts economic and financial studies on trade activities, including those related to WTO agreements.[36] The FYCCI's role in influencing trade policies is enhanced by its relations with regional and international organizations such as the Arab League, Arab Labour Organization, ILO, Arab Organization for Administrative Development, Arab Organization for Industrial Development and Mining, League of Countries Overlooking the India Ocean, International Federation for Chambers of Commerce and Industry, Federation of Arab Chambers, Islamic Chambers of Commerce and Industry and Arab Federation of Exchanges. Also, the FYCCI secretary-general maintains constant communication with international chambers such as the Arab-German Chamber, Arab-French, Arab-British, Arab-Italian, Arab-Greece, Arab-Portuguese, Arab-Brazilian and Arab-Mexican chambers.

The FYCCI endeavours to enhance the private sector's participation in regional and international events, establishing joint businessmen councils with other countries and supporting the government in addressing major economic difficulties. However, the FYCCI itself faces a number of challenges, mainly relating to the poor business environment, including laws that impede growth and development. In addition, the FYCCI struggles with limited revenues and a lack of qualified staff.

Capacity development

Institutional capacities

There is evident overlapping of responsibilities between many institutions concerned with formulating and implementing trade policy, including the CCO WTOI and the foreign trade sector in the MOIT with its four general directorates. This redundancy should be addressed through one of the three options:

- Limiting the CCO WTO’s responsibilities to following up on the implementation of Yemen's WTO commitments and required notifications, while allowing the foreign trade sector to undertake all other foreign trade activities, including policy development
- Merging the CCO WTO as a general directorate of the foreign trade sector mandated with addressing WTO issues
- Terminating the CCO WTO's role now that WTO accession has been accomplished and assigning its staff and responsibilities to the relevant directorates in the foreign trade sector

The MOIT should:

- Establish an authority to protect national production and combat dumping
- Upgrade the General Directorate for IPR into an IPR Authority

Human resources capacities

The MOIT has trained around 10 staff members on WTO issues and is planning to increase the staff qualified in this field to 20 during 2015 by attracting staff from other sectors to the foreign trade sector. Human resources development should include:

- Capacity building in conducting studies leading to establishing a research and study unit on trade issues
- Training and raising awareness on WTO agreements as well as revising trade legislation and regional agreements
- Training staff in business environment and national trade activities, particularly issues of competitiveness and price stabilization, given their impact on trade policy
- Training MOIT staff and other stakeholders on trade policies and WTO issues by offering internship programmes in the ministry

Strengthening policy formulation

Policy formulation should entail the following:

- Formulation of an export strategy
- Drafting a trade strategy consistent with other strategies, taking into consideration promising sectors
- Setting up a trade policy committee involving all stakeholders, including the private sector, to formulate and review trade policies
- Establishing relations with research institutions and think-tanks and with public and private universities to benefit from their expertise in foreign trade policy
- Enhancing capacity in trade negotiations
- Although Yemen's WTO accession process helped to train local staff in trade negotiations, post-accession operations require:
- Training more staff in economic analysis, trade policies and negotiations

- Establishing a decision-making support unit concerned with conducting studies on multi-party and regional trade negotiations, in addition to facilitating access to information on trade
- Promoting negotiation capacities within the framework of establishing an Arab Customs Union
- Creating awareness in the private sector and involving the sector in negotiations
- Identifying negotiation priorities and targeted outcomes for all stakeholders

Trade policy

Prior to economic reform

Prior to 1995, trade policy in Yemen was characterized by import restrictions designed to support the BOP and protect local production. Import licenses were required before importation and many imports were prohibited, particularly those competing with local products. There was also a ban on the import of goods that violate Islamic Sharia law or are harmful to the environment or human, animal or plant health.

There were 15 tariff bands: the lowest at 5 per cent and the highest at 200 per cent, with a weighted average of 27 per cent. Customs procedures were complex and customs clearance required about 50 signatures. During that period the exchange rate was pegged at 12 Yemeni rial to US$ 1, while four other official exchange rates were in place for various purposes such as government procurement, salaries of the diplomatic corps and the custom exchange rate. Export activities were also subject to restrictions such as the requirement of export licenses, while a ban was imposed on exports of some goods such as fish. There was no strategy or policy to encourage export activities.

The minister of trade had the authority to ban or set limits on the quantity or value of permitted imports and exports. This system had negative repercussions such as the creation of monopolies and bias against exports.

Trade policy since 1996

After the first phase of economic reform that aimed to halt the deterioration of the macro-economy, remove structural defects and price distortions and promote privatization, the private sector was encouraged to augment its role in the economy. Trade policy had new objectives, the most important of which was to continue implementing economic reform policies, including the liberalization of foreign trade and integration in the multilateral trading system through WTO membership and increasing and diversifying non-oil exports, particularly in the promising sectors. Enhancing competition was key, as was establishing free trade and industrial zones.

Measures affecting imports

Import registration requirements

Resolution no. 314 (1996) on granting commercial registration (Import Category) stipulated that natural and legal Yemeni importers should apply for commercial registration from the General Directorate of Commercial Registry at the MOIT or from one of its branches. During WTO accession negotiations, Yemen committed to granting trading rights (import and export) to non-Yemenis. Article (28) of Commercial Law no. 32 (1991), amended by Law no. 22 (2004) and later by Law no. 1 (2008), allowed non-Yemenis to establish commercial companies without a Yemeni partner.

Import licensing

Import licensing was abolished by Law no. 16 (1996) on foreign trade. However, some technical procedures remain in place for the clearance of imports of specific goods, shown in Table (17).

Table (17): Imports subject to technical clearance.

Item	Responsible agency
Plants and plant products, seeds, seedlings, fertilizers, pesticides, live animals and animal products and veterinary inputs	Ministry of Agriculture and Irrigation
Explosives and fireworks	Ministry of Interior
Artistic and literary works	Ministry of Culture
Magazines and newspapers	Ministry of Information
Medicines, medical appliances, narcotic drugs, psychotropic substances, precursors and chemicals	Supreme Authority for Drugs and Medical Equipment

Source: WTO (2013) "Report of the Working Party on the Accession of Yemen to the World Trade Organization" (WT/ACC/YEM/42), Geneva

The objective is to ensure that specific technical conditions are met. Clearances are also subject to fees, which used to be levied as a percent of the import value. This has been amended to a lump sum fee reflecting the cost of the service.

Prohibited and restricted products

Bans on the import of agricultural goods were gradually removed, except for on a number of goods such as coffee and mangoes. The import of some products was banned during their productive seasons, including potatoes, tomatoes, lettuce, oranges and grapes. During WTO negotiations Yemen committed to removing all bans on agricultural goods upon accession. Cabinet Resolution no. 55 (2012) on the agriculture calendar was issued, setting a customs tariff on those products except for coffee. A prime minister's resolution is currently being prepared to regulate banned non-agricultural goods through imposing import quotas and/or prior approvals.

Tariff rates

Yemen levies tariffs on an ad valorem basis and has never applied tariff quotas. Several amendments were applied to the tariff schedules to reduce them in line with the economic reform programme, as follows:

- In 1996 tariff rates were reduced from 15 bands to only five bands, ranging from 5 per cent to 70 per cent.
- Tariffs were reduced a second time in that year to four bands, ranging from 5 per cent to 30 per cent, along with tariffs being reduced on most goods included in the fourth band.
- Tariffs were reduced for the third time in the same year on most goods from 15 per cent to 10 per cent and on some goods from 5 per cent to 4 per cent. The minimum rate was 4 per cent and the maximum was 30 per cent within the four bands.
- In 1997 tariffs in the four bands were reduced to range from 5 per cent to 25 per cent in addition to tariffs on some goods being reduced from 15 per cent to 10 per cent. The weighted average fell to 10.5 per cent. According to customs statistics from 1998, 51 per cent of total Harmonized System tariff lines were subject to 10 per cent or less, 12 per cent subject to 25 per cent and the rest to 15 per cent, or exempted or prohibited due to religious reasons.

- In 2005 an amendment took place through the issuance of Law no. 41 (2005) on tariffs, cancelling the tariff category of 15 per cent and transferring most of its items to the 5 per cent category. Yemen now has only three tariff categories, where 5 per cent is applied on about 70 per cent of tariff lines, 10 per cent applied on about 20 per cent of tariff lines, and about 6.5 per cent of those lines are subject to 25 per cent.

In 2012 tariffs on cars were amended in line with Yemen's commitments to the WTO and the ban on importing cars over eight-years old was removed. New cars have become subject to a tariff rate of 5 per cent and those between two and 10 years old are subject to a 15 per cent tariff rate (this tariff category has been resumed only for cars). As for cars over 10-years old, a fee of 25 per cent is imposed.

Measures affecting exports

Registration requirements for exporting

Natural and legal Yemeni exporters are required to obtain a Commercial Registration Permit (Export Category) from branches of the MOIT. From 2015 onwards Yemen is committed to granting trading rights to non-Yemenis, according to its WTO Protocol of Accession. Investors are permitted to engage in export activities without an export license or registration. Also, there are no longer quantitative restrictions, prohibitions or quotas on Yemeni exports, nor any requirements for licensing, minimum export prices, voluntary export restrictions or orderly marketing arrangements. However, the following products require technical clearance from the relevant authorities:

Fish and marine exports require clearance from the Ministry of Fish Wealth, which issues a sanitary certificate after ensuring safety measures have been met.

Ingots, coins, gold, silver, platinum, jewels and precious stones are inspected by the Yemen Standardization, Metrology and Quality Control Organization (YSMO) to ensure specification conformity.

Yemen is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora and prohibits the export of endangered plant and animal species. Certain rare birds, flora, fauna and exhaustible materials are also subject to export bans. Export of charcoal is not permitted so as to prevent desertification and the mass felling of trees.[37]

Export financing, credit and subsidy

There are no policies to subsidize exports, offer financing and provide credit or guarantees, although many countries establish a specialized bank for exports. Some local commercial banks benefit from providing export credit submitted by the Islamic Cooperation for the Insurance of Investments and Export Credit and others.

Tariff rates

Yemen dose not levy export duties or taxes. However, fees and charges are applied on exports of fish, plants, pesticides and animal wealth for export clearance or laboratory examination. These fees and charges were reviewed and amended to be more specific and reflect the cost of services according to Article VIII of the GATT 1994.

Other policies

Protection of domestic production

Up until 2010 there were two articles (12 and 13) in Customs Law no. 14 (1990) regulating compensatory fees on subsidized or dumped imports that authorized the GoY to adopt suitable measures against practices harmful to the economy. Law no. 21 (2010) was enacted to protect national production against harmful trade practices. The MOIT established a general directorate to oversee the implementation of this law. Still, Yemen has not yet imposed any anti-dumping measures due to a shortage of qualified staff in this field.

Import duty drawback

Customs Law no. 14 (1990) allows for import duty drawback, partial or total, on certain imported inputs used in the production of goods for export. Drawbacks are based on actual cost and can never exceed those levied on imported inputs used in the production of exports.

Application of internal taxes on imports

Yemen has not established a Value Added Tax (VAT) system but imposes a general sales tax on domestic and imported goods and services, applied pursuant to Law no. 19 (2001), which was amended by Law no. 42 (2005) on general sales tax. Most goods and services are taxed at 5 per cent.

WTO accession

The process of Yemen's accession to the WTO began in the mid-1990s. Yemen adopted an economic, financial and administrative reform strategy with support from the IMF, World Bank and a number of donor countries. The goal of accession was mentioned in the GoY's official documents, particularly the economic, financial and administrative reform programme in 1995, the year in which the WTO was established. Yemen's progress towards accession was similar to that of many developing countries, as the accession process is usually accompanied, and sometimes preceded, by the launching of an economic reform programme and the adoption of development documents and tools such as poverty reduction strategies and the Millennium Development Goals (MDGs).

Economic and administrative reform in preparation for the accession process naturally veers towards establishing prevalence of order, rule of law and good governance. The GoY took a number of practical steps to initiate the accession process, including the Cabinet issuing the decision to form a ministerial committee to study the accession issue. The committee recommended Yemen's pursuit of WTO accession and stressed the importance of accomplishing the preparatory steps. The Cabinet agreed to this goal and endorsed the government programme in June 1998, which included for the first time the objective of achieving WTO accession. The programmes of the successive governments continued to confirm this up until the national consensus government.

Objectives of WTO accession

Through pursuing WTO membership, Yemen's primary aims were to enhance and stabilize the economic reforms, particularly those related to trade, that were included in the framework of the economic, financial and administrative reform programme. Yemen also aimed to provide a climate conducive to continuing the reform process and for trade to play a central role in ensuring the success of the reforms and supporting economic growth and development. Yemen sought through accession further integration in the regional and global economy, through the multilateral global trade system. It was anticipated that WTO membership would protect Yemen from marginalization as the GoY committed to the principles and rules of the WTO system and worked towards gaining global confidence in its domestic commercial and economic policies. These processes would develop the trade and investment climate and improve attractiveness for domestic, Arab and foreign investment.

Yemen also aimed through WTO membership to establish a transparent trade policy independent of the financial and monetary policies but complementary to them, so that the three policies could achieve development in the framework of a more effective vision.

Potential benefits and costs of WTO accession

Benefits

There were many potential gains Yemen sought from WTO membership, the most important of which were the following:

- Establishing trade policies based on international principles and regulations so as to improve national development plans and programmes, making them clearer, more cohesive and stable
- Preparing new trade and economic opportunities to increase production and trade and reduce poverty, which has increased noticeably in recent years
- The commitment of government entities to safeguard the domestic and foreign private sector, limiting any procedures outside the principles and rules of the WTO (this approach should be in line with the national reform programmes with the provision of a mechanism for commercial dispute settlement in cases of maltreatment)
- Benefiting from the legal tools made available by the agreements of "trade remedies" to protect domestic production and the economy from harmful practices of international trade
- Benefiting from the effective dispute settlement mechanism in the WTO in cases of unjustified trade restrictions on Yemeni exports
- Facilitating access to more varied and competitive goods and services in terms of price and quality
- Participating in multilateral trade negotiations, contributing to the formulation of agreements and protecting Yemen's interests and commercial and economic needs through coordination with other groups
- Benefiting from preferences and flexibilities granted by the WTO to LDCs
- Accessing trade-related technical and financial support programmes such as the support for trade programme and integrated framework programme, among others[38]

Costs

The process of attaining WTO membership through implementing the conditions of the agreement and rules of international trade may involve a number of obstacles, including falling into dispute settlement procedures with the WTO. However, the facilitations and preferences offered in the WTO agreements for LDCs, the transition period granted to Yemen and the measures addressing unfair trade practices all represent important incentives to overcome any difficulties, including the work required for Yemen's commitments to be met.

The lack of understanding of WTO membership in many production and service sectors represented a real issue, as it was necessary to spread awareness of the WTO agreements and rules and Yemen's commitments towards them, as well as making the benefits known. This required considerable effort and expense from the relevant authorities and private sector and involved the development and establishment of new mechanisms and the changing of certain practices.

Access to the markets of WTO member states in the short and medium term is in part dependant on domestic production and export capacity; the expansion and diversification of local production and services is vital. The private sector's role in achieving this is essential and complementary to that of the government.

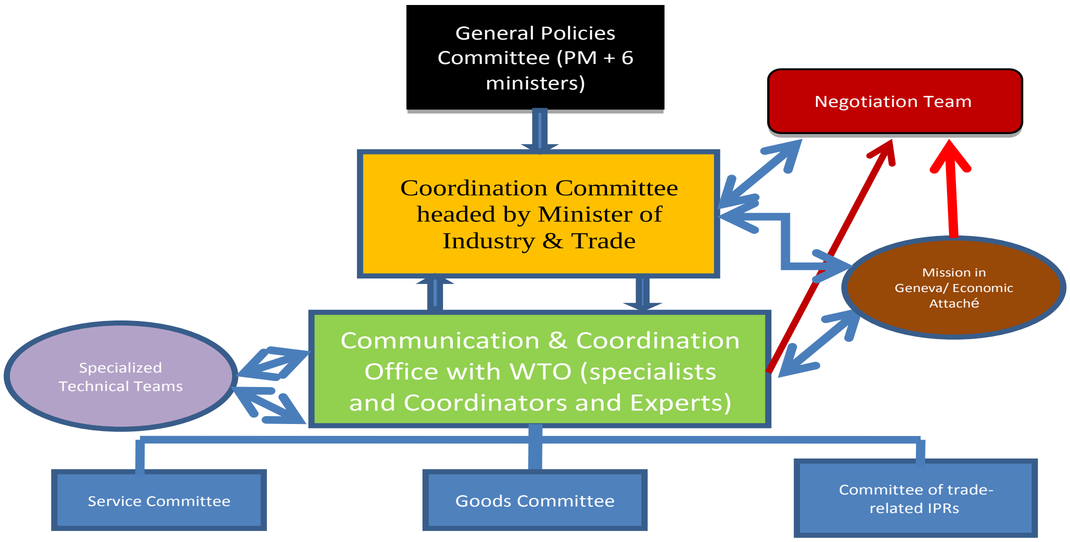
Some local industries may be negatively impacted by WTO accession, particularly those that functioned well in low efficiency/high cost conditions or focused solely on the local market and cannot contend with external competition or adapt to transparent trade rules. There will therefore be some social costs in the short and medium term. It is of the utmost importance that the business sectors, particularly industry, assess how they will be affected by WTO accession and avoid potential negative impacts as much as possible.[39]

Institutional mechanisms for WTO accession coordination

The organizational, political and legal aspects of the national mechanism for Yemen's accession to the WTO were established under the supervision of the prime minister and the General Policies Committee, which is chaired by the prime minister and includes the ministers of industry, foreign affairs, finance, agriculture and legal affairs and the governor of the Central Bank of Yemen. During the accession process, the committee held a number of meetings and took many important guidance decisions, including endorsing concession offers and confirming commitments, as well as decisions to issue and amend the laws, regulations and systems needed to conform to WTO agreements.

The minister of industry and trade, being the chief negotiator for Yemen and field leader, supervised the executive mechanism of accession by chairing the National Committee for Preparation and Negotiation with the WTO. The committee included high-level representatives from the Cabinet, deputy ministers, chairmen of government authorities, officers of official entities and representatives from the private sector. The tasks of the committee were to supervise the preparation of plans, policies and programmes to enhance Yemen's negotiating capacity as well as to review and endorse all the accession documents submitted to the WTO Secretariat. The minister of industry and trade supervised the CCO WTO, which represents the executive arm, and the technical office. The office was responsible for following up on all accession-related issues, including coordination and participation in the meetings of the General Policies Committee, National Committee and the three technical committees of the office, which are the goods committee, the services committee and the Trade-Related Aspects of Intellectual Property Rights (TRIPS) committee. An economic attaché for WTO affairs was also appointed to Yemen's diplomatic mission to Geneva to complete the work of the office and be the point of contact for the WTO and its members. The office also followed up on the negotiation file and contributed to preparation for the meetings of the accession working group and coordinated bilateral negotiations. This mechanism was developed over several years until it was finalized in 2001.

Figure (8): National mechanism for accession to WTO.



The establishment of the CCO WTO took place with support from the EU. The EU was the main supporter of Yemen's accession efforts for over seven years and offered technical assistance reaching 7 million Euros. The assistance focused on developing national capacity, preparing documents and funding the participation of the negotiation team in Geneva.

Negotiations

Multilateral negotiations

The accession process started with the submission of the Foreign Trade Memorandum in November 2002, considered the first requirement for the accession of any country. This memorandum represented a "fixed picture of the economic, commercial and legislative situation" in Yemen. The accession working group was established 17 July 2000 by the general council of the organization under the chairmanship of Mr. Hartmut Roben (Germany) and membership of 51 WTO members. This working group examined the memorandum and all related documents subsequently submitted by Yemen and also managed the multilateral negotiations during the 11 official and two unofficial meetings. Yemen had the highest number of meetings among the LDCs, followed by Laos. This reflects the complexities of the negotiations and the dedication of Yemeni negotiation team and its commitment to achieving the most suitable accession terms for Yemen given its economic and development conditions. Over 40 documents were submitted and the team received about 1,200 questions in the process of examining the foreign trade system and its conformity with the provisions of WTO agreements.

Bilateral negotiations

The Yemeni negotiation strategy focused on binding the customs tariff rates, aiming to bind them at higher levels than those applied at the time. There were three bilateral trading options, to bind the customs fees at the same level as those applied at the time of accession, to lower them or to raise them. Raising the tariffs would be the hardest and most time-consuming option to enforce but would allow more policy space, particularly with regards to protecting domestic production in accordance with the principles and rules of the WTO. Considering that the customs fees applied at the time were established in the context of one-sided economic reforms and were not based on actual negotiations with commercial partners, Yemen demanded that consideration be given to the national reforms it undertook.[40]

An initial offer for the import of specific services was stated in the services agreement (cross-border, external consumption, commercial existence and existence of natural persons) for six basic service sectors (business services, communications, education, finance, health and tourism). A second revised offer was submitted which included new basic services (environment, transport and cultural entertainment) at the request of certain countries. A third revised offer included two further sectors (distribution and construction services). The exchange of bilateral requests and offers continued until bilateral agreements were signed with China, Canada, Korea, Japan, the EU and United States (US).

Legislation

Yemen's legislative commitments in accordance with the accession requirements predominantly concentrated on: the removal of discriminatory aspects in the trading rights between Yemenis and non-Yemenis, turning the percentage fees stated in the applicable legislation into lump sum fees, enforcing new laws that regulate intellectual property rights (IPRs) to ensure conformity to the TRIPS agreement, and enforcing new legislation and amending existent laws to conform with the WTO agreements such as customs valuation and agreements concerning trade remedies (to anti-dumping, compensatory measures and protective measures in case of increased imports), trade-related investment measures, the Sanitary and Phytosanitary (SPS) agreement and the Technical Barriers to Trade (TBT) agreement.

The most important of the new laws enacted was Law no. 21 (2010) on national protection from impacts of harmful practices in international trade. The three agreements on trade remedies for anti-dumping, support and compensatory measures and protective measures in this law defined the institutional structure to implement it, i.e. the General Department for the Protection of National Production in the foreign trade division of the MOIT. A draft law to complete the legislative structure for the protection of national production and its bylaw have been prepared. These are currently being discussed with the relevant bodies and after the bylaw has been issued, subsequent internal bylaws and decisions will be issued.

Investment Law no. 22 (2002) was amended and was then replaced by the new Investment Law no. 15 (2010), which cancelled investment incentives related to the use of local content mentioned in the previous law. It also included guarantees and other benefits on the basis of non-discrimination and equality between Yemeni and foreign investors with regards to rights, rules, obligations and procedures (Article 5 of the law).

Law no 10 (2012) was also issued amending Articles 5 and 6 of Law no 41 (2005) on customs tariffs. The amendments targeted the restrictions imposed by these two articles regarding the ban on importing cars over eight-year old and heavy machinery over 16-years old. These restrictions had been a point of objection and reservation for a number of countries due to their nonconformity with the GATT 1994. The Customs Authority was also in favour of cancelling these restrictions due to the difficulties in apply them.

Yemen developed a "legal action plan",[41] which incorporated the legislative reforms and the most important documents of the working group. This plan detailed the various commitments regarding national laws and legislation that were agreed on in bilateral and multilateral negotiations. Twenty-seven pieces of legislation (laws, republican decrees, ministerial decisions and internal bylaws) were issued in accordance with the plan.

Post-accession

WTO membership does not automatically entail access to the accession benefits as these are bound by the relevant parties' policies and measures. The working group report, issued on 4 October 2013, listed the commitments registered in Yemen's foreign trade system as a member of the WTO. These were also referred to in item 2 of the accession protocol, starting from the date of accession except in cases where Yemen is granted "specific transition period" status.

At the institutional level, steps were taken to establish a new national mechanism to supervise Yemen's relationship with the WTO and its members for future negotiation purposes and for the implementation of the various agreements and commitments made by Yemen. A structure such as this requires a national communication and coordination unit to carry out these tasks within the government and with the involvement of non-government bodies and other national partners. A central notification unit is necessary to brief the WTO Secretariat and members on different issues related to the implementation of Yemen's WTO agreements and commitments. Notifications have to be prepared and submitted immediately after accession or when requested, and contact points related to agreements such as SPS and TBT are expected to provide answers to inquiries submitted by WTO members or exporters and importers. These steps have yet to be undertaken.

Yemen took several practical steps to begin the implementation of its WTO commitments. The minister of industry and trade issued a resolution on the regulation of foreign non-resident importers and also on the point of contact for TBT issues at the YSMO. The MOIT is preparing a draft resolution on the prior evaluation of the rules of origin, unifying other fees and charges at 0.25 per cent, and the establishment of the collection mechanism for such fees. The Cabinet is revising customs valuation rules for banned and restricted goods.

A programme was prepared to build national capacity in certain fields, particularly the TBT, SPS, TRIPS and customs valuation agreements, as well as to increase the number of staff working on these issues. The WTO provided training and workshops in WTO affairs, especially relating to implementing the commitments and notifications.

Yemen, like other LDCs, asked to be granted a suitable transition period. WTO members agreed in 2010 to concede a transition period for the implementation of a number of the WTO agreements, including the TBT, SPS, customs valuation and TRIPS agreements, which would end in December 2016. A matrix was prepared for the implementation of Yemen's commitments, which includes action plans for the four agreements and specifies which bodies are responsible for implementation as well as the technical assistance needed for carrying out the required tasks. The EU project for supporting Yemen's accession is expected to contribute to the implementation of the plans.

Regional and bilateral trade agreements and market access

Yemen has sought to enter many regional and bilateral trade agreements to enhance economic and commercial cooperation. These agreements highlight the role of trade in achieving economic development and in implementing economic plans and development strategies.

Greater Arab Free Trade Area

The Greater Arab Free Trade Area (GAFTA) is a multilateral agreement between member Arab countries to fulfil the 1981 agreement on facilitating and developing trade exchange.[42] The GAFTA agreement was endorsed by the Economic and Social Council of the Arab League in its Resolution no. 1317 (1997).[43] It scheduled the freeing of trade among its members in agricultural, industrial, intermediate and mining goods within 10 years between January 1998 and December 2007.[44] The GAFTA agreement stipulates the elimination of all non-tariff barriers and the application of a gradual reduction by 10 per cent annually in customs tariffs, taxes and other similar charges on imported goods of Arabic origin. In 2002 14 Arab countries agreed on achieving full liberalization of trade by December 2004. In the same year Yemen, Sudan and Palestine also joined, while Algeria joined in 2008.

As LDCs, Yemen, Sudan and Palestine were granted a transition period of five years in which to apply the gradual reduction of customs fees, taxes and similar charges. The three countries started applying gradual reductions in 2005 in equal annual increments. Yemen applied a reduction of 16 per cent annually for three years, but both Yemen and Sudan were unable to achieve the full customs exemption by 2010. Both countries requested an extension of the transition period and were given a new target of 2012. However, the unconducive political and economic conditions and the Arab Spring overwhelmed the whole process. The Yemeni economy suffered damages and losses reaching US$ 10.5 billion due to the decline in oil production, which led to huge deficits in economic and financial balances. Yemen did not receive support to build the capacity of its economy and export sector in order to compete in Arab markets, despite the GoY’s repeated submissions for assistance in accordance with the Arab summit resolutions.

Impact of Yemen's accession to GAFTA

Yemen's trade with Arab countries

Yemen's trade with Arab countries peaked in 2013 at US$ 6,876 million, equivalent to 33.1 per cent of Yemen's total foreign trade, compared to US$ 1,860 million in 2004. Growth was continuous between 2004 and 2008, when trade with Arab countries reached US$ 6,223 million (34.5 per cent of total foreign trade) due to the gradual liberalisation of trade with other GAFTA member countries after 2005 and the global increase in prices of basic commodities. However, between 2009 and 2012 it declined, recording an annual average of US$ 4,403 million, equivalent to 26.4 per cent of total foreign trade. This was due to the global financial crisis and the impact of the popular uprising in 2011.

Imports

Yemeni imports from GAFTA member countries increased from US$ 1,523 million in 2004, equivalent to 38.1 per cent of total imports, to its highest level at US$ 5,481 million in 2013 (40.7 per cent of total imports). Imports from GAFTA member countries rose at an annual average of 18.8 per cent between 2005 and 2013 and averaged 38.5 per cent of total imported goods. Arab countries are Yemen’s main trading partners for the import of goods. Most of these imports are similar to local products and thus negatively impact domestic production. Increased imports have led to a wider gap in the balance of trade and BOP between Yemen and Arab countries, as well as considerable loss of customs revenue.

The GoY applied for a list of exceptions to protect infant industries for a period of four years, starting in 2013, in accordance with Article 15 of the agreement on facilitating and developing trade exchange and the agreement on the executive programme of GAFTA. The request was denied.

Exports

Yemeni export of goods to GAFTA member countries increased from US$ 336.9 million in 2004, equivalent to 8.3 per cent of total export of goods, to its highest level of US$ 1,395 million (19.1 per cent of total export of goods) in 2013, achieving an average annual growth of 24.2 per cent over the period. Arab countries are Yemen's primary trading partners for non-oil exports. This is due to the geographic proximity and relative advantages granted by the GAFTA agreement.

Oil derivatives constitute around 60 per cent of exports from Yemen to Arab countries. Other exports include fresh and frozen fish (13 per cent), agricultural produce such as fresh fruit, vegetables, coffee, honey (10 per cent) and non-oil manufactured goods (17 per cent).

The Saudi market imports the largest share of Yemeni exports of fish and live animals (65 per cent), followed by Egypt (15 per cent) and the remainder is distributed among other Arab countries. Manufacturing exports are mainly directed to Somalia and Djibouti (50 per cent), Saudi Arabia (15 per cent) and the UAE (14 per cent).

Yemeni export of goods to GAFTA member countries remains limited due to non-tariff restrictions (technical, administrative and procedural) as well as some quantitative restrictions imposed by Saudi Arabia. High transport costs and the lack of regular maritime routes also impede potential export activities. Furthermore, the noncompliance of most agricultural and fish products with the standards, specifications, health, technical and environmental criteria of the GCC restricts access to those markets.

Trade balance with GAFTA member countries

The trade balance deficit with GAFTA members tripled from US$ 1,186 million in 2004 to US$ 3,576 million in 2008, at an average annual growth of US$ 597 million over the period. The deficit declined between 2009 and 2012, averaging US$ 2,569 million before rising again to peak at US$ 4,085 million in 2013.

Table (18): Domestic trade and trade with GAFTA countries (million US$)

Total goods trade						GAFTA Intra-regional trade				
Descript. / Year	Foreign trade	Imports	Exports	Trade with Arab countries	per cent	Imports	per cent	Exports	per cent	Trade balance
2004	8064.59	3986.1	4078.46	1860.48	23.06	1523.49	38.22	336.99	8.26	1186.5-
2005	11007.3	5373.1	5608.0	2630.10	23.89	2058.99	38.29	571.10	10.19	1487.8-
2006	12748.0	6069.5	6678.5	3160.01	24.78	2374.53	39.10	785.46	11.76	1589.0-
2007	14822.8	8509.6	6313.1	4396.53	29.66	3471.9	40.78	924.57	14.64	2547.3-
2008	18051.6	10447.0	7602.9	6223.07	34.47	4899.8	46.88	1323.2	17.40	3576.6-
2009	15438.6	9177.3	6261.4	4122.9	26.69	3226.2	35.15	895.6	14.30	-2330.6

2010	16283.7	9483.0	6879.0	4867.08	29.45	3711.6	38.09	1155.4	17.04	-2556.2
2011	16733.8	9545.4	7188.3	4463.68	26.74	3492.7	36.58	970.8	13.60	2521.9-
2012	18262.1	11297.2	7064.8	4160.34	22.66	3513.7	31.10	648.5	9.18	2865.2-
2013	20759.9	13463.0	7296.0	6876.07	33.11	5480.9	40.71	1395.0	19.12	4085.9--
Source: Central Statistical Organization, Foreign Trade Bulletins, various issues, Sana'a.										

Gulf Cooperation Council (GCC)

Yemen has sought gradual economic integration with the GCC countries with the aim of attaining full membership of the council.[45] Yemen has joined a number of GCC councils and authorities in the fields of education, sports, culture, health and media as well as other economic sectors such as auditing, metrology, industry and chambers of commerce. The greatest obstacles to Yemen's full membership are the following:

- Some GCC countries object in principle to Yemen's membership, referring to Article 5 of the Main Agreement of 4 February 1981 that stipulates that the GCC council consists of six states.
- Yemen’s political system differs greatly from that of the neighbouring monarchies.
- There is a large variation in economic potential and financial resources between Yemen and the GCC countries, which together have about 495.7 billion barrels of oil reserves and produce about 17 million barrels per day, compared to Yemen's humble reserves of less than 10 billion barrels, equivalent to 2.1 per cent of GCC reserves.
- The GCC's GDP reached US$ 1,642 billion in 2013 with a per capita average of US$ 33,665 and foreign trade amounted to US$ 1,544 billion in the same year. Yemen's trade is equivalent to 1.3 per cent of the GCC's foreign trade.
- Yemen’s economic and trade infrastructure is limited when compared to that of the GCC countries.

Nonetheless, Yemen continues in its pursuit of integration with the GCC countries as a group and individually and in 2006 set up a mechanism for integration entitled "Towards a broader cooperation and partnership with GCC countries", which included the following:[46]

- Drafting a roadmap for gradual integration, taking into account trade liberalization within the GAFTA framework given that all six GCC countries are GAFTA members
- Convening an investment conference in 2007 in coordination with the GCC to promote investment opportunities
- Convening a donor conference in coordination with the World Bank and the GCC in London in 2006 to coordinate donor assistance and prepare Yemen for GCC accession through achieving economic integration in all areas of production, trade, investment, labour and capital

- Improving the business environment in Yemen to make it more conducive to GCC investments, particularly in the promising sectors, in addition to streamlining economic, trade, investment, legal and regulatory structures to correlate with those of the GCC countries
- Adopting GCC standards and specifications to enhance trade with the GCC countries, particularly after Yemen joined the GCC Standards & Metrology Authority
- Removing obstacles and non-tariff restrictions that impede the flow of goods between Yemen and the GCC countries by joining the GCC trade committee as well as through the joint Yemeni-Saudi coordination council

Trade between Yemen and the GCC countries has noticeably improved due to the application of the GAFTA customs-free trade regulations. It increased considerably between 2005 and 2013, reaching its highest level in 2013 at US$ 6,096 million. Yemen's trade balance with the GCC recorded a deficit of US$ 3,966 million in 2013 compared to US$ 1,321 million in 2005. Trade between Yemen and the GCC countries formed about 90.5 per cent of Yemen's total trade with Arab countries in 2013. Yemeni imports from the GCC countries accounted for 92.5 per cent of Yemen's total imports from Arab countries, while Yemeni exports to the GCC countries accounted for 82.4 per cent of total exports to Arab countries.[47] These figures demonstrate the importance of Yemen's trade with the GCC countries. However, the same difficulties and obstacles hindering Yemeni export to GAFTA countries, such as specifications, standards and the high cost of transportation, equally apply to trade with the GCC countries.

Bilateral trade agreements

Yemen has signed many bilateral trade agreements with other countries to enhance its economic relations and increase trade through removing obstacles and non-tariff restrictions. These include agreements with Ethiopia in 1997, Turkey (1998), Indonesia (1998), Malaysia (1998), Djibouti (1998), Algeria (1999), Morocco (1999), Sudan (1999), Lebanon (1999), Qatar (2000) and Eritrea (2001).

Despite the large number of bilateral trade agreements, their impact on increasing and diversifying Yemeni non-oil exports to these countries has been minimal due to the inability of Yemeni products to meet foreign markets' requirements in terms of specifications and health and environmental standards, as well as the strong price competition. Bilateral trade agreements focus on non-tariff restrictions and do not sufficiently address preferential trade, customs, standards and recognition of certificates of conformity. Attention to these issues would improve Yemeni exports' access to other markets. Imports from these countries have noticeably increased during recent years, as most of the partner countries have substantial producing and exporting capacities, unlike Yemen, which suffers from supply-side weakness.

In 1996 Yemen signed an economic, trade, technical and investment cooperation agreement with **Saudi Arabia** to facilitate the flow of goods between the two countries by removing all obstacles and non-tariff restrictions. In accordance with the agreement, a free zone between the two countries was established and full exemption of customs tariffs and taxes was applied on two lists of exchanged goods of national origin for both countries.

The agreement came into effect in 2001 and resulted in trade between the two countries growing considerably. Bilateral trade increased from 18.5 billion Yemeni rial in 1997 to 40.2 billion Yemeni rial in 2001 and to 131.5 billion Yemeni rial in 2006. Yemeni exports to Saudi Arabia tripled from

3.7 billion Yemeni rial in 1997 to 10.7 billion Yemeni rial in 2001 and rose to 19.7 billion Yemeni rial in 2006. Yemeni imports from Saudi Arabia increased from 13.2 billion Yemeni rial in 1997 to 28.8 billion Yemeni rial in 2001 and to 105.7 billion Yemeni rial in 2006.[48] In 2006 bilateral trade between Yemen and Saudi Arabia was freed and Yemeni exports became exempt from customs tariffs.

In accordance with the Free Trade Zone Agreement with Iraq signed in August 2001, full customs exemptions were applied and all obstacles and non-tariff restrictions were eliminated on a list of exchanged goods of national origin between the two countries. The agreement, which remains in force, increased Yemeni exports to Iraq, particularly of manufacturing goods, from 4.5 million Yemeni rial in 1997 to 879 million Yemeni rial in 2001 and to 4,843 million Yemeni rial in 2006. Yemeni imports from Iraq increased from 3.1 million Yemeni rial in 1997 to 4.6 million Yemeni rial in 2001 and to 50 million Yemeni rial in 2006.[49] However, bilateral trade is still low due to the unstable conditions in Iraq in recent years.

Generalised system of preferences for LDCs

The EU's preferential trade system guarantees Yemeni exports full customs exemption on most goods. Yemeni exports to EU countries, particularly fish and coffee products, have been exempt from customs tariffs since 2002. Agricultural produce such as fresh fruit and vegetables could not access these markets due to failure to meet EU health and environmental specifications and standards.

Yemeni non-oil exports increased from 718 million Yemeni rial in 2000 to 4,323 million Yemeni rial in 2001 and to 6,200 million Yemeni rial in 2002. Exports reached their highest level at 9,002 million Yemeni rial in 2010. Exports to the EU have declined since 2011, falling to 7,490 million Yemeni rial in 2013 as a result of the unstable political and economic conditions.[50]

In 2009 Yemen signed a general preferential trade agreement with China, covering 60 per cent of the Chinese tariff lines. This coverage increased to 95 per cent of all tariff lines from 2013 and to 97 per cent in 2015. However, Yemeni exports to China declined from 7,381 million Yemeni rial in 2010 to 3,326 million Yemeni rial in 2011 and to 2,412 Yemeni rial in 2013 with the unstable political and economic conditions.[51]

Yemen also signed preferential trade agreements with India and South Korea that were due to be implemented in 2013 (85 per cent of India's tariff lines and 95 per cent of South Korea's).[52] Yemen met all the necessary requirements, procedures and conditions regarding certification and rules of origin, including approved signatures and seals of the relevant authorities. However, the Yemeni private sector has still not succeeded in benefiting from these agreements due to insufficient capacity and the lack of awareness of these opportunities.

Yemen is currently seeking to coordinate with the WTO Secretariat and members who grant general preferential trade to LDCs to conclude discussions on the rules of origin in accordance with the relevant WTO decisions, which is a key factor in benefiting from preferential systems.

Sana'a Forum for Cooperation

The Sana'a Forum for Cooperation (SFC) was established in accordance with an agreement signed in Addis Ababa in 2003 between Yemen, Sudan and Ethiopia. The objective was to enhance cooperation in political, security, economic, trade, cultural, health, transportation and communications fields. The SFC established its secretariat in Sana'a and held six periodic meetings alternating between the capitals of the three countries, the last of which was in Khartoum in 2008. A number of agreements were signed for marine freight, exports, customs cooperation, free zones and establishing a joint chamber for trade and industry. A draft document was also signed to build a regional centre in Yemen's Mocha port to regulate livestock trade between the three countries.

The three countries agreed to prepare studies on establishing a free trade zone and to remove tariff and non-tariff restrictions for trade between them. Yemen submitted a study during the sixth round of the SFC, but the discussion was postponed until the seventh round to give Sudan and Ethiopia time to complete their own studies. Other Horn of Africa countries have expressed interest in joining the forum in the future. However, SFC meetings have since halted due to political unrest in the region.

System of preferential trade in the Organization of Islamic Cooperation

Although Yemen is a member of the Organization of Islamic Cooperation (OIC), it has not yet joined the preferential trade system among member countries, which includes a framework agreement, a protocol of the preferential trade system for customs tariffs and rules of origin of the trade preferential system. The system was established in 2011 with the ratification of 11 countries, five of which are Gulf countries. There are now 15 signatory countries.

The decrease in tariff rates made by Yemen in 2005 far exceeded those negotiated by the OIC trade committee, which reflects the lack of coordination between Yemeni government agencies, in particular the Ministry of Planning and International Cooperation (MOPIC), the Ministry of Foreign Affairs and the MOIT. The MOIT is currently assessing the feasibility of joining this preferential trade system.

Indian Ocean Rim Association for Regional Cooperation

Yemen is a founding member of the Indian Ocean Rim Association for Regional Cooperation, which was established formally on 6 March 1997 and included 20 members. A number of member countries signed the preferential trade agreement of the association. Yemen has not yet signed the agreement and is still studying the potential benefits and impact on the national economy, particularly in light of its accession to the WTO.

The federal system and opportunities for trade and investment

The federal system

After the National Dialogue Conference, a decision was reached to transform Yemen into a federation of six regions. The proposed federal system is expected to provide solutions to the economic, political and social challenges that Yemen is facing. The federal system represents a new direction towards reform and better management to avoid monopolizing available resources at the country's centre.

Economic policies that have failed to achieve economic development during the last five decades need to be addressed and a move to adopt new strategies and policies that reinforce economic and social development is vital. Federal regions delineated according to geographical and administrative factors will enhance the development agenda by redistributing central responsibilities and establishing real partnerships with local communities to ensure effective participation in the development process, better resource management, improved living conditions and a reduction in poverty and unemployment.

The economic and social indicators in the proposed federal regions demonstrate the available resources and opportunities in these regions. The population is most densely concentrated in three of the six regions: Azzal (28.4 per cent), Al-Janad (23 per cent) and Tihama (23 per cent). The rest of the population are divided between the other regions: Aden (11.3 per cent), Hadramout (8.1 per cent) and Sheba (6.4 per cent). Data on GDP categorized by region is not available but it does not correspond with the population distribution, as oil production is centred in the less populated regions. Human resources reflect the production potential in the highly populated regions. Economic factors in some regions can support growth and development, hence the potential for cooperation and coordination between regions through better resource management and reinforcing the role of trade in the domestic and foreign markets.

A positive attitude towards the federal system will ensure justice in wealth distribution and autonomy in managing resources, development projects and investments. Competition between the regions will lead to better development in the country at all levels and ensure efficient services. Also, a federal system is by nature intended to fight corruption, nepotism and bribery.

Yemeni regions possess a wide variety of economic, human, touristic, cultural and mineral resources. Most of the regions contain diverse investment opportunities in agriculture, tourism and industry. However, there should be support for economic integration among the regions through the provision of a solid framework for this model. The system should devise new solutions to the persistent nationwide political issues such as instability, political unrest, poor infrastructure, limited funds, lack of skills and widespread corruption.

Some regions and governorates are in more dire need than others of roads to connect urban centres with rural areas. Others suffer more from water scarcity or from environmental and vegetation deterioration. Some of these challenges, which vary from one region to another, reflect the culture, education and economic level of the local communities. The federal system must therefore consider tailored support for regions that have limited revenues and a low share of public spending.

Foreign trade in a federal state

Regions can engage in trade with other countries through their sea, land or air customs ports. Two-thirds of Yemen's foreign trade is dominated by Aden and Hadramout, with a share of 41.9 per cent and 29.1 per cent of total foreign trade, respectively, in 2013. Tihama ranks third with almost 25.9 per cent, followed by Azzal (3.2 per cent) and Al-Janad (0.8 per cent). Sheba region has no opportunities to participate in foreign trade, as it has no customs outlet despite its Al-Jawf governorate bordering Saudi Arabia.

Table (19): Trade by region.

Year / Region	2010		2011		2012		2013	
	billion Yemeni rial	per cent	billion Yemeni rial	per cent	billion Yemeni rial	per cent	billion Yemeni rial	per cent
Aden	1183.6	33.3	1198.9	33.7	1300.9	33.1	1823.5	40.9
Al-Janad	62.7	1.8	35.4	1.0	37.3	0.9	35.8	0.8
Hadramout	1225.1	34.5	1363.3	38.3	1406.4	35.7	1297.3	29.1
Tihama	935.8	26.3	857.6	24.1	1076.2	27.3	1153.7	25.9

Azzal	145.7	4.1	105.9	3.0	114.9	2.9	143.4	3.2
Yemen	3552.9	100	3561.2	100	3935.9	100	4453.6	100
Source: Statistical Yearbook (2013)								

Aden, Yemen’s most important port, dominates imports with 52.7 per cent of total imports in 2013. Aden holds an international airport, a free zone and Bouriqa and Dar Sa’ad customs service ports through which imports flow into the country. Tihama ranks second (37.3 per cent) through Al-Hodeidah airport and sea port, Ra’as Eisa terminal for oil exports, Meidi port and Al-Twal land port connecting Yemen with Saudi Arabia. Hadramout and Azzal follow with 4.6 per cent and 4.4 per cent, respectively. However, while Hadramout possesses several sea, land and air customs ports, its share of imports remains much lower than its share of exports. Al-Janad's share does not exceed 1 per cent of total imports.

There is a wide disparity among the regions and a structural imbalance in import activities. Trade activity is predominantly centred in Aden and Tihama as these regions have the necessary institutions and infrastructure, besides being key centres of domestic trade. This is a reflection of the state policy of centralization, where the need to balance the operations of sea ports was neglected, especially in Al-Janad and Hadramout where the sea ports lack basic infrastructure.

Al-Janad's import activities and the availability of industrial exports have been impeded by the poor condition of its airport and sea ports, despite it being one of the most populous regions. Mokha is one of the oldest and most famous Yemeni sea ports. However, Yemen has focused on Aden and Tihama to facilitate its foreign trade activities.

Table (20): Imports by region.

Year / Region	2010		2011		2012		2013	
	billion Yemeni rial	per cent	billion Yemeni rial	per cent	billion Yemeni rial	per cent	billion Yemeni rial	per cent
Aden	978.4	46.7	1040.1	51	1159.9	47.9	1521.4	52.7
Al-Janad	57.3	2.7	30.7	1.5	32.8	1.4	29.6	1
Hadramout	103	4.9	84.2	4.1	121.2	5	131.6	4.6
Tihama	828.1	39.5	786	38.6	1003.3	41.4	1077.3	37.3
Azzal	128.2	6.1	96.5	4.7	104.2	4.3	128.2	4.4
Total	2095.1	100	2037.4	100	2421.4	100	2888.2	100
Source: Statistical Yearbook (2013)								

The significance of foreign trade in Aden and Hadramout is seen in their increasing share of Yemeni export activity. Hadramout ranks first with 74.5 per cent of total exports, followed by Aden (19.3 per cent). This is due to the oil and natural gas exports coming through Dhabah port in Hadramout and Belhaf port in Shabwah. Aden deals mainly with industrial exports, fish products and other primary goods exports. Tihama and Azzal record only 4.9 per cent and 1 per cent, respectively, while Al-Janad ranks last with only 0.4 per cent.

Table (21): Exports and re-exports by region.

Year / Region	2010		2011		2012		2013	
	billion Yemeni rial	per cent	billion Yemeni rial	per cent	billion Yemeni rial	per cent	billion Yemeni rial	per cent
Aden	205.19	14.1	158.9	10.4	141.1	9.3	302.1	19.3
Al-Janad	5.4	0.4	4.8	0.3	4.4	0.3	6.2	0.4
Hadramout	1122.03	77	1279.1	83.9	1285.2	84.9	1165.7	74.5
Tihama	107.67	7.4	71.6	4.7	73	4.8	76.3	4.9
Azzal	17.53	1.2	9.4	0.6	10.7	0.7	15.1	1
Total	1457.81	100	1523.8	100	1514.5	100	1565.4	100
Source: Statistical Yearbook (2013)								

Imbalances in the share of foreign trade activities between regions indicate the urgent need for the rehabilitation of transport infrastructure, especially in Al-Janad. Other regions such as Sheba and Azzal that have no sea ports should seek land-based international freight solutions; trade activity in Azzal currently flows through Sana'a airport and other land ports with Saudi Arabia. Disparities among regions should promote cooperation and partnerships and formulas should be developed to redistribute revenue and activities.

While many developing countries achieved rapid economic growth through trade expansion, especially export activities, growth does not necessarily alleviate poverty or reduce inequalities. In Yemen, trade failed to meet its objectives due to limited productive capacities and protracted economic transformation. The underperformance of the economy has been a product of political instability, insecurity and the mismanagement of oil revenue.

For trade liberalization to bring about increased market access for LDCs, including Yemen, these countries need to ease supply-side constraints and release their resources from monopolistic practices, rent seeking and quick profiteering. Yemen must first establish productive capacities and trade has to become an integral part of the country's development strategies and plans in order to ensure that economic growth has a direct impact on poverty reduction. Yemen will require assistance in diversifying its product base and enhancing competitiveness.

B. CROSS-CUTTING ISSUES

Trade, poverty reduction and human development

Introduction

Economic growth driven by trade can make a substantial impact on poverty reduction and human development. In many developing countries, the economically disadvantaged have benefited from the opening up of trade with other countries. Mounting evidence suggests that trade has a positive impact on poverty reduction and overall human development. Trade can, however, detract from human development objectives if not accompanied by a suitable policy environment, and this is where Yemen's primary challenge lies.

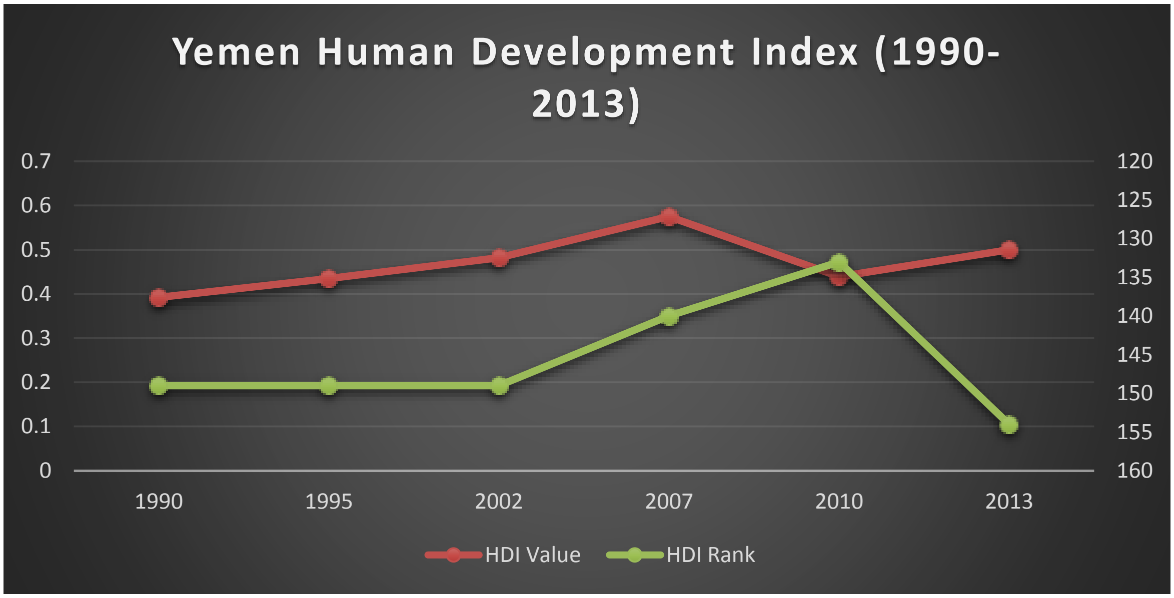
In order to achieve sustainable development goals, in keeping with the global post-2015 development agenda, trade must be fostered and integrated as an essential component of development strategies. The Marrakesh Agreement that established the World Trade Organization (WTO) emphasizes the importance of trade for human development. The agreement states that members "recognize that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development."

Recent political instability and insecurity in Yemen have posed tremendous challenges to trade and have negatively impacted human development. For the past several years, overall development in Yemen has slowed, in part due to weakening trade. A decline in oil exports, which account for seventy per cent of government revenue, has led to cuts in spending on education, health and infrastructure. Malnutrition, poverty and unemployment have been rising as a result of the economic contraction in 2011 and the slow recovery. The transition period, which was expected to end by 2014, has still not seen all of its objectives realized. Amid these mounting challenges the newly formed technocratic government represents an opportunity for attention and efforts to be focused on development and ensuring that trade can flourish. This chapter analyzes the trade-related challenges Yemen is facing in the framework of the Millennium Development Goals (MDGs) and human development, explores trade opportunities that benefit the economically disadvantaged, and puts forth a set of policy recommendations to support pro-poor economic growth and foster sustainable development.

Human development situation

Since the political and economic crisis that began in 2011 and persists in the present day, human development indicators have reflected the severity of the situation in Yemen. Yemen ranks 154th out of 187 countries on the United Nations (UN) 2013 Human Development Index (HDI), placing it in the low human development group along with most least developed countries (LDCs). As illustrated in Figure (9), Yemen's HDI rank remained relatively unchanged between 1990 and 2002, with a slight improvement in 2007 and 2010. However, this trend reversed in 2013 with Yemen's rank plunging from 133rd to 154th, reflecting the severe deterioration of public services and human development indicators. Social indicators reflect the trends in human development in Yemen. In 2011 54.5 per cent of the population were estimated to live below the poverty line, representing a considerable drop since 1998 when the level was at 40 per cent. Large gender disparities are apparent in the significant gaps between men's and women's access to economic, social and political opportunities. Two-fifths of young people are unemployed, ten million children are malnourished and Yemen is considered the seventh most food insecure country in the world.

Figure (9): Yemen Human Development Index (1990-2013)



The challenging development situation is exacerbated by frequent conflict, high population growth, weak governance and limited resources. Groups that are disproportionately affected by poverty include women, young people, children, farmers and fishermen. Issues concerning poverty and a lack of basic services are more severe in rural areas than in urban areas. "Remote and marginalized areas have been neglected for a long time and have not received adequate budget resources and investment, which has contributed to their population slipping further into poverty".[53]

Trade has the potential to contribute to economic growth, poverty reduction and the improvement of social welfare. Certain advantageous factors signify the potential for trade to flourish in Yemen. The upcoming transition towards a federal system, which will transfer more power to governorate authorities, will serve as a catalyst for development across the country and competition between governorates. The international support and coordination working to lead Yemen out of the current crisis can incorporate support for trade and improving the competitiveness of Yemeni products overseas. Yemen's recent accession to the WTO allows it to take full advantage of the trade preferences granted to LDCs and to integrate further into the global trading system. The dynamic youth segment of the population can provide the human resources required to develop local production and can also access regional labour markets.

Employment-led growth can heavily impact human development. As new employment opportunities are created in trade, more income is generated and households and individuals can improve their nutritional intake and invest in education and health, thus enhancing human capital.[54] Trade-led growth can also generate additional government revenue that can be used to fund social safety net programmes and improve basic services. Consumers can also benefit from trade as a wider variety of commodities becomes available. Better education and a more skilled workforce lead to progress in human development and contribute to economic growth and increased trade. Yemen's abundant and young workforce is a valuable resource that has vast potential if the young generation is educated and trained to meet the demands of a competitive economy.

Trade can also have a negative impact on human development and welfare. Due to the limited production capacities in the agriculture and fisheries sectors, higher quality products usually enter the export markets, leaving the domestic market with lower quality goods. Environmental damage can also occur through overexploitation of marine life in fisheries and aquaculture activities and the overuse of the limited water resources in agriculture.

Progress towards MDGs

The MDGs, which world leaders agreed upon in 2000 and aimed to achieve by 2015, continue to provide the framework for international development efforts. This section analyzes Yemen's progress towards the attainment of the MDGs and identifies links between trade and each of the goals. According to Yemen's MDG Reports, Yemen is behind schedule on all of the goals, with the possible exceptions of universal primary education and under-five mortality rates.[55] Yemen has made slow progress in addressing poverty and hunger (MDG 1), gender equality (MDG 3), maternal health (MDG 5) and environmental sustainability (MDG 7). However, relative progress has been made in education (MDG 2), combating diseases (MDG 6) and developing a global partnership for development (MDG 8).

MDG 1: Poverty reduction

Yemen is still a long way from achieving its MDG 1 target of eradicating extreme poverty and hunger. Chronic poverty, infant malnutrition and limited resources have all persisted. According to the World Food Programme, 42.5 per cent of the Yemeni population remain food insecure. Some 4.5 million Yemenis are severely food insecure while 6 million are moderately food insecure. This ongoing crisis has been exacerbated by the frequent conflict and deteriorating security throughout Yemen, particularly in rural areas.

As seen in a number of other developing countries, it is the development of productive capacity and economic transformation that ultimately provide the best route to poverty reduction. The Government of Yemen (GoY) should strive to develop the productive capacities of promising sectors. Agriculture, fisheries, tourism and industry must be given priority support so as to increase productivity and employment with the view to alleviate acute poverty. Sustainable food and agricultural production should be promoted in order to achieve food security. These issues are dealt with in the remainder of the Diagnostic Trade Integration Study (DTIS).

MDG 2: Education

Depending on its ability to overcome current shortcomings, Yemen could be on course to achieve MDG 2 by attaining universal primary education by 2015. Substantial progress has been made in improving enrolment rates and access to primary education. However, the quality of education remains poor. Inadequate school facilities, the limited capacity of teachers and a lack of teaching equipment contribute to the low quality of education, which results in students lacking the necessary knowledge and skills for higher education and the demands of the labour market. There are also sizeable discrepancies in the availability of qualified teachers and educational tools between urban and rural areas. The stark difference between primary enrolment rates (97 per cent) and secondary enrolment rates (47 per cent) shows the troublingly high drop-out rate. Female enrolment rates remain remarkably low in secondary education with persistent gender disparity related to factors like early marriage, poverty and illness. According to the latest UN estimates, the female enrolment rate for primary education is 78 per cent and for secondary education 33 per cent.[56] In order to maintain the progress towards achieving MDG 2, there is an urgent need for education policy reforms, improving the quality of teachers and schools, increasing female enrolment and ensuring that every child completes a full course of primary education.

MDG 3: Gender equality

Yemen has achieved modest progress towards reaching MDG 3's gender equality targets. Although there is a long way to go, increasing numbers of female students are enrolling in schools and universities and there has been a cultural shift in Yemen that has seen girls no longer discouraged from seeking education. With regards to employment, labour participation for women is still low at 25 per cent, compared with 72 per cent for males. Women are also disproportionately engaged in the informal economy, in the least paid and most insecure, precarious and vulnerable types of employment. They comprise more than 70 per cent of unpaid workers in family businesses, particularly in the agriculture sector in rural areas, often shepherding. Women commonly work as low paid day labourers, are self-employed in very small businesses (knitting, sewing, food processing, incense production) or are engaged in domestic work. Women face huge barriers to accessing the labour market, particularly for decent work and higher paid jobs. Yemen needs to tackle this gender inequality by empowering women and promoting their access to education and employment opportunities.

MDG 4: Reducing child mortality

With regards to the MDG 4 target to reduce child mortality, children in Yemen continue to be at severe risk. While mortality rates among children under the age of five decreased from 122 cases per 1,000 live births in 1992 to 60 in 2012 (and infant mortality rates decreased from 83 cases per 1,000 live births in 1992 to 46 cases in 2012) the rate of reduction must be accelerated for Yemen to achieve the target of reducing child mortality by two-thirds by 2015. The high mortality rates largely reflect the high rates of poverty, hunger and homelessness and are also aggravated by Yemen's strained institutional capacity, lack of water resources, growing conflict and natural disaster-based internal displacement crises. Malnutrition is the leading cause of death with severe hunger often starting in the womb, whereby maternal hunger results in children being born under-weight and at higher risk of premature mortality. Adolescent pregnancy is also a factor, as children born to very young mothers are more vulnerable to diseases and hunger in the early stages of life. "Child mortality in poorer families remains significantly higher than the national average, highlighting the strong link between poverty and mortality".[57]

MDG 5: Improving maternal health

As a result of measures taken by the GoY with support from the UN, the maternal mortality ratio declined from 365 per 100,000 live births in 2003 to 200 per 100,000 live births in 2010. Despite significant improvements in the health sector, services do not currently meet the needs of Yemen's rapidly expanding population. High rates of home birth and the lack of medical care during pregnancy increase maternal mortality rates, particularly in rural areas. To reverse the high mortality rates, interventions are urgently needed, including the training of midwives across the country to reach those women who are unable to access basic health services. Efforts should also focus on building awareness among women on family planning and its health benefits.

MDG 6: Combating diseases

There have been some notable successes in combating diseases in Yemen. Measles, a significant cause of death in 2000, has not caused any fatalities since 2012. There has also been a marked decrease in new cases of tuberculosis, which have fallen to very low levels. Malaria cases and mortality rates have significantly declined. The implementation of a GoY national strategy for combating malaria has been a significant factor in achieving these positive results. Under this strategy, 283,825 houses in high risk areas were sprayed with long-lasting pesticides in 2009, protecting approximately three million people. Additionally, 990,000 long-lasting insecticide saturated bed nets were distributed between 2004 and 2009, with a further three million to be distributed in the near future. 259,295 anti-malarial doses were distributed to priority healthcare facilities, so that in 2010 Yemen was on track for meeting its malaria targets under MDG 6. Still, malaria remains a serious health risk today.[58]

MDG 7: Ensuring environmental sustainability

Environmental challenges in Yemen pose great risks to development and undermine efforts to establish a thriving trade sector. Communities are increasingly experiencing water shortages and are vulnerable to weather shocks and changes in rainfall levels. The agriculture sector is facing reduced rainfall, significant decreases in the capacity of water basins, increasing droughts, land degradation and volatile temperatures. Over 90 per cent of water is consumed by agriculture, leading to enormous pressure on water sources. A large portion of that water is used to irrigate qat. The fisheries sector is experiencing overfishing and illegal fishing, which have a detrimental impact on the marine eco-system. Another issue is the protection of Yemen's biodiversity, particularly in Socotra, which has excellent potential as a tourist destination (see chapter C.II). Yemen, with the support of international organizations and donors, needs to prepare and implement multiple programmes to tackle the environmental challenges that pose a threat to the economy and the population.

MDG 8: Developing a global partnership for development

Yemen's efforts to attract foreign investment and official development assistance (ODA) and to build international partnerships have been hampered by the political instability and insecurity. Foreign direct investment (FDI) has almost dried up since 2011, with many foreign companies freezing their projects and leaving the country. The political unrest, lack of infrastructure, electricity shortages, absence of free zones and industrial zones, excessive government bureaucracy and suspected corruption have all contributed to driving investors away. Although substantial amounts have been pledged by international donors to support Yemen, disbursements have been slow, mainly due to the weak absorption capacity of the GoY and bureaucracy on the part of donors. One significant step in establishing a global partnership has been Yemen's accession to the WTO. This important advancement should serve as a catalyst to boost international trade and further integrate Yemen into international trading networks.

Young people

Yemen's population is estimated at 24 million with a high annual growth rate of 3 per cent. It is also estimated that over 45 per cent of the total population is below the age of 15 and around 25 per cent of the population comprises young people (15-24 years). This youthful population puts a strain upon the country's limited basic services such as education, health and water. The vast majority of young people are unemployed due to limited opportunities, a situation that can lead to their radicalization and in turn the destabilization of the country. Young people were the dynamic force behind the 2011 protests that led to a political settlement and the transfer of power. They are increasingly active in the political scene and have achieved participation in government and the political transformation. The newly formed government included many young people, with the youngest ever minister appointed at the age of thirty-one.

The large number of young people willing to work and contribute to development presents an opportunity to meet the employment demands that will accompany any growth in trade. Improving tertiary level and vocational education and stimulating promising economic sectors can contribute to generating employment opportunities for young people. Emphasis should be placed on building the capacity and skills of the young population in order to meet the demands of labour markets in the Gulf region, which will lead to boosting remittance. Engaging young people and absorbing them into the labour market will improve their quality of life and lessen the likelihood of their participation in political conflicts and their vulnerability to radicalization. With the right policies and institutions, the youth bulge can represent a defining factor in bringing about stability and long-term development. Many young people have demonstrated their aspirations for better opportunities and desire to contribute to the sustainable development of their country. The fulfilment of these aspirations should be an integral part of the development of trade and the building of productive capacities.

Inequality and gender

Socio-economic inequality was one of the main triggers for the 2011 protests across Yemen. Inequality is a huge impediment to development and contributes to political instability. Unrest in various regions of Yemen, including the Southern Movement, was the result of the people's intolerance of marginalization. The Gini coefficient, which measures income inequality, puts Yemen at 37.7, roughly the median level. By contrast, Sweden is the most equal country with a Gini of 27, whilst Namibia's Gini of 70 makes it the world's most unequal country (the higher, the more unequal). In Yemen great disparities still persist in income levels and poverty rates between urban and rural areas. The rural population is worse-off in almost all categories, including poverty rates and access to health, education and basic social services.

The majority of women are still excluded from many economic, social and political opportunities. The Global Gender Gap Index prepared by the World Economic Forum has consistently ranked Yemen last among all the countries evaluated. Women's roles are often limited to domestic work and household responsibilities. Early marriage also contributes to hindering women's participation in economic activities. Although the labour force participation rate of women has been increasing slightly over recent years, women's access to managerial positions in the private sector is still very limited. A glass ceiling exists whereby the majority of female employees are constrained to basic secretarial and accounting jobs. The United Nations Development Programme's (UNDP) Gender Empowerment Measure (GEM) assesses women's participation in economic and political life. The GEM estimates women's relative income, participation in high-paying positions with economic power, and access to professional and parliamentary positions. The GEM puts Yemen at a value of 0.135, last in a list of 109 countries.

In rural areas, gender inequality is rampant and women are often marginalized and engaged in unpaid work in the agriculture sector. The predominant perception in rural areas is that women have a duty to service the family, starting from a young age, which hinders their enrolment in education. Women play an important role in the agriculture sector, which represents a promising export sector. Therefore any efforts to promote agriculture should place emphasis on supporting and training women in best practices to increase agricultural productivity. Empowering rural women will improve the welfare of rural households and increase their incomes.

Improving the skill base and education levels of women will help them to integrate into the labour force. This will greatly benefit the overall economy and the country's progress towards participation in the international trading system. Programmes to curb early marriage and the fertility rate can lead to women having greater freedom from household responsibilities and increase their participation in education and employment. The recent transition period has seen a remarkable increase in women's participation in the political sphere and the same opportunities need to be made available in the private sector.

Environment

Yemen faces critical environmental issues that constitute key challenges to development and trade. Water scarcity continues to be a fundamental challenge, with the rapidly depleting water tables having serious repercussions on the agriculture sector and creating long-tern development challenges across all sectors. Yemen relies heavily on underground water, the levels of which are rapidly diminishing, and permanent surface water is non-existent. The under-regulated over-use of groundwater is alarming and the World Bank anticipates that the resource will be exhausted within another two to three decades. An estimated 90 per cent of water is consumed in agriculture, often through wasteful irrigation methods. In cities residential water is predominantly provided by water trucks with a tiny fraction of housing having access to piped water. Those with access to piped water are vulnerable to water rationing for long periods, sometimes lasting months. The quality of water is also low, with inadequate maintenance of water systems and contamination of water sources leading to many water-borne diseases. In rural areas people largely rely on pack animals or otherwise haul water themselves to transport it from distant sources. The overall welfare of a typical Yemeni household is strongly affected by challenges to accessing water. Agriculture and industry are also suffering from inadequate and unsustainable water supplies and Yemen's trade performance is thereby impacted.

Yemen enjoys a long coastline of 1,900 km and vast marine wealth. Concerns regarding the over-exploitation of fish resources have been voiced by many international organizations. Sustainable fishing practices need to be adopted by all stakeholders in the sector. Currently, 94,000 people are directly involved in fishing activities (see chapter C.II). Maintaining marine biodiversity is fundamental to achieving sustainable development in the fisheries sector and enhancing its contribution to exports. The protection of biodiversity, particularly in areas like Socotra, is essential for the tourism sector to thrive.

Education

Education remains at the forefront of Yemen's development agenda. Although important advances have been made in improving enrolment rates, education is still characterized by significant shortfalls at various levels. Improving the delivery and quality of education is key to providing the labour sector with the skilled workforce the economy needs in order to prosper. The supply of unskilled labour far exceeds market demand, contributing to unemployment. Equipping this sizeable unskilled workforce with vocational training and skills will contribute to easing unemployment and promoting increased productive activities. Investments must be made in building critical infrastructure, developing the capacity of educators and modernizing curriculums.

Higher education and vocational training institutions need to bridge the gap between students' skills and the needs of the private sector and foreign labour markets. Vocational training institutions should emphasize practical skills rather than only teaching theoretical subjects. The neighbouring Gulf Cooperation Council (GCC) countries' labour markets represent an opportunity for people seeking employment abroad. Education should focus on the development of skills that coincide with the GCC countries' labour market needs. The GoY should coordinate with GCC countries to facilitate visa applications. Given the dwindling oil production, Yemen needs to promote trade in services (see chapter C.VI), particularly labour export (chapter C.IV), so that remittances can in part compensate for the fall in foreign exchange earnings. Remittance benefits many households by increasing their income and thereby their ability to access health and education services.

Internal conflicts

The increased level of conflict witnessed over the past few years has led to deteriorating economic conditions and has inhibited trade. Prior to 2011 conflicts were occurring but were mainly limited to isolated areas of the country. In 2011 mass protests demanding better governance and economic opportunities culminated in an economic crisis, political instability and insecurity. During the crisis the private sector suspended many activities and laid off workers, donors' projects were suspended and power transmission lines and oil pipelines were frequently sabotaged. In 2014 Yemen faced another wave of conflict with supporters of the Houthi movement storming the capital and several other cities, resulting in the formation of a new technocratic government. The increasing threat from extremist groups led the European Union (EU), the United States (US) and several Gulf states to impose a ban on air cargo from Yemen following the detection of a parcel bomb in October 2010. The ban has since been lifted by the US and Gulf states though the EU is still enforcing it. Agricultural exporters intending to diversify their exports away from the Saudi market are facing difficulties in accessing the EU while this ban is still in place.

Yemen has experienced long-term widespread poverty, dwindling oil revenues, water shortages and a rapidly growing population, and these pre-existent issues have been further exacerbated by conflict and instability. FDI has dramatically subsided and major private sector projects have either been suspended or completed abandoned. Trade has suffered greatly due to the ongoing crisis. Limited domestic and foreign investment and the economic downturn have contributed to the further deterioration of human development indicators. Many people have lost their jobs and thereby their only source of income. Frequent power outages have serious hindered the functions of hospitals and other health facilities. Shortages in fuel have decreased agricultural output, which has led to increases in the price of fresh produce. The lack of basic services such as water and sanitation has had dire consequences for Yemen's health situation. Conflict and violence have displaced hundreds of thousands of people, causing a humanitarian emergency that led the UN and other humanitarian organizations to intervene. Traditional trade routes have been disrupted, impeding trade and the supply of food and other necessary household items. A spike in consumer prices was also recorded, exacerbating the serious challenges that the economically disadvantaged were already facing. Given the devastating results of the conflict outlined above, the GoY and international community must establish and maintain stability and security as a prerequisite for revitalizing the economy and improving overall human development. The infrastructure destroyed during the conflict needs to be rehabilitated and replaced and the government's weak capacity needs to be strengthened so that the state can effectively serve the population and retain an investment climate conducive to private sector growth.

Small and Medium Enterprises (SMEs)

Small and medium-sized enterprises (SMEs) constitute the vast majority of enterprises in Yemen and provide crucial employment for millions of economically disadvantaged people. SMEs are confronted with a range of challenges, from the overall economic and security environment to significant regulatory constraints. The specific obstacles SMEs have faced over the last few years include a lack of security, the intermittent supply of electricity and water, increased input prices, transport challenges and limited access to credit. Although promoting SMEs has been high on the development agenda in Yemen, actual support and implementation of programmes has been very limited. The public-private dialogue has been dominated by larger businesses, which on the whole create relatively few jobs. The existing regulatory environment inhibits the formalization of SMEs. The recognized benefits of formalization such as access to finance, protection from unfair competition and provision of basic services (electricity, water) are not apparent in Yemen, whereas the costs of formalization in terms of time, money and compliance are high. Small businesses that undergo formalization find themselves the target of various government inspections and compliance requirements, while informal businesses face limited or no government interference. This results in many establishments preferring to remain informal. The lack of incentives for formalization inhibits much needed growth within the SME sector.

The GoY must address the challenges confronting SMEs; the overall economic environment requires significant interventions towards the elimination of impediments and development of the skills and resources SMEs require to grow and thrive. The government has adopted two strategy documents related to the agriculture (see chapter C.I) and fisheries (C.II) sectors, based on pro-poor job creation. These strategies, along with the recommendations in this report, should be prioritized and implemented. Interventions should not only focus on poverty alleviation, but also on nurturing an environment that encourages the private sector and foreign investors to contribute to Yemen's overall development. SMEs should be supported in exploring export opportunities and clusters should be formed and equipped with market information and export knowledge and tools.

Energy security

As oil production declines, Yemen faces significant energy security issues, particularly given the economy's heavy reliance on oil export revenue. Yemen is already witnessing interrupted energy supplies due to factors such as the sabotaging of oil pipelines, fiscal constraints to supplying sufficient subsidized fuel to the market and limited refinery capacity. In 2005 the GoY began to reduce its universal subsidies on a gradual basis in order to free up resources for development programmes and maintain low levels of fiscal deficit. In July 2014 subsidies for oil derivatives were completely lifted, leading to a substantial increase in prices. However, subsidies were partially re-introduced in September 2014 as a result of public protests. At the time of writing, the price of diesel and gasoline stood at 150 Yemeni rial per litre, an increase of 20 per cent for gasoline and 50 per cent for diesel on the price levels before the subsidies were phased out two months previously. The decision to raise fuel prices was fully supported by the private sector after enterprises were forced to buy fuel at much higher prices on the black market due to its unavailability at subsidized prices. The agriculture and fisheries sectors, which depend on fuel as an essential input, faced extreme shortages and higher fuel prices, which at times reached five times the official price. Increasing fuel prices was an important step towards ensuring its availability and protecting businesses from further disruption to production and ultimately closing down.

Globally, Yemen is considered among the countries with the lowest electrification rates, and the available electricity is highly unreliable and inefficient. The power sector in Yemen suffers from low capacity, lack of investment and frequent sabotage. Investment is needed to modernize the distribution and transmission systems and to install new generation capacity through gas and renewable sources such as wind solutions. Improved access to reliable power supply is imperative for the growth of trade. All sectors, particularly services and industry, have experienced significant cost increases as a result of having to purchase commercial generators and paying higher prices for fuel from the black market. The fiscal resources the GoY has conserved by reducing subsidies should be diverted towards improving human development. Diversifying exports away from oil products is necessary in order to recuperate lost foreign exchange earnings from oil. Providing a stable political and security environment will attract foreign exploration companies to invest in Yemen, exploring new oil. Investments must be made within a sustainable development framework that incorporates solving energy security issues.

Conclusion

The analysis in this chapter covers many of the challenges that inhibit human development in Yemen, including the fragile political, security and economic environment, natural resource depletion, increasing poverty and unemployment and the poor provision of basic services. There is, however, a possibility that the situation will stabilize with the formation of the new technocratic government, which has vowed to improve the security situation and revitalize the economy. While the challenges are many, Yemen's youthful population can contribute to rebuilding the country and act as the engine for growth in trade. The political transformation can incorporate positive changes in government institutions and policies. The incoming government has the opportunity to establish new partnerships with the international community towards supporting human development efforts, particularly the GCC countries, which have an inherent interest in Yemen's stability. The pressure resulting from the depleting oil reserves can also serve as a catalyst for Yemen to explore renewable energy sources such as solar and wind solutions. Having experienced various crises over recent years, Yemenis are eager for an end to the conflict and for security and stability. These factors will serve as a solid base for improving trade and human development.

Business and Investment Environment

Achieving economic growth and attracting private investment are among the greatest challenges to Yemen's development. Yemen lacks significant basic factors essential to development such as sound and efficient infrastructure (physical and services), a robust legal system and law enforcement. The current situation in Yemen has brought with it new obstacles and also deepened the existing ones. Since 2011 the insecurity and political conflict have been the greatest threats to the business environment and investment climate, further inhibiting activities.

Value and trends of private investment

Yemen's foreign direct investment (FDI) net inflows totalled US$ 3,758 million between 2003 and 2010, contributing an average 20 per cent of gross domestic product (GDP) a year. The total FDI between 2011 and 2013 was US$ -1,183 million, due to the political crisis. The FDI net outflows between 2003 and 2010 totalled US$ 450 million and during the crisis years of 2011 to 2013 reached US$ 221 million.

Table (22) Total private investments registered at the General Investment Authority (GIA) and the share of investors (per cent of total private investments) 2000-2013. Inflows and outflows of FDI (million US$)*

Year	Domestic investors per cent	Foreigners		Total (billion Yemeni rial)	Inflows	Outflows
		Arabs per cent	Non Arabs per cent			
2003	58.5	27.3	14.2	85	6	61
2004	89.3	10.0	0.7	114	144	21
2005	70.3	29.1	0.6	129	-302	65
2006	41.9	57.6	0.5	295	1,121	56
2007	76.8	6.4	16.8	277	917	54
2008	78.8	20.2	1.2	389	1,555	66
2009	58.4	41.5	0.2	315	129	66
2010	67.0	22.3	0.7	130	188	70
2011	66.8	32.4	0.8	130	-509	77
2012	98.8	1.0	0.3	71	-531	71
2013	81.0	16.6	2.4	75	-134	73
Source: GIA and Central Statistical Organization, Statistical Yearbook (various years) *The Arab Investment and Export Credit Guarantee Corporation, Investment Guarantee (2012) issue1						

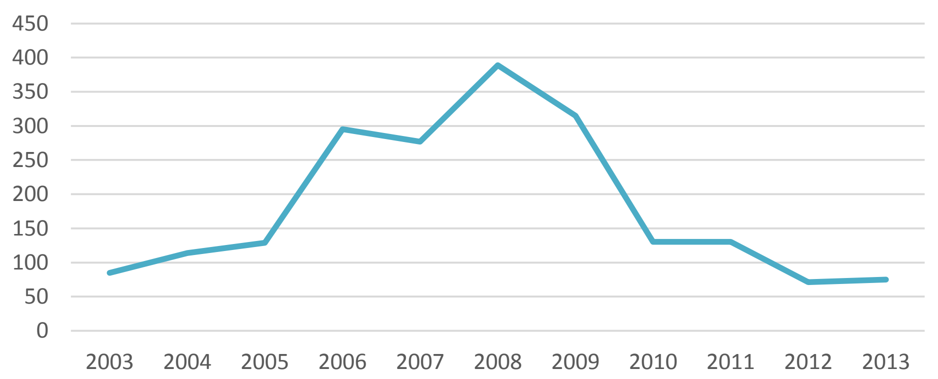
Total net private capital flows reached US$ 3,050 million between 2003 and 2010. This was due to the unprecedented increase of private capital inflows from 2006 to 2008 to finance the liquefied natural gas (LNG) export project and the South African telecommunications company

MTN's acquisition of the Yemeni company Spacetel. The value of cross-border merging and acquisition (net sales) for Yemen was US$ 716 million in 2006, US$ 144 million in 2007 and only US$ 64 million from 2008 to 2012.[59] According to United Nations Conference on Trade and Development (UNCTAD) data, FDI inward stocks for Yemen rose to US$ 3,675 million in 2013, while FDI outward stocks increased to US$ 733 million in 2013.

Yemen has entered 37 bilateral investment agreements and seven international investment agreements.[60] The sum of the private investments registered at the General Investment Authority (GIA) between 2003 and 2010 was 1,734 billion Yemeni rial, at an annual average of 216.8 billion Yemeni rial. This decreased to an annual average of 92 billion Yemeni rial from 2011 to 2013.

Political crises have not only negatively impacted new investment projects, but have also been detrimental to ongoing projects. Data indicates that 2006, 2007 and 2008 were the best years for private investment, with an annual average of over 320.3 billion Yemeni rial.

Figure (10): Total private investment registered at GIA (billion Yemeni rial)



Source: GIA

Investments made by Yemeni nationals accounted for the majority, representing 76.5 per cent of total private investment registered at the GIA between 1992 and 2013. Investments made by Arab nationals accounted for 21 per cent and those made by investors of other nationalities stood at only 2.5 per cent. Local private capital was the main driver of private investment in Yemen. Between the years 2003 and 2013, Yemeni private investments accounted for between 58.5 per cent and 98.8 per cent of total investments, at an annual average of 71.6 per cent. Investments made by Arab nationals averaged 24 per cent with considerable fluctuations, including remarkable increases in 2006 (57.6 per cent) and 2009 (41.5 per cent). The overall trends indicate that Yemen does not boast an attractive climate for foreign investment.

Legal and institutional framework for investment

A strong legal and institutional framework for private investment is an essential component of an attractive investment climate. However, it cannot stand alone if the other components are weak or absent. While there are considerable opportunities for investment in Yemen (available and potential), the investment climate is very weak and unattractive. This shortcoming is a serious obstruction to Yemen's economic development.

The first investment law, Law no. 22 (1991), was amended in 1995 to eliminate obstacles to Arab and foreign investments in Yemen. A second amendment took place in 1997 and a new law was issued. These amendments were made by the Government of Yemen (GoY) in response to recommendations made by the Foreign Investment Advisory Service (FIAS).

In 2008 the FIAS presented a report on FDI that proposed another investment law, which the GoY then issued in 2010. In 2012 the GIA presented a new proposal to again amend the investment law (Law no. 15 (2010)). These recurrent changes indicate that the legal and institutional framework for investment is unstable and thereby a source of investment climate weaknesses. Also, the GoY tends to follow donors' recommendations in order to receive more financial assistance, regardless of the effects they might have.

The legal framework for investment consists mainly of the Investment Law no. 15 (2010), the new Income Tax Law no. 19 (2010) and Customs Law no. 14 (1992), according to Law no. 12 (2010). These three laws were issued in 2010 as a package of reforms based on the recommendations of the FIAS, World Bank and International Monetary Fund (IMF). Law no. 15 (2010) was issued in a bid to adopt the best practices, eliminate complexity and discretionary practices, and refocus the role GIA on promoting rather than regulating activities. With the issuance of the Law no. 15 (2010), incentives and fiscal issues were moved to the new Income Tax Law no. 19 (2010). This enabled a policy shift from tax holdings to tax incentives and lowered corporate tax rates from 30 per cent of profit to 20 per cent and 15 per cent for investment projects. In addition, the law allowed loss carry forward and accelerated depreciation.[61] The FIAS and World Bank held that the new income tax law would simplify tax policy and administration, reduce compliance costs, widen the tax net, spread tax burden and reduce avenues for corruption.[62]

Investment Law no. 15 (2010) entails the following:

Eliminating the distinctions between Arab investors and investors of other nationalities. Investors are free to invest in any sector of the economy in accordance with the provisions of this law, except the production of armaments and explosive materials. Investment in the sectors that are organized by special laws must be in accordance with those laws (oil and gas exploration and extraction, minerals exploration and extraction, and banking and finance).

Guaranteeing equal, non-discriminatory treatment for foreign (Arabs and non-Arabs) nationals and Yemeni investors with regards to all rights and obligations, including the freedom to invest in any of the economic sectors, solely or in partnership in accordance with the provisions of the investment law. Also, the law protects against expropriation and nationalization, free convertibility of local currency and repatriation.

Removing the restrictions on the level of foreign ownership of a company formed under the commercial companies law, which was subject to 49 per cent local ownership in certain cases.[63]

Legalizing the one stop shop system at the GIA and requiring all government agencies involved in investment activities to appoint qualified personnel as their representatives in the one stop shop responsible for issuing all required permits from their authorities. The GIA has thus gathered all the relevant agencies at the GIA's head offices, along with the tax and customs authorities.

In 2012 the GIA presented a proposal for a new investment law to supersede Investment Law no. 15 (2010). The GIA was of the opinion that the existent law negatively affects the investment sector and investors because it places limitations on many exemptions, advantages and incentives for investment projects. In addition, it weakened the administrative role of the GIA in managing the investment sector and in providing investors with the necessary facilities.

Prompted by the GIA's proposal, the prime minister issued Decree no. 57 (2012) to form a committee representing the stakeholders (the GIA, Ministry of Finance, Ministry of Legal Affairs and the private sector). The GIA and the committee presented a proposal suggesting amendments but the president steered the government away from issuing a new law while Investment Law no. 15 (2010) was still relatively new due the expenditure of public resources.[64]

The General Investment Authority (GIA)

The GIA was created in 1992 in accordance with the first investment law, Law no. 22 (1992) and from mid-2002 to 2010 it was regulated by Investment Law no. 22 (2002). Investment Law no. 15 (2010) established the GIA as an independent authority with financial autonomy and headed by the prime minister. It is the government body responsible for promoting and facilitating investment in coordination with the competent authorities. Investment Law no. 15 (2010) lists 11 duties and functions that the GIA is obligated to undertake, including preparing, developing and implementing the national investment promotion strategy. It is also responsible for carrying out promotional activities and building a positive image of Yemen as an attractive investment location. In addition to the GIA's head office in Sana'a, it has five branches in Aden, Hadramout, Al-Hodeidah, Laheg and Taiz.

The GIA board consists of four public sector directors and four from the private sector and is chaired by the prime minister. Alongside the president of GIA are the foreign minister, minister of industry and trade, minister of petroleum and mineral resources, minister of planning and development, minister of finance, governor of the Central Bank of Yemen, and chairman of the Federation of Yemen Chambers of Commerce and Industry (FYCCI). In addition, there are four private sector members nominated by four leading associations: the FCCI, the Businessmen Council, Yemeni Businessmen Club (now known as the Yemeni Business Club) and the Association of Yemeni Industries. Membership is a three-year tenure and can be renewed.

The GIA board designs and implements the authority's policies. It has 11 tasks and functions, the most important of which is the approval of the National Strategy for Promoting Investment and its policies, programmes and required budget. The board must also approve the annual plans, programmes and budgets necessary to implement the strategy.

One of the downfalls of the institutional framework is the number of organizations involved. Many ministries and agencies are involved in investment promotion and investment regulation such as investor licensing, oversight and compliance. The FIAS report listed 10 main organizations involved in investment promotion and seven in investment regulation at the national level and there are also those at the governorate level.[65]

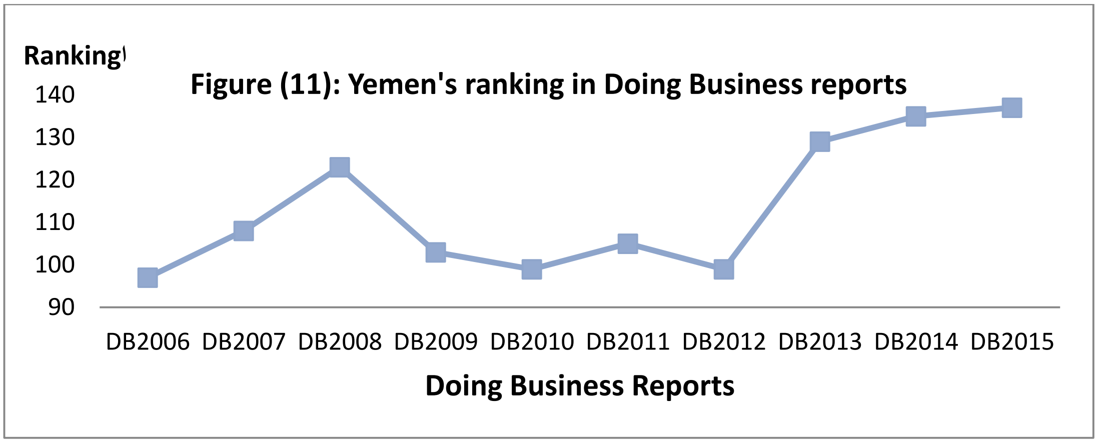
Recommendations

- Prepare and issue an Executive Bylaw for Law no.15 (2010) to fill in the current gaps in the legal framework.
- Amend Banking Law no. 38 (1998) to grant the authority to seize branches of foreign banks only if the bankruptcy or liquidation has been properly ordered by the appropriate authorities in the investor's home country.

Doing business indicators

In 2007 the International Finance Corporation (IFC) began to assist Yemen in simplifying the procedures for starting a business, guided by the assessment of Yemen's performance in Doing Business reports.

Yemen is ranked 137th out of the 189 economies covered by the Doing Business 2015 report. In the Doing Business 2012 report, Yemen ranked 99th out of 183 countries, showing a significant drop since the remarkable achievements made during 2008 and 2009, especially in business start-up procedures. This backwards slide came as the momentum in the reform process was lost in 2010 while other countries continued to progress. The GoY then proved incapable of maintaining the achievements that had been attained through reform during 2008 and 2009 and the business and investment environment became more hostile.



Source: World Bank and IFC, Doing Business Reports (2006-2015)

The best example of the regression can be seen in the business start-up procedures. Yemen was considered as a top reformer globally for the ease of business registration in the Doing Business 2007 report, out of 181 countries. Initially the GoY did not pay heed to the Doing Business reports and overlooked the ways in which they can assist decision makers to improve a country's business environment.

Yemen ranked 50th in the Doing Business 2008 report as result of the reforms implemented by the Ministry of Industry and Trade (MOIT) that year. In 2009 and, to a lesser extent, in 2010 the GoY, through the MOIT, implemented a considerable number of reforms in close cooperation with IFC's Yemen office and relevant government agencies, particularly the tax and custom authorities, Central Bank and Land Registration Authority.

Table (23): Yemen's ranking in Doing Business reports 2008-1015.

	DB2008	DB2009	DB2012	DB2015
Ease of Doing Business	113	98	99	137
Starting a Business	175	50	66	140
Dealing with Construction Permits	35	33	35	68
Getting Electricity			52	122
Registering Property	44	48	55	44

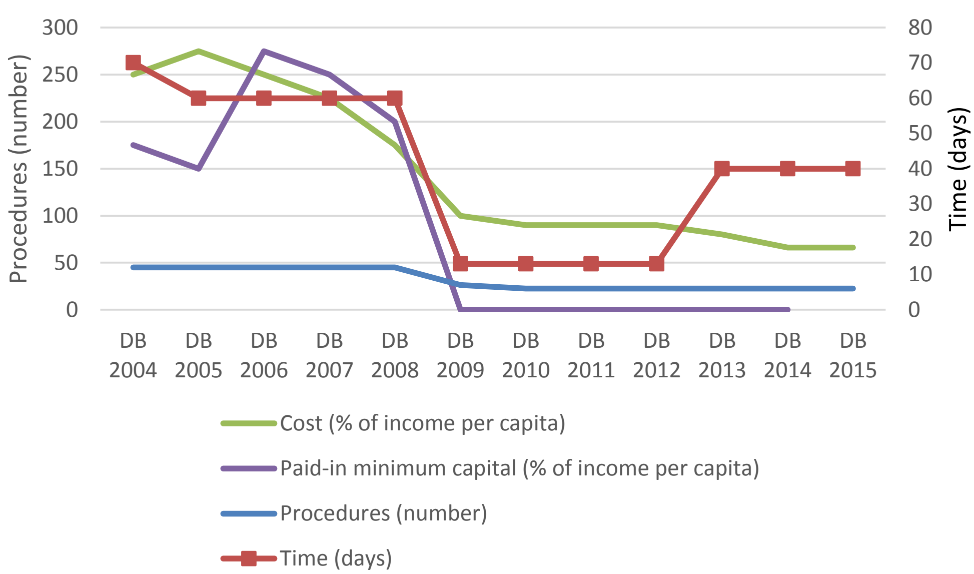
Getting Credit	158	172	159	185
Protecting Investors	122	126	133	162
Paying Taxes	84	138	116	135
Trading Across Borders	128	126	118	134
Enforcing Contracts	41	41	38	85
Resolving Insolvency	83	87	114	154

Source: World Bank and IFC, Doing Business Reports (2008, 2009, 2012 and 2015)

The political crisis in Yemen since 2011 has negatively impacted the reform agenda and the progress previously achieved. The lack of political will and capable administrative leadership in the government has contributed to this regression and the GoY is incapable of maintaining the improvement that had been achieved in the business and investment environment.

According to the Doing Business 2015 report, starting a business in Yemen requires six procedures, takes 40 days and costs 66.3 per cent of the average income per capita. Yemen ranked 140th out of the 189 economies in this field in the Doing Business 2015 report compared to 66th in the 2012 report. The one stop shop at the MOIT does not work as efficiently as it previously did and business registration has therefore become more difficult, currently taking 40 days while in 2011 it took only 12 days.

Figure (12): Starting a Business indictor rank



Source: World Bank and IFC, Doing Business Reports (2004-2015)

The MOIT project to automate trade registration was long delayed, despite receiving financing from the Government of the Netherlands, which was simultaneously financing the project to automate registration at the GIA.[66] In spite of the political crisis and the relocation of its headquarters to another building, the GIA had the capacity to fulfil the project and it is now fully operational.[67]

The power sector has not been reformed, resulting in Yemen ranking 122nd globally in the Getting Electricity indicator in the Doing Business 2015 report. It requires four procedures, takes 110 days and costs 3492.6 per cent of income per capita to obtain a permanent electricity connection.

Concerning tax administration and rates, firms in Yemen make an average of 44 tax payments a year, spend 248 hours a year filing, preparing and paying taxes and pay total taxes amounting to 33.3 per cent of their profit. Yemen ranked 135th in this field in the Doing Business 2015 report.

The Trading Across Borders indicator assesses the time and cost associated with exporting and importing a standard shipment of goods by sea and the number of documents necessary to complete the transaction.[68] Globally, Yemen ranks 134th and regionally, 15th. Exporting a standard container of goods requires six documents, takes 29 days and costs US$ 1,065 while importing the same container of goods requires nine documents, takes 27 days and costs US$ 1,560.

In April 2007 a new government was formed and a new minister of industry and trade was appointed. He compiled a comprehensive report on the condition of the business and investment environment in Yemen with the cooperation of IFC's Yemen office and presented it to the Cabinet with proposed reforms. The Cabinet issued Decree no. 489 (2007) to create a technical ministerial committee under the auspices of the minister of industry and trade to improve and develop the business environment, making use of Doing Business reports and other similar international reports.

During 2008 and 2009 the most important reforms to be implemented were:

- Establishing a one stop shop system at the MOIT, enabling all agencies involved in business start-up procedures and registration such as the Chamber of Commerce, Tax Authority and Ministry of Legal Affairs to work together under the one stop shop administration. Processes were reduced by 60 per cent and the number of days required for registration dropped from 63 to 13.
- Applying legal and regulatory reforms such as the amendment of Commercial Companies Law no. 22 (1997) (Article 248/A), which abolished the requirement of paid-in minimum capital.
- Re-activating the Improve Trade and Industry Licenses Registration Capabilities project at the MOIT, funded by the United Nations Development Programme (UNDP) and later by the Government of Italy. The project worked towards improving the one stop shop system and simplifying business start-up procedures.
- The MOIT, with IFC support, signed an agreement with the Government of the Netherlands to finance more advanced automation and electronic trade registration systems to simplify and speed up trade registration by connecting the head office of the MOIT with its branches in Hadramout, Aden, Al-Hodeidah and Taiz. Unfortunately, this project was cancelled.
- Preparing and printing guides, manuals and brochures for the MOIT aimed at limiting avenues for corruption and speeding up procedures.

- Initiating the standardization of business start-up procedures at the main MOIT branches, drawing on the success of the one stop shop system at the head office, in close cooperation with the IFC Yemen office. The four branches were in Aden, Al-Hodeidah, Taiz and Hadramout.

As a result of these reforms, the number of procedures required to start a business dropped from 12 to seven and the time required fell from over two months to only 13 days. Registration costs were almost halved and the paid-in minimum capital requirement was abolished.

There were several factors behind the achievements seen between 2008 and 2010, the most important of which were political will, the leadership's desire for reform, qualified technical personnel, full cooperation with the IFC team and the careful selection of achievable reforms, a sound matrix and the action plans of the MOIT and IFC.

Unfortunately, the process of improving the business environment did not maintain momentum because the absence of a robust institutional framework obstructed development, regardless of any ministerial changes.

Since 2010 the implementation of reforms in Yemen has been limited. The most important reform to be made was the issuance of the new Income Tax Law in 2010, which reduced the corporate tax rate from 35 per cent to 15-20 per cent for investment projects. The law also abolished all tax exemptions except those granted under the Investment Law no. 15 (2010) for investment projects. Since 2011 Yemen has not made any progress in improving the business and investment environment. While this is mainly due to the political crisis, the lack of political will is also a factor and the business and investment environment has weakened further.

Recommendations

- Reactivate the Government of the Netherlands' information technology infrastructure system for the MOIT.
- Enhance the IFC simplification project.

Global Competitiveness Index

Yemen was included for the first time in the Global Competitiveness Index (GCI) Report 2011-2012 and ranked 138th out of 142 countries. In the GCI 2014-2015 report Yemen ranked 142nd out of 144 countries, scoring 3 on the 1-7 scale. Yemen ranked between 116th and 142nd in all sub-indicators of the GCI pillars except in the market size pillar, in which it ranked 83rd. The lowest rankings were in infrastructure, institutions, financial market development, labour market efficiency and technological readiness.

Table (24): Yemen's ranking in the Global Competitiveness Index 2014–2015

Indicators	**Rank (out of 144)**	**Score (1–7)**
Basic requirements (60 per cent)	142	3.0
Institutions	141	2.7
Infrastructure	142	1.9
Macroeconomic environment	140	3.0
Health and primary education	116	4.6
Efficiency enhancers (35 per cent)	139	2.9
Higher education and training	139	2.3
Goods market efficiency	131	3.6
Labour market efficiency	138	3.2
Financial market development	143	2.2
Technological readiness	136	2.4
Market size	83	3.4
Innovation and sophistication factors (5 per cent)	134	2.8
Business sophistication	120	3.4
Innovation	143	2.1
World Economic Forum (2014) 381-386		

Public-private dialogue and partnership

Despite the GoY's efforts since March 1995[69] to open up economic activities to the private sector that had previously been monopolized by the state, there are still considerable difficulties hindering the activities and investments of the private sector. A positive partnership between the government and private sector has not been reached. In addition, the private sector has thus far been incapable of acting as the main engine for economic activity and development. This negative relationship came about because of the lack of clarity and common understanding between the two parties about the concept of their partnership and the nature of its components. This has led to issues such as:

- The absence of an institutional mechanism governing consultation and coordination between the two parties as well as the absence of a clear definition of the roles and areas of cooperation and integration
- A lack of clarity and transparency on the government's vision concerning the private sector and its activities
- An incomplete GoY vision concerning the economic and social role the state should play in the current market economy
- The continuing weakness of the institutional structure and administrative organization of the country in general, and the GoY in particular

These factors have had further negative implications, including the low level or absence of mutual trust between the GoY and the private sector and the conflicts between them that sometimes arise. The private sector, for example, has widely opposed the general sales tax law since 2002, meaning that the GoY has not been able to enforce this law. The private sector does not trust the public policy and regulations designed and implemented by government. The GoY has been unable to implement financial and economic reforms, particularly those that might damage private sector interests. The lack of a common vision on general economic and social goals and objectives is another central issue.

Public-private dialogue and consultation

The GoY recognized that it had to redouble its efforts to support private sector activities and investment through continuous dialogue and consultation with private sector organizations and enabling the private sector to participate in planning processes and implementing economic policies, regulations and decisions. Representatives of the private sector were appointed as members of public economic and financial authorities and agencies, including the central bank and the GIA. Private sector representatives also regularly participate in government economic and trade cooperation committees[70] with other countries and participate in official visits abroad.

The Industrial Development Council (IDC) is an example of this partnership in the industry sector. The IDC was established by the Executive Bylaw of the Industry Regulatory Law no. 20 (2010). The minister of industry and trade chairs the council but IDC members from the private sector outnumber the government members. The IDC has 10 tasks and functions, including studying relevant policies, legalizations and challenges and presenting proposals to the Higher Economic Council and the Cabinet.

The GoY and the private sector agree on proposals for new laws and amendments to existent laws before they are issued, especially those closely related to private sector activities and investment.

The GoY appears to be of the opinion that it has already implemented a significant number of reforms and designed various policies to ensure a business enabling environment for private sector activities and investments. It maintains that the private sector has been unable to take advantage of the opportunities presented and is incapable of leading economic growth and development.

The private sector, meanwhile, complains that the business environment is not enabling and there are a plethora of challenges and obstacles that constrain its activities and investments. The private sector also feels that its participation in decision making processes is merely tokenistic and not effective.

The private sector believes that the partnership should be comprehensive, with itself and the government each taking 50 per cent of the responsibility in all decision making.

Partnerships between the government and the private sector in infrastructure and public services projects were on the rise at the end of the 1990s as the GoY's prepared for the privatization programme. Public-private partnership (PPPs) were seen as a viable alternative for developing and improving the quality of basic infrastructure services and at the same time improving the efficiency of public entities, which would be expected to enhance their financial, administrative and organizational performance. In addition, PPPs would help to ease the financial burden on the state budget. However, since the issuing of the privatization law in 1999 no noticeable progress has been made, despite the legal and organizational procedures the GoY has undertaken.

To encourage private sector investment in infrastructure sectors and prepare the legal and regulatory framework for PPP investment, the GoY established a special unit for within the Ministry of Planning and International Cooperation (MOPIC) in 2009 with support and financing from the IFC.[71] The core mandate of the unit is to provide coordination and transaction support to ministries, departments and agencies across a broad spectrum of services related to PPPs.

IFC assistance also included US$ 700,000 funding from the Public-Private Infrastructure Advisory Facility for the development of PPP models for domestic gas pipelines and transaction advisory services (including concession design, investment marketing, and structuring and evaluating bids) for an Independent Power Project.[72]

The main achievements of the PPP unit up until June 2010 were limited to some workshops and the preparation of a study on the legal and institutional framework for PPPs. The first draft was presented in January 2009 for discussion with stakeholders and the GoY. The unit also prepared a draft PPP law.

The PPP unit arranged a consultative workshop in July 2010, attended by high-level government officials from the relevant ministries and chaired by the vice prime minister for economic affairs and the minister of planning and international cooperation. In this workshop the PPP unit and MOPIC presented new proposals on the concept of partnership and the division of roles between the government and the private sector.

During the Yemen Consultative Group meeting in Riyadh and Friends of Yemen meeting in September 2012, the GoY, at the request of donors, presented a list of PPP projects offering opportunities to private investors for build-operate-transfer (BOT) agreements and other types of PPP.

Under the mutual accountability framework between the GoY and its donors, the GoY prepared a new draft PPP law. However, progress in this area will not come about merely though the issuance and implementation of a new law because the legal framework is but one of a long list of necessary improvements. The insecurity and political conflicts are currently the main obstacles to change.

The Yemeni private sector is hesitant or perhaps not fully prepared for PPP projects, especially in basic infrastructure, not only because of the lack of a sound legal framework but because the basic economic, technical and administrative requirements for such partnerships are not available. In addition, the Yemeni private sector does not have the financial requirements to enter into PPP projects.

Recommendations

In order to achieve a solid positive relationship and partnership between the GoY and the private sector:

- The government and political leadership should create a clear and comprehensive policy on the importance of partnerships.
- A diagnostic study on the private sector and its current relationship with the government should be conducted.
- A clear agreement must be reached between the two parties about the concept of their partnership and its components.
- Sustainable institutional mechanisms to govern PPPs need to be established, based on clear principles and rules so that the private sector can be involved in economic and development decision making processes. One option is to update and implement the proposed framework of the National Economic and Social Council that was presented by the MOPIC in 2006.
- A legal and regulatory framework needs to be developed to encourage the private sector to participate in providing public services and goods without detracting from the GoY's role in economic and social development and poverty alleviation.

Until the desired partnership between the government and the private sector is reached, the GoY should undertake the following recommendations towards improving the business environment in the short and medium term:

- Enhance security and social stability and strengthen the institutional structure of the state in general, particularly the public administration.
- Enhance good governance principles and improve the performance of the judiciary.
- Pursue macroeconomic policies that are clear and stable in terms of design and implementation.
- Promote and strengthen infrastructure and public facilities and services.
- Identify the authorities responsible for studying and analyzing the private sector and propose solutions and treatments.
- Collaborate with the private sector to collate information and create a comprehensive database on private sector activities and investment.
- Simplify business start-up processes

Constraints on the business and investment environment

The World Bank conducted Investment Climate Assessments of Yemen in 2001, 2005 and 2010. These studies were based on surveys of private sector perceptions of the principal obstacles to private firms' investment and the business environment in Yemen.

The leading constraints identified by firms operating in Yemen in 2010 were corruption, electricity, access to land, political instability and uncertainty concerning regulatory policy. Secondary constraints included courts, tax rates and tax administration, absence of security (theft, disorder and crimes) and financing. Corruption was the top concern in the 2010 Investment Climate Assessment. Electricity was the second most mentioned constraint in 2010, compared to being in seventh place in 2005. Access to land was the third most identified constraint, up from ninth place in 2005.

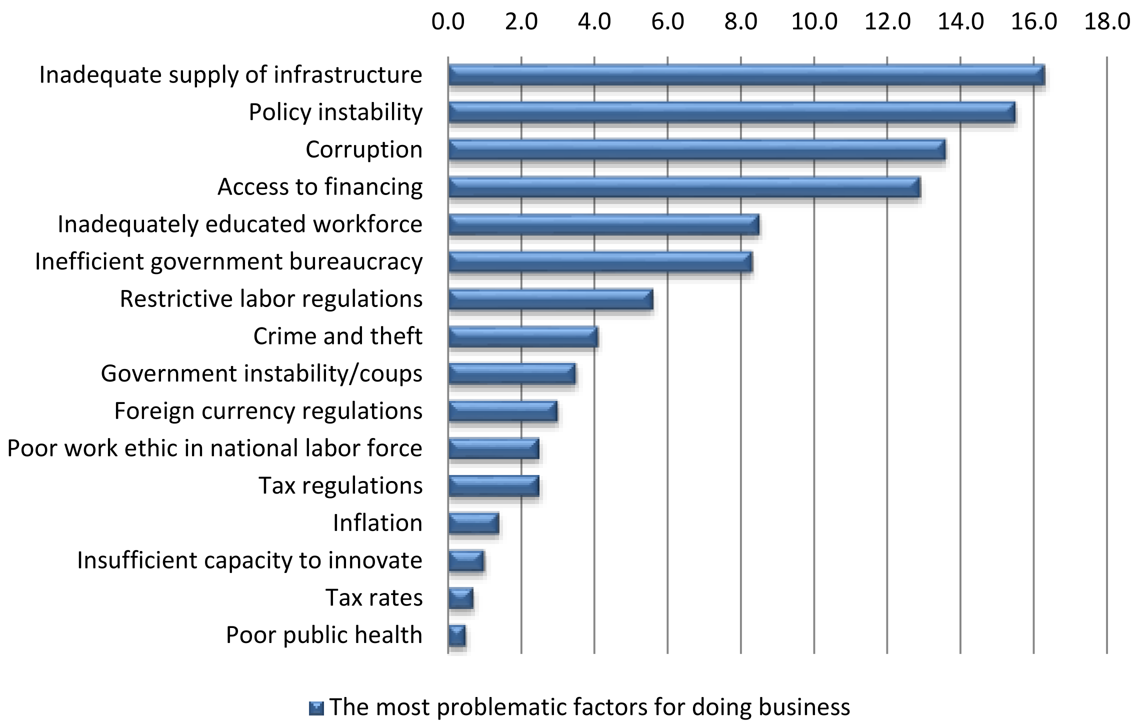
Table (25): Investment constraints in Yemen (according to investment climate surveys in 2010)

Constraints	Firms surveyed (per cent)
Corruption	74
Electricity	61.3
Access to land	57.3
Political instability	56.3
Uncertainty concerning regulatory policy	50
Courts	45
Tax rate	44
Tax administration	38
Theft, disorder, and crimes	31.4
Access to financing	31.2
Cost of financing	30.4
Skills and education of available workers	29.5
Illegal competition from informal businesses	24.4
Business licensing and operating permits	19
Customs and trade regulations	18
Transportation	15
Source: World Bank (2011) Yemen Investment Climate Assessment Update	

Political instability, which was not rated in the 2005 survey, was identified by the majority of firms (5,790) to be the fourth most grievous constraint. Uncertainty concerning regulatory policy rose from 12th to fifth place and the legal system/courts from 11th place to sixth. On a more positive note, the tax rate receded from second place to seventh, while tax administration dropped from fourth to eighth place.

The GCI 2014-2015 listed 16 factors as the most problematic issues confronting business activities in Yemen. Inadequate infrastructure was at the top of the list, followed by weak governance in the public administration and the lack of security and macroeconomic stability. Tax regulations and tax rates were also top concerns.

Figure (13): Greatest obstacles to business and investment in 2014



Source: World Economic Forum (2014) 386

Corruption ranked as the leading constraint to the business and investment environment, moving from being the third most grievous constraint in 2005 to the first in 2010. Almost six out of 10 Yemeni firms acknowledge that informal payments to public officials are sometimes required, a much higher rate than in many comparator countries. As a "tax", firms report that informal payments total around 6.4 per cent of annual sales value.[73] In the context of business inspections and mandatory meetings, such payments are most common in interactions with tax officials and municipal police.

In the GCI 2011-2012 and 2014-2015 reports, corruption was the second most important factor negatively affecting the business and investment environment in Yemen.

Infrastructure

Electricity is Yemen's greatest infrastructural challenge. Access is limited and unreliable across much of the country, inhibiting economic growth and poverty reduction, as well as hindering the development of the business environment. Road transport, conversely, is reasonably good between urban areas, though not in rural locations. The domestic air transport network is small; most international flights depart from and arrive at Sana'a International Airport. Sea ports, despite having a long and distinguished heritage, are undeveloped and few in number. Information Communications Technology (ICT) infrastructure is at a nascent stage although it has significant business potential. Agreements were signed in the past to develop a railway connecting Yemen with regional neighbours but these plans are on hold.

Electricity

Yemen features the lowest levels of access to electricity in the Middle East and North Africa (MENA) region, with only about half of the total population having access to electricity compared to a regional average of about 90 per cent. In rural areas of Yemen the electrification rate is very low at about 20 per cent. The public electricity network covers only 41 per cent of the population (22.8 per cent in rural areas and 87 per cent in urban areas), according to the Fourth Five-Year Plan for Poverty Reduction.

The unified network only covers western areas (from Amran in the north to Aden in the south). Independent small and medium-sized electricity generation stations use costly fuel, damage the environment, perform poorly and have high operating expenditures. The state-owned, vertically integrated Public Electricity Corporation (PEC) is the country's main provider of electricity but does not have a legal monopoly over electricity generation.

The unreliable supply of electricity is considered one of the leading business environment constraints for Yemeni firms. The continuous damage to the public grid since 2011 has exacerbated the problem. Yemen ranked 116th out of 189 countries in the ease of getting electricity indicator in the 2014 Doing Business report, dropping drastically after ranking 52nd in the 2012 report. In 2014 getting an electricity connection required four procedures, took 110 days and cost 3604 per cent of the average income per capita.

In addition to recent disruption cause by attacks, the main problems are the ageing generation plants and generators and weaknesses in maintenance and rehabilitation. Blackouts are frequent and prolonged

In Yemen there are three main electric power generation systems: the unified electricity network or public grid, the independent network stations and power generated by private mobile stations and purchased by the PEC. Independent generation systems are not connected to the unified network and consist of many small or medium-sized stations.

In 2008 the GoY initiated the Renewable Energy Strategy and Action Plan, in which different sources of renewable energy were investigated, including wind, solar, geothermal, hydropower and biomass. The objective of the plan was to promote sustainable development and improve the standard of living of the rural population by providing affordable access to clean energy. It was concluded that wind and solar energy are potentially the most feasible renewable sources. In 2008 the Ministry of Energy and Electricity (MOEE) established a renewable energy division comprising several departments and units, including one for wind energy. A notable outcome has been the Al-Mokha 60MW Wind Farm project, which will add 60MW of clean power to the national grid.

To tackle low generation capacity, one partial solution should be the interconnection of Yemen's isolated grids to the main public grid. Four currently isolated grids in the Hadramout area (Hadramout, Al-Mukalla, Belhaf and Ataq) should be connected to form an eastern grid. These should be linked to the main grid (the 400kV transmission line from Mareb 1). The northern grid around Sa'adah city should also be interconnected. Although these interconnection projects have been nominally included in PEC's investment plans, funding has not been sourced.

The weakness of the transmission lines and distribution networks is another challenge, resulting from the overloaded transmission and distribution networks (lines and transferring stations).

Until summer 2009 Yemen had one main 132kV grid, following which the new gas-fired Mareb 1 plant was connected to the main grid via a 400kV double circuit transmission line at Bani Hoshish. There is a plan to connect the second 400kV transmission line from Mareb 2 gas plant to the 132kV substation at Dhamar, south of Sana'a.

Following Cabinet approval it took nine years to issue the Reform Strategy of the Electricity Sector (RSES) law in 2001 and the law has still not been implemented. One of the most important expected reforms was the unbundling of the PEC into three independent corporations (generation, transmission and distribution) within three years. As of yet these three corporations have not been established.

According to RSES law, a new independent Rural Electrification Authority should have been created (Republican Decree no. 76 (2009)) as the main authority responsible for supplying electric power in rural areas, under the supervision of the minister of energy and electricity.

The bylaw organizing the MOEE (Republican Decree no. 149 (2010)) laid out the ministry's objectives, tasks and responsibilities. The MOEE was tasked with developing and managing electric power generation in urban and rural areas and encouraging investments in electric power generation according to the constitution, current laws, regulations and decisions. The PEC, Rural Electrification Authority and any corporations and authorities established in the future will fall directly the minister of energy and electricity.

It is recommended that the Electricity Law and its bylaw be implemented within two years, including:

- Establishing an Independent Regulator Committee of Electricity Activities (under republican decree)
- Initiating the steps and procedures to establish the three independent electric corporations for generation, transmission and distribution (the bylaw does not cover this important issue)
- Starting the procedures to establish pilot local associations for supplying electricity services to rural communities in accordance with items 68-71 of the Electricity Law Bylaw

Road transport

Roads are crucial for people needing to access services and markets, especially in rural areas. The population is dispersed and many people live far from the main urban centres. The GoY paved about 17,100km of the road network by the end of 2013, approximately 21 per cent of the total road length in Yemen (which extends approximately 80,000km). Hadramout has the most roads, with 2,842 km of asphalt roads, followed by Sana'a, Taiz, Al-Hodeida, Shabwah, Al-Maharah and Amran.

Paved roads are largely in good condition, mainly because they are new. According to the World Bank, Yemen is comparatively well served by its primary road network, given its level of GDP and population size. The Global Competitiveness Report 2014 indicated that Yemen ranks 131st out of 144 countries on quality of roads.

Status of the Road Network		
Roads that are paved or being paved	**Existent (km)**	**Under construction (km)**
International	3,693	172

Main	5,152	1,015
Secondary and rural	6,483	8,594
Total paved roads	15,328	12,781
Other earth roads*	44,000	0
Total	59,328	9,738
Source: Ministry of Public Works and Highways Road Sector, http://www.mpwh-ye.net/en/website/sectors/detail.php?ID=1453&lang=ar *World Bank (2013:2)		

Yemen's rural roads do not serve the entire rural population. Approximately 73 per cent of the population lives in rural areas (compared with 48 per cent on average in MENA countries). Much of the rural population lives in steep and rocky mountain regions or desert areas that are difficult to access. The inhabitable deserts, mountainous terrain, and population location patterns give rise to high transportation costs and leave many small communities isolated. Often routes are not passable due to rain, restricting access to services and markets. Most unpaved rural roads are essentially earth tracks in very poor condition, making travel challenging and exceedingly slow and entailing high vehicle operating costs.

One important issue is the absence of technical specifications for the construction of roads, leading to a disparity between most roads and the deterioration of major parts of asphalt road networks. Small projects continue to dominate expenditure. The accumulation of previous commitments exceeds financial and practical capacities.

The lack of financial resources for building, paving and maintaining roads is the biggest challenge. Too many projects are being implemented simultaneously. More than 750 projects are being executed by Ministry of Public Works and Highways (MPWH), more than half of which are urban road projects.

Institutionally, the high fragmentation of roles and responsibilities in the road sector is the most pressing obstacle to development. Some important units, including planning and research and laboratories are outside the responsibility of the MPWH.

The lack of a national strategy or plan and medium-term expenditure weakens road planning, programming and budgeting, and reflects an often fragmented programming framework. The lack of a functioning road classification system adds to the difficulties in planning and monitoring. There are procedural weaknesses in planning and budgeting processes, insufficient manuals and frameworks for designing and implementing road projects and no systems for monitoring and evaluation. The road construction and maintenance industry is still young and fragile.

Although the main road network is sufficient for the time being, a large part of expenditure still focuses on the main roads, leaving insufficient financial resources for rural roads.

To address these challenges, the third and fourth five-year development plans suggested new polices and action. One was to increase the length of asphalt roads and the percentage of asphalt roads in good condition to 70 per cent by the end of 2015, although at the time of writing it seems unlikely that this will be achieved.

Other recommended policies included:

- Extending and developing the main road network, connecting it with the developing road network and completing the connector roads to neighbouring countries
- Implementing and extending the secondary, sub and rural roads projects
- Maintaining the existing road network and guaranteeing its protection through routine maintenance and rehabilitation, especially for asphalt roads
- Improving the traffic light safety conditions of the road network
- Supplying the Road Maintenance Fund with sufficient financial resources, increasing its revenues, reducing its dependence on public budget resources and simplifying procedures for financing maintenance projects

Sea transport

Yemen has been a sea trading country since ancient times. Ports such as Al-Mokha, Gana and Aden are historically famous. Aden and Al-Hodeida are the main national ports while Al-Mukalla sea port serves western Yemen. There are also oil sea ports such as Aden and Ra'as Eisa, which serves as a loading point for oil exports. A small amount of cargo passes through other small ports like Nishtoon. Al-Mokha Port is non-operational, although it is used for informal trade.

Yemen has no marine fleet, although from 2011 to 2013 there were an annual average of 2,075 incoming ships to Yemeni sea ports, most arriving in Aden Port (64.1 per cent) and Al-Hodeidah Port (19.6 per cent). The latter received 54.5 per cent of unloaded dry cargo compared to 30.8 per cent at Aden Port. Incoming oil tankers averaged 1,276 a year during the same period, about 57.5 per cent handled by Aden Port and 25.6 per cent by Al-Hodeidah.

The Maritime Affairs Authority (MAA) is the national agency responsible for fulfilling the GoY's duties in relation to maritime affairs. The main objectives of the MAA are regulating, monitoring and ensuring the security of maritime shipping in accordance with international standards. The authority aims to enhance the durability of Yemeni ports, as well as the navigational routes overlooked by Yemen in both its territorial waters and international waters, with the goal of improving Yemen's international economic integration.

Yemeni sea ports are not competitive compared to other developed sea ports in the region such as Dubai and Jeddah. This is largely the result of high fees and ageing equipment. There is also a lack of supportive services such as storage and cooling facilities, as well as shortcomings in institutional capacity. A shortage of domestic sea transport between Yemeni sea ports for passengers and goods is another drawback.

Recommendations for the development of sea ports include:

- Upgrading and finalizing the national strategy for sea transport
- Updating the suggested amendments to Maritime Law no.15 (1994)
- Improving and enhancing regulations, management and technical systems to prevent sea pollution and ensure the safety of maritime aviation in accordance with maritime law and the Protection of Marine Environment Law no. 16 (2004)
- Improving infrastructure and services in all Yemeni sea ports
- Encouraging the private sector to participate in sea port activities
- Establishing a domestic sea fleet for the transportation of passengers and goods
- Developing the human and physical resources of the MMA in marine safety and preventing pollution

The Transitional Programme for Stabilization and Development 2012-2014 recommended developing current ports and encouraging investment in port services through PPPs. The establishment of new ports should also be considered, especially on the eastern and southern coasts.

Air transport

The air transport sector in Yemen is small compared to that of other countries of similar size, population and economy. Yemen has 18 civilian airports with paved runways, six of which are open to international flights. Sana'a International Airport is the state airport and sees the most traffic, accounting for about 70 per cent of total passengers.

Yemenia Airways was the only national flag carrier, internationally and domestically, until 2008 when Felix Airways was established by private investors. In 2009 Felix extended its network to some regional cities.

One of the biggest challenges to the sector is weakness in the institutional framework. The Ministry of Transportation is responsible for defining air transport sector policies and priorities and providing oversight. The bylaw organizing the Ministry of Transportation states that the ministry's objective is to achieve strategic management of all transport activities. For air transport the ministry's main tasks are the formulation of a domestic and international air services policy; competition regulation; improving the performance of existing airports and increasing their capacity; and determining fees and rates. The Ministry of Transportation is also tasked with fostering private sector investment in air transport infrastructure and equipment.[74]

Limitations include the capacity of the staff and the operating budget. The air transport sector of the Ministry of Transportation is very small and focuses largely on developing sector policies and plans.[75] The Ministry of Transportation's role needs to be clarified so as to avoid overlapping responsibilities with the Civil Aviation and Metrological Authority (CAMA).

CAMA is the main agency responsible for ensuring that airports comply with international standards and regulations. It both operates and regulates airport activities and is the only provider of air navigation and metrological services. It has four departments: flight safety, airport operations, air navigation services and metrological services.

The financial situation of the sector is unclear and there is a shortage of available information about the overall use of public funds. There is also no public disclosure of financial statements detailing the sources and allocation of sector income. This makes the GoY's decision making processes more difficult and weakens accountability mechanisms.

Rail

Yemen has no rail network but has ratified the Agreement on International Railways in the Arab Mashreq, which entered into force on 23 May 2005. In 2008 Yemen deposited its instrument of ratification of this agreement with the Secretary-General of the United Nations. Between 2008 and 2010 the Ministry of Transportation undertook various surveys as well as technical and economic feasibility studies to assess the potential for building railways. In collaboration with the Economic and Social Commission for Western Asia (ESCWA) and the Gulf Cooperation Council (GCC), Yemen carried out an economic feasibility study on the construction of international and domestic railway lines. The GoY and ESCWA signed an agreement on 4 December 2006 to conduct an economic feasibility study on the construction of international railway lines in Yemen. On 16 February 2009 the two parties signed an agreement to carry out another feasibility study on a project to construct a railway line for the transport of minerals (Al-Jawf/Mareb/Shabwah/Belhaf) and another line to link densely populated cities, including Al-Mokha, Taiz and Aden.

Information and Communications Technology (ICT)

Although the industry is at an early stage of development, Yemen has made considerable progress in spreading and diversifying ICT services, especially in telecommunications. Investments have been made in three private mobile phone companies since 2001. Telecommunications centres, internet cafes and training centres and institutes can be found in a number of cities. The private sector operates a number of other activities, including postal services (notably express airmail).

Internet use, which is dependent on telecommunications quality, is slowly becoming an essential component of business in Yemen. Over 32 per cent of firms surveyed in 2010 stated that they use e-mail in their correspondence with clients and suppliers, while 27.9 per cent have their own websites and over 80 per cent of the firms surveyed use the internet to undertake research and develop new ideas and products.

Despite substantial growth in recent years, telephone, mobile phone and internet penetration are still among the lowest in the MENA region. Broadband services are expensive and the subscription process for residential users is complicated. While mobile telephone and internet penetration have increased significantly over the last few years, the unreliability and costs of these services create considerable difficulties for firms.

Survey results in 2010 showed an average wait of about 66 days to get a new telephone connection. This represents a significant increase from the 9.3 days average wait in 2005, suggesting a shortage of supply. Service firms receive connections much faster than manufacturing firms do and larger firms wait longer than small ones. Foreign firms receive service more quickly, with connections reported after an average of only 10 days.

The infrastructure of the domestic system consists of microwave radio relay, cable, tropospheric scatter, Global System for Mobile Communications (GSM) and Code-Division Multiple Access (CDMA) systems. Development of the domestic infrastructure should include the establishment, expansion and modernization of fixed lines in all governorates.

The investment plan for telecommunications focuses on implementing Next Generation Network (NGN) technology, enabling service providers to provide voice and video, data and internet services. This technology is being installed in Sana'a, Aden and Al-Mukalla as a pilot project.

The development of rural communications systems should involve the installation and expansion of existing fibre optic cables in various locations, as well as other permeability systems, including fixed wireless phone systems using Code-Division Multiple Access-Wireless Local Loop (CDMA-WLL) technology so as to meet the needs of customers in rural areas. Many traditional systems are being modernized, including through the introduction of ground stations operating via satellites and wireless telephone services to cover remote areas along the border, on the islands and in the deserts. There is a plan to complete connection in the rest of governorates with a total length of 2,455km of fibre-optic cables. Most major and secondary cities are linked with fibre optic cables, which improve the instant network and enable NGN technology.

The development and modernization of international telecommunications services included upgrading the ground stations and information network systems, installing new two satellite stations and digitization. Since 1996 Yemen has installed several fibre optic cables, including the submarine cable between Aden and Djibouti. A regional linkage project saw two ground optical cables installed linking Yemen with Saudi Arabia, other GCC countries and Jordan. Another cable links Yemen with Oman across Al-Gah and Sarfet land ports.

In January 2014 Yemen International Telecommunications Co. (Tele Yemen) signed a US$ 44 million agreement to be connected to the new AAE1 submarine cable spanning Asia, Africa and Europe. It will help Yemen to further develop international bandwidth capacity and improve international internet connectivity in Yemen. In addition, the international network consists of three Intelsat (two Indian Ocean and one Atlantic Ocean), one Intersputnik and two Arab-Sat satellite earth stations.

Internet infrastructure and technology has developed to meet the increasing demand. It offers fixed line, wireless networks like WiFi and WiMAX, and Yah Click satellite communications services. Tele Yemen reduced the fees of ASDL bundles subscription when it introduced WiMAX services, but it is still expensive compared to in other countries.

The Ministry of Telecommunications and Information Technology is responsible for administering, organizing, regulating, licensing, controlling and supervising telecommunications. It provides telecommunications services through its subsidiary cooperation, the Public Telecommunication Cooperation (PTC), which fully owns Tele Yemen, Yemen Net and Yemen Mobile.

Yemen's ICT laws are outdated. The Cable and Wireless Telecommunication Law was issued in 1991. Although the draft of the new telecommunications law was approved by the Cabinet in 2009 and presented to Parliament, it has not yet been issued. In addition, Yemen has not yet followed international best practices by establishing an independent regulator. The GoY is the sole provider and operator of fixed line services through the PTC. It also provides internet services through the PTC, Tele Yemen and Yemen Net.

Fixed lines increased in number from 422,228 in 2005 to 901,385 lines in 2010, with about 21 per cent annual average growth. Lines numbered 1,380,901 in 2013, with urban lines representing 82 per cent and lines in rural areas accounting for 18 per cent. This increase is due to a new marketing and tariff policy targeting people with limited incomes and in rural areas. Fees for fixed line services were reduced and phone tariffs in rural areas were made equal to urban tariffs (one Yemeni rial per minute). The penetration rate of fixed line subscribers in Yemen was 4.3 per cent in 2012 and increased to 4.7 per cent in 2013, but is still very low compared to the regional average of 9.7 per cent. This is explained by Yemenis preference for mobile phones.

Fixed lines services are still provided under monopoly by the PTC, although tariffs are low.

Mobile phone subscribers increased from 878,232 in 2004 to 17.4 million by the end of 2013, raising the number of mobile subscriptions to 69 per 100 inhabitants. Fixed broadband internet subscriptions are still very low, increasing from 0.1 per 100 inhabitants in 2008 to 0.3 in 2010. The cost of broadband access is extremely high at US$ 119.2 per month, 135 per cent of the monthly GNI per capita in 2011 compared with US$ 8.0 (4.6 per cent of GNI per capita) in Egypt and US$ 54.0 (5.5 per cent of GDP per capita) in Qatar.[76]

Mobile phone subscriptions are increasing for the following main reasons:

- The prevalence of smart phones, especially cheap handsets imported from China
- Increasing numbers of people use social media; Yemen is among the Arab countries with the highest growth in Facebook users[77]
- Many villages across Yemen do not have fixed line services

Table (26): Cellular network operating lines by company (2013)

[76] ESCWA (2011) 34 and 36
[77] ESCWA (2013) 75

Company	Operating lines
Yemen Mobile	4,529,000
Sabafone - GSM (Private)	5,421,000
MTN - GSM (Private)	5,777,000
Y - GSM (Private)	1,696,000
Total	17,423,000
Source: CSO (2013) for the Ministry of Telecommunications and Information Technology	

There are four mobile service providers, three of which are private companies using GSM technology. Sabafon and MTN started their operations in 2002. Y is owned by Hits-Unitel. The fourth operator is Yemen Mobile, which is predominantly state-owned and in 2006 was registered as a shareholder company. The PTC owned 59.3 per cent of Yemen Mobile's capital and 18.2 per cent was owned by public and private companies and the Youth Fund. Yemen is among the four countries in the ESCWA region with four or more mobile service providers and it ranks 8th among the ESCWA countries in mobile cellular competition intensity.[78]

Despite there being four mobile companies, they do not compete to a significant level. Not long after they began operating, Sabafone and Spacetel agreed to unify their tariffs. The two companies were using and benefiting from the PTC's infrastructure. Yemen Mobile also unified its tariffs with these two providers, although it started operating in 2004 with new CDMA technology.

Some of the main challenges include:

- Mobile providers do not market services and plans that make mobile internet access viable. Very few people use the 3G network, unless Wi-Fi service is limited.
- Mobile internet is more expensive than fixed line internet.
- Service variety is limited. Bundling further restricts the ability of consumers to subscribe to individual services.

Internet subscribers increased from 109,127 in 2005 to 2.6 million in 2013. This growth is largely the result of making dial-up access free and the reduction in the price of the Super Yemen internet service by 30 per cent. In 2012 there were 33,206 internet hosts. Computer equipment and connections remain costly relative to income levels. Bandwidth on the outdated telephone network is limited.

Internet services have been provided under a monopoly by Yemen Telecom and PTC since 2002. Internet connectivity is unreliable and lacks sufficient bandwidth (data carrying capacity) even for a relatively small number of users. The limited capacity of the internet connection seriously hinders the development of e-business and other internet-based activities. The operational cost of internet service provision is high, raising questions over its sustainability. In order to remedy these constraints the government has said it will explore options to enhance and expand the current telecommunications network connection with higher bandwidth. It will also open the internet service market to other providers and privatize international connection services according to market demand.

[78] ESCWA (2011): 14

The main reasons for the low usage of internet services include:

- High cost relative to income levels
- Shortage of electricity, especially in rural areas
- Low quality of services due to usage overload
- Language constraints
- Limited competition between service providers and the absence of telecommunications regulations

One of the main challenges is the limited legislation and regulatory framework. Law no. 38 (1991) on cable and wireless telecommunication is outdated. A new draft telecommunications law has existed since 2009. Yemen has still not established the Telecommunications Regulatory Authority.

Yemen must issue new telecommunications laws and establish an independent regulator in order to safeguard consumers and ensure fair competition, with major stakeholders receiving equal treatment. The government must also ensure that state taxes, revenues and necessary resources are assured and applied to all operators. An independent regulator would also ensure transparent policy and enhance the investment environment by organizing and motivating development in the sector.

Yemen's WTO accession raises additional challenges (addressed elsewhere in the Diagnostic Trade Integration Study). The commitment made upon WTO accession to liberalize all telecommunications services before January 2015 was not met. Several steps are required prior to liberalization, including the drafting of appropriate laws and establishing the regulatory authority. The mobile sector is already liberalized with about 80 per cent of market share in the hands of the private sector, although public entities like Tele Yemen and the PTC must be restructured given their size; they have over 10,000 employees and need to operate in a more competitive manner.

C. SECTORAL ANALYSIS

Agriculture

Introduction

Agriculture is the second main source of export revenue (as far as productive sectors are concerned) after oil and gas production. Most agricultural exports are horticultural products. While the expansion of agricultural export activities would improve the export sector, current productivity and marketing are not sufficiently efficient to provide Yemeni farmers with adequate returns for their labour.

The Third Five-Year Development Plan 2006-2010, based on the Millennium Development Goals (MDGs), viewed agriculture as a key sector for ensuring that annual economic growth remains at a minimum of 8 per cent. This is necessary in order to decrease the percentage of the population who earn less than US$ 1 per day to 9.5 per cent by 2015, down from 19 per cent in 1998. The Third Five-Year Development Plan 2006-10 identified the following main constraints to optimizing the sector's contribution to economic growth:[79]

- Inadequate agricultural marketing facilities and road infrastructure for a growing agricultural production sector and modest food/crop processing capacity
- A lack of data on all aspects of the sector, including inputs and outputs prices
- A limited capacity for enforcing produce/food quality control and agricultural resources management regulations through effective monitoring, control, food safety and inspection activities

Yemen's Strategic Vision 2002-2025 described the development of agriculture and rural areas as an important step towards mitigating migration to urban areas.[80] It identified the agriculture sector as "one of the most promising economic sectors" and emphasized the importance of modern refrigeration, storage and marketing of agricultural products in order to "raise productivity and improve quality and competitiveness". The strategy also advocated greater collaboration between the government and the private sector. The Poverty Reduction Strategy Papers 2003-05 confirmed that fisheries and agriculture are the most promising sectors in the Yemeni economy and advocated sustainable exploitation of agricultural and natural resources.

The 2003 Diagnostic Trade Integration Study

Resource management and trade and gender issues were priority subjects in the 2003 Diagnostic Trade Integration Study (DTIS). Although women are involved in the production and marketing of agricultural and livestock products, their participation in agricultural cooperatives is minimal. The study proposed ways to develop women's participation in community-based organizations and increase their share of revenue from the sector. The recommendations made in the 2003 DTIS included viable programmes and projects such as policy and strategy contributions and changes, amendments to tax levies and export and tariff regulations and the application of Sanitary and Phytosanitary (SPS) measures, in line with World Trade Organization (WTO) requirements.

Issues not fully covered by the 2003 DTIS that are of importance to trade, agricultural production and marketing include the unsustainable use of water aquifers, the participation of women in agricultural production and the rapid growth in the production and consumption of qat. Most of the proposed activities and technical assistance suggested in the 2003 DTIS for the Rural Women Development General Directorate (RWDGD) based in the Ministry of Agriculture and Irrigation (MAI) were not successfully implemented and should therefore be taken into account again in this study. The proposed activities included:

- Shifting the balance of research and extension towards rainfed agriculture, including seeds and fertilizers, harvesting and post-harvesting techniques and rain water irrigation systems
- Enhancing the internal and external circulation of agricultural products; technical assistance should be directed towards marketing and distribution arrangements for major products, marketing and distribution arrangements for imports of seeds, fertilizers and chemicals, internal and external market information networks, the development of advice and guidance from production to marketing in order to reduce post-harvest losses, and development of agricultural export policies to correspond with international requirements

Past and current agricultural activities

Agriculture including qat production accounts for 11 per cent of the national gross domestic product (GDP) and 8.6 per cent when qat is excluded. An estimated 33 per cent of the national workforce is directly employed in agriculture. Agriculture also generates significant employment in the transport, processing and trade sectors. The agriculture sector is a vital to Yemen's development, particularly in generating employment in rural areas, supporting the economy in farming communities and providing food and nutritional security.

From 2006 to 2010 the average annual growth rate in production of value-added agriculture was 7.5 per cent. All crops showed positive growth from 2005 to 2010, with the largest increases in grain, coffee and honey.[81]

Agriculture plays a vital role in food security. There are large farms in close proximity to the major cities that meet 100 per cent of the domestic demand for eggs and 56.4 per cent of the chicken meat demand. Coastal fruit farms produce large amounts of mangoes, bananas, citrus fruits and other exportable products, as well as fodder for dairy and livestock operations. Many farms and facilities have a combination of public and private shareholders, with the line between public and private hard to distinguish at times. Many commercial horticulture farms are only involved in growing the produce and rely on traders for harvesting and transportation activities, which provide a significant number of employment opportunities to landless rural communities. Commercial farms are able to access subsidized inputs through various government programmes.

Located at the southwest corner of the Arabian Peninsula, Yemen has a highly diverse geography comprising coastal and inland deserts, high mountain ranges in the north and centre and fertile mountain plains and valleys. Yemen's land stretches over half a million km2 but only 2 per cent is populated and 3 per cent is considered cultivable, of which less than half is normally planted due to lack of rain and other water resources. Over 90 per cent of the country has an arid or hyper-arid climate and over 40 per cent of the land area is desert or barren. The pressure on productive land, therefore, is extreme. Depletion of natural resources by profligate use is acute, with groundwater reserves declining beyond the level of possible recovery in many places. Current quantities of water pumped are estimated at 138 per cent of the annual renewal of water resources.

Description of the agriculture sector

Agriculture plays an important role in the economy. During the period covered in the Second Five-Year Development Plan (SFYDP) 2000-05, agriculture was the main direct or indirect source of income for 73 per cent of the population, contributed 20.5 per cent of GDP, employed 31 per cent of the labour force and accounted for 56.6 per cent of non-oil exports. However, the contribution of agriculture to GDP has been in decline. At the beginning of the 1990s the contribution of agriculture was about 25 per cent of GDP. By 2000 it dropped to 15 per cent and reached about 20 per cent in 2006. Agriculture utilizes over 90 per cent of the country's water resources. Farming, forestry, livestock and qat make up 93 per cent of value-added agriculture, of which qat accounts for close to a third and livestock for about 20 per cent.[82] Despite the arid climate, agriculture has always been a major sector of the economy. Total arable land is scarce, estimated at 1.6 million hectares, about 80 per cent of which is cultivated by farmers. Farm sizes are small, averaging about one hectare, and most farmers use traditional methods. Well irrigation has made it possible to expand cultivated areas, but groundwater tables are rapidly declining. The land under cultivation varies from year to year, mainly depending on weather conditions, especially fluctuations in rainfall. The productivity of Yemen's agriculture sector, particularly the crop and livestock sub-sectors, is low.

Agriculture only represented around 3 per cent of total exports in 2012. In spite of the slow growth of agriculture, it remains the main employer and the second most important contributor to GDP. About one third of Yemen's land is used for agricultural purposes, mainly for raising and grazing livestock.

Yemen has four main agro-ecological zones. The most important is the highland zone, which holds over 44 per cent of the cultivated land and 60 per cent of farms. The second is the Eastern Plateau, with over 26 per cent of the cultivated land and 19 per cent of farms. The Tihama zone holds 26 per cent of the cultivated land and only 10 per cent of the farms. Lastly there is the coastal zone, with only four per cent of the cultivated land and 10 per cent of farms. Rainfed agriculture accounts for about 54 per cent of cultivated land, while 35 per cent is irrigated through wells from groundwater from both shallow and deep aquifers and 9 per cent from spate irrigation.

Honey production has increased steadily over the past five years. The growth rate between 2008 and 2012 was 7.4 per cent at an annual growth rate above 1 per cent. In recent years honey production has received substantial support from the Government of Yemen (GoY) as well as from the international community. Recently the International Fund for Agricultural Development (IFAD) and the United State Agency for International Development (USAID) have developed projects (Economic Opportunity Fund (EOF)-IFAD and Honey Chain Value) to increase the production and export of Yemeni honey. These projects are centred on developing the value chain of honey production and export in many areas across Yemen.[83]

Table (27): Production (tonnes) of coffee and honey 2008-13.

Year / Crop	2008	2009	2010	2011	2012	2013	Growth rate (per cent)	Annual rate of growth (per cent)

Coffee	18,788	18,924	19,029	19,275	19,828	19,984	6.4	1.1
Honey	2,439	2,486	2,546	2,561	2,572	2,614	7.1	1.2

Source: Central Statistics Organization (CSO), Statistical Yearbook (2011), Agriculture Marketing Directorate MAI

Yemen boasts the optimal agro-ecological conditions and climate for the production of high-quality coffee, and in fact coffee originated from Yemen. Yemen has the potential to produce high-quality coffee for domestic and specialty markets but is still lagging far behind its competitors. Coffee is grown by an estimated 90,000 to 100,000 rural households (out of a total of 2.5 million), for whom it constitutes an important source of income.[84] The processing activities along the value chain are also significant sources of employment and income. Coffee is grown in 17 governorates but the main producing governorates are Sana'a, Hajja, Sa'adah, Al-Mahweet, Amran and Remah, which together produce more than 80 per cent of the total. Coffee production has increased by 80.7 per cent over the past eight years from 11,059 tonnes in 2004 to 19,828 tonnes in 2013. The growth rate between 2009 and 2012 was 6.2 per cent at an annual growth rate of over 1 per cent.

One of the gravest challenges to agriculture is the depletion of natural resources, particularly water, soil and forest cover. Yemen's groundwater resources are in great danger. According to the SFYDP 2000-05, Yemen's annual water consumption is estimated at 3.4 billion m3 while the annual renewable water supply is estimated to be 2.5 billion m3. In 2006 the annual water deficit was estimated at over 1 billion m3, or one third of annual consumption. Yemen now has an annual water availability per person of 120-150 m3, about 10 per cent of the regional average of 1,250 m3.

Over 90 per cent of water consumed is used in the irrigation of less than half of the cultivated land (about 400,000 to 404,850 hectares). A reduction in the use of water for irrigation is essential to ensure sustainability, as is an improvement in efficiency. Yemen is now confronted with the immense task of overcoming its water deficit while meeting the additional water requirements arising from population increase, economic growth and improving living standards.

The scarcity of water is the foremost constraint to the development of agriculture in all regions of Yemen. Highland basins that rely on groundwater are experiencing rapid declines in the water table and competition for this dwindling resource is fierce. Coastal areas are also utilizing groundwater at an unsustainable rate and salinity is becoming a serious problem. For areas that are dependent on groundwater for agriculture, a strategy that takes into account the water requirements of various crops and estimated water availability is urgently needed to preserve resources and prevent or lessen the impact of groundwater depletion. Areas that rely on surface water or spate irrigation are dependent on rainfall levels that vary from year to year. However, long-term planning for agriculture is possible in these areas and expansion of surface water resources through dam construction should be considered. Finally, rainfed agriculture, which is practiced in most parts of Yemen, needs to be more firmly supported. Even if production levels are low, rainfed agriculture activities are preferable to allowing desertification.

Key strengths, challenges, opportunities and threats

Cultivated land is a limited resource in Yemen, and the practice of terraced agriculture dates back hundreds, if not thousands, of years. Population density is very high in the terraced highlands and these areas are heavily farmed. In the coastal and plains areas, land is also limited due to scarce water resources and high population density. Given the limited land available, productivity must be improved. More effective registration and legislative procedures are necessary to ensure that conflicts over land are minimized and that activities undertaken on the land are appropriate and will preserve it as a resource. Land degradation and desertification are significant issues that need both study and upgraded policies to prevent land from being taken out of cultivation. Overgrazing and worsening deforestation as the population's energy requirements rise are speeding up the desertification of the country and also exposing the top and alluvial soils to high intensity erosion.

Qat production is expanding in Yemen and the rapid increase in its consumption over the last 20 years has made the crop a controversial issue. Many farmers opt to grow qat in place of food crops and by doing so are excessively utilizing the limited groundwater resources. In spite of its numerous negative impacts on society, qat is also a significant source of income for farmers and accounts for a large percentage of agricultural production in Yemen. Many attempts to address the qat issue have resulted in oversimplified solutions that do not fully take into consideration rural incomes.

Qat is widely recognized as a multi-dimensional issue, given its socio-economic and cultural impacts, yet for many years qat's supporters have claimed that qat production (supply side) is grown on marginal lands and does not affect the cultivation areas of other crops. Discussions and proposed actions focus primarily on the negative aspects of qat production. A national, multi-sectoral strategy that addresses social, economic, health, cultural and awareness issues in a comprehensive manner is needed. The establishment of a high-level body such as a council, committee or commission is necessary, with multi-sectoral membership and a mandate to research these issues in a comprehensive manner and to disseminate results, findings, data and information. A strategy is needed that includes the following:

- Assessment of possible alternative crops for farmers and alternative livelihoods for qat marketers
- More efficient methods of producing qat that reduce the demand on groundwater and other resources (research side)
- An awareness-raising programme on the health and nutritional risks of qat
- Realistic assessment of qat's impact on the rural economy regarding returns to the farmer from alternative crops and the impact on rural employment

As mentioned above, the total area of irrigated land (404,839) hectares represents about 41.7 per cent of the total area of cultivated land. Of this area qat cultivation occupied 168,772 hectares in 2013 (41.3 per cent of the total area of irrigated land). An agricultural policy must be developed that focuses on using the remainder of the irrigated area for the production of high-value crops with export potential, such as coffee, taking into account the available water resources. As the volume and value of agricultural exports increase, so will their contribution to GDP, given the export prices of coffee in world markets.

Livestock sub-sector

The value of livestock grew from 60,500 million Yemeni rial (US$ 330 million) in 2003 to 561,027 million Yemen rial (US$ 1,074.3 million) according to the latest data, a 325.5 per cent increase. Livestock production is a critical component of the agriculture sector, however, Yemen does not produce sufficient livestock for domestic demand and depends heavily on imports of live animals, meat and dairy products. Over 57 per cent of livestock products consumed are imported. Domestic poultry production satisfies 56.4 per cent of demand, and locally produced beef, lamb and goat meat meets 63.7 per cent of demand. Yemen is fully self-sufficient in the production of eggs and honey.

The majority of small farmers and the economically disadvantaged in rural areas have farm animals and livestock resources and many rely on livestock as a their main asset, selling animals as money is needed. Improvements in livestock production for small farmers could play a significant role in the food security of rural households through increased consumption of livestock products and increased income through the sale of animals and dairy products. There is excellent potential for additional income opportunities if markets are developed for underutilized resources, such as skins and wool, and if production of by-products, such as cheese, is expanded. These and new sources of income, such as honey production, can contribute to increasing the incomes of farmers and rural communities.

Commercial livestock production is significant in Yemen and the sector has the potential to grow. The poultry sector is advanced, satisfying the domestic demand for eggs. However, poultry produced for food consumption is insufficient to meet domestic demand. Local consumers prefer domestic live chicken to imported frozen chicken, even though it is sold at a higher price. Within the cattle industry there are several dairy operations and some grow out (fattening) facilities. In general, the facilities for cattle are acceptable, but should be enhanced through additional inputs and improved techniques to increase productivity. The sector would benefit from more highly trained technicians. With the exception of egg production, there is plenty of room for growth in the livestock sector, with the key limitation being feed. Currently most protein meal (soy based) is imported and the cost of relying on imports impacts the viability of the sector.

The role of women in agriculture

Women have always played an important role in agriculture, undertaking a wide range of activities relating to production, processing and marketing. Women's vital role in agriculture is largely unacknowledged in government statistics and decision-making processes. There are many significant obstacles that rural women in agriculture face today. Some of the important challenges include:

- Scarcity of water for household use and instances of denial of access to water for irrigation
- Insufficient financial resources and support are provided by the government and international donors to the Rural Women's Development offices and rural women extension agents
- Low levels of official land ownership by women
- Lack of involvement of women in the agricultural development process
- Stereotypical views of women, patriarchal norms and tribal traditions all limit women's participation in development projects, associations, cooperatives and sale of their products directly in the market

Alongside other natural resource challenges, climate change and variability create the need for a wide range of adaptive measures. The National Adaptation Programme of Action (NAPA) and the National Agriculture Sector Strategy (NASS) and its update have suggested the following measures:

- More efficient groundwater irrigation and increased use of groundwater as the sole supplementary irrigation solution
- Investment in infrastructure and improved water use efficiency in surface irrigation
- Return to traditional agricultural and water harvesting techniques

- Adapting farming practices including changing cropping patterns, growing shorter cycle or later maturing varieties and changing the crop calendar
- Adoption of integrated management of land and water resources at all levels and within an integrated watershed management framework

Agricultural and rural credit facilities

Credit, grants and interest free loans are provided through the AFPPF to farmers who are members of agricultural cooperatives registered with the ACU. Often these cooperatives are required to have a minimum number of members, individual members may be required to have a minimum amount of land, and a cooperative may need to demonstrate significant capital resources to be registered with the ACU. Microfinance banks are just starting up in Yemen and represent an excellent opportunity to provide low cost loans to small agricultural producers.

The Cooperative and Agricultural Credit Bank (CACB) has recently made a successful transition into a full service commercial bank, which enabled it to recover from its low repayments rates and high operation costs. However, the CACB still provides a variety of products to the agriculture sector, with interest rates set by the GoY. Most of its loans and services have been directed to land owners and therefore have excluded landless and tenant farmers, who tend to be the most economically disadvantaged. The CACB has stated an intention to cooperate closely with the AFPPF to develop a fund to finance exports, targeting SMEs.

Export trends and export potential

There is great potential to expand the production of a large variety of agricultural products and many of these products are in high demand in overseas markets, particularly in Europe and the Arab region. Despite Yemen's inherent advantages in the production of a wide range of crops and the available opportunities to access many markets, Yemen has not focused on exporting high value crops. Current markets for mangoes, melons, onions, coffee, honey and okra present opportunities for increased export activities.

The fruit and vegetables sub-sector is a significant contributor to Yemen's exports, with 89,000 tonnes exported in 2009. Exports of these products have been increasing at an annual average rate of 12 per cent and account for 40 per cent of all agricultural exports. Currently, about 80 per cent of these horticultural exports go to Saudi Arabia. Yemen enjoys a seasonal advantage in the production of certain fruit and vegetables, for which there is a strong market when crops are at maximum production.

In determining which crops should be prioritized for production expansion and export, the domestic resource cost (DRC) approach to economic analysis of crop production must be employed. This is the most frequently used measure of the efficiency of domestic farm production in relation to the international market. Considering the scarcity of resources, particularly water, the selection of crops for export is critical. For crops that have a high water requirement, such as bananas, the annual water required exceeds 40,000 m3/hectare and the return per cubic metre of water is only 10 Yemeni rial (12 Yemeni rial/kg for oranges and 6 Yemeni rial/kg for papaya). Such a low return per cubic metre of water is a critical factor given the severe water scarcity in Yemen.[85] The calculated DRC for coffee is a low 0.35, indicating that Yemen has a competitive advantage in producing coffee for export markets.

Honey

From 2006 to 2010 honey exports increased in both quantity and value. The quantities rose from 201 tonnes in 2006 to 928 tonnes in 2010, a 362 per cent increase. The value increased from 999.95 million Yemeni rial to 1,635.1 million Yemeni rial, an increase of 63.5 per cent. Yemeni honey is highly valued on the international market and honey exports increased by an average annual growth rate of 12.7 per cent from 2006 to 2010. Organic certification can further increase returns on investment and generate additional market demand. The honey value chain is characterized by long-term cooperation, close coordination and mutual credit flows between the stakeholders. The value chain actors are highly specialized and all are small and medium-sized enterprises (SMEs). There is a sophisticated quality grading system that is consistently applied from beekeeper to final vendor. All stakeholders are aware of the quality indicators and the quality grading system involves clear price incentives. Nevertheless, value chain actors have expressed concerns about the integrity of honey production and consumer confidence. They are working towards the implementation of a quality certification system. Key points of intervention include supporting the value chain actors in implementing the quality certification system, investments in infrastructure (cedar trees and modern beehives) and developing the packaging and branding of Yemeni honey.[86]

Coffee

Coffee exports have increased by 61 per cent from 3,534 tonnes in 2006 to 5,867 tonnes in 2009, at an annual growth rate of 16.5 per cent. The value of coffee exports increased by 71 per cent during the same period, from 2,618,574,000 Yemeni rial in 2006 to 5,342,229,000 Yemeni rial in 2009.

Most of the coffee produced is exported to and consumed in Saudi Arabia and other Gulf Cooperation Council (GCC) countries. The remainder is exported to Japan, Russia, Turkey and the United States (US). The coffee is exported as green coffee beans, unroasted, at a current average freight on board (FOB) price of US$ 12,000 per tonne. Yemeni coffee is sold by foreign retailers at a price of US$ 60-80/kg.[87] Despite this attractive market, Yemen will not benefit fully unless the need to increase production and maintain high quality is acknowledged. Technical assistance interventions will increase the value of exports by increasing production and expanding the development of value-added products.

Table (28): Quantity (tonnes) and value (thousand Yemeni rial) of natural honey and coffee exports 2006-11

Year / Crop	2006	2007	2008	2009	2010	2011	Growth Rate (per cent)
Honey	Honey						
Quantity	201	199	622	866	928	822	
Value	999,952	371,946	1,318,839	2,246,429	1,635,132	1,510,197	51
Coffee	Coffee						
Quantity	3,534	2,527	3,085	5,867	2,887	1,978	44
Value	2,618,514	1,548,242	2,118,208	5,342,229	5,772,496	2,073,831	-20.8

Source: Statistical Yearbook (2011), SCO, Agriculture Marketing Directorate MAI
Yadav S.S. (2007) "Fruits and Vegetables Export Promotion and Quality Control", UNDP Yemen

The coffee sector cannot be indefinitely protected by import restrictions. However, targeted interventions can be immediately implemented and domestic policies can be improved that will significantly increase the competitiveness of Yemen's coffee sector. One important strategy is the protection of the historic and hard-earned credibility of Yemen's coffee as a brand. The country has already lost much of its connection to the popular "Mocha" term that historically identified Yemen's unique coffees that were mostly shipped from its port of Al-Mokha. Today a number of non-Yemeni coffees are branded as "Mocha" and some Yemeni exporters have contributed to the erosion of its reputation by blending domestic coffee with inferior imported coffees and exporting the product labelled as Yemeni. However, there is considerable scope to recover this and other terms that could serve to increase value in the market. This strategy is particularly relevant given the market developments over the last decade that have created a much larger demand for unique speciality coffees such as those grown in Yemen.

Recent policy changes in both Europe and the US to protect distinctive names and origins of developing countries, such the Denominations of Origin concept, can assist Yemen in establishing and benefiting from its unique national and regional products such as Mattari, Harazi and Ismaeli coffees. The current Yemeni market structure is neither well-regulated nor transparent, meaning that any newcomer wishing to participate in trade activities faces serious risks. There is no coherent grading system and standards are loose and typically defined at the local level on an ad hoc basis. This increases transaction costs and distorts value throughout the supply chain. Most foreign buyers are therefore wary of dealing with any but the few more established exporters. One of the obvious consequences is a reduced willingness to invest in the marketing of Yemeni coffee.

As varietal identification and grading capacity improve, an institutional and legal structure should be established that is capable of monitoring the quality of Yemen's exports and supporting its international reputation. A representative coffee board or similar institution could facilitate overseas marketing in close cooperation with the private sector. One approach to competitiveness should be the development of a controlled Denominations of Origin programme in cooperation with foreign buyers and the international coffee community such as the

International Coffee Organization, Specialty Coffee Association of America and European Cooperation Fund.[88]

Fruit

The quantity of exported fruit (mango and pomegranate) increased rapidly from 62,817 tonnes in 2006 to 155,859 tonnes in 2010. The growth rate between 2006 and 2010 was 148.1 per cent at an average annual growth rate above 29 per cent. Its value grew by 125 per cent (at an average annual growth rate of 25 per cent), from 4,890 million Yemeni rial to 10,996 million Yemeni rial during this period. For instance, mango is a major export product for Yemen with varieties such as Kitchener, Alphonso, Abu Samaka, Bombay and Tommy Atkins.[89] Given Yemen's diverse climate zones, productivity in the horticulture sub-sector could be substantially increased.

Table (29): Production (tonnes) of fruits and vegetables for export

Year / Crop	2008	2009	2010	2011	2012	Growth Rate (per cent)
Mango	387,906	404,573	400,978	377,664	383,107	-1.24
Pomegranate	25,621	26,200	26,784	27,179	27,402	6.95
Sub-total	413,527	430,773	427,762	404,843	410,509	-0.73
Total production of all fruits	958,977	988,679	1,036,862	991,091	1,001,411	4.42
Total (per cent)	43.1	43.6	43.1	40.8	41	-4.94
Production of vegetables for export						
Year / Crop	**2008**	**2009**	**2010**	**2011**	**2012**	**Growth Rate (per cent)**
Watermelon	171,520	178,148	188,792	149,153	182,214	6.23%
Onion	202,761	215,500	223,860	204,041	216,739	6.9
Okra	21,529	22,599	24,277	17,664	21,342	- 0.889
Sub-total	395,810	416,247	436,929	370,858	420,295	6.186
Total production of all vegetables	1,047,046	1,100,299	1,165,014	988,463	1,134,865	1,032,414
Total (per cent)	37.80	37.80	37.50	37.50	37.10	-1.86

Source: MAI (2012) Agriculture Statistical Yearbook (2011)Agriculture Marketing Directorate MAI

Vegetables

The quantity of exported vegetables also increased significantly from 56,777 tonnes in 2006 to 96,006 tonnes in 2010. The growth rate between 2006 and 2010 was over 69 per cent, at an average annual growth rate of 13.8 per cent. Its value increased from 5,248 million Yemeni rial to 6,911 million Yemeni rial over the same period. The leading export crop in terms of quantity between 2006 and 2012 was onions, reaching 130,776 tonnes with a value of 3,707 million Yemeni rial. The growth rate for the quantity and value of onion crops between 2006 and 2011 was more than 213 per cent, at an annual growth rate of 53 per cent. In 2012 the quantity of onion exports fell to 80,049 tonnes (a decrease of 39 per cent).

Data for some export commodities is incomplete. Figures for okra exports are only available from 2011 and for watermelon and pomegranate only 2012 data exists. The quantity of exported okra was very low due to restrictions put in place by Saudi Arabia.

For the export sector to perform well, strong associations are needed between farmers, private sector processors, packers, exporters and the government authorities responsible for quality standards and export regulations. Stakeholders in the sector must improve their knowledge of export markets, establish stronger exporter-importer relationships, acquire better knowledge of shipping alternatives, and receive training on customs procedures, basic business skills and knowledge of SPS requirements.

The potential for growth is significant, but exporters need to be better qualified in order to take full advantage of export opportunities. Yemeni exporters also need to meet the product specifications required in overseas markets in order to gain access to them. As a least developed country (LDC), Yemen has preferential access to global markets, subject to rules of origin being met. However, there are considerable challenges to the expansion of crop production to meet export needs. One such issue is the huge investments currently being made in Saudi Arabia for crops similar to those grown in Yemen, such as mango. It is expected that demand from important regional markets like Saudi Arabia will decrease over time.

From the export data available, exports grew by 175.4 per cent between 2008 and 2012. This represents the accumulated growth rate of exports of honey (309 per cent), fruit (148 per cent) and vegetables (69 per cent). Coffee exports decreased by 44 per cent over the same period. The main goal of the National Agriculture Export Strategy (NAES) is to ensure sustainable export growth and raise the quality of products while maximizing the returns from exports. [90]

Processing zones

Public and private export processing zones (preparation centres) for agricultural products have been established in governorates with international border points: Hajja, Al-Hodeidah, Sa’adah, Al-Mahweet, Aden and Hadramout. The Agricultural Cooperative Union (ACU) is highly active in the export of agricultural products. The union is involved in exporting the products of its member agricultural associations and cooperatives and in buying products and processing them for export. The ACU also makes its export preparation centres available to other non-members cooperatives at a small fee. The Agricultural and Fisheries Production Promotion Fund (AFPPF) has supported the establishment of processing zones in Al-Hodeidah.

Approximately 100,000 people are employed in manufacturing, predominantly in food processing. Large establishments employ 36 per cent, medium size establishments employ 7 per cent and small establishments employ 57 per cent.[91] The Poverty Reduction Strategy Papers predicted that the industrial sector would become a major source of economic growth. It was expected that manufacturing would grow by an average of 6.2 per cent over the period 2003–2005.[92] In fact, according to the World Bank, manufacturing value-added substantially outstripped this estimate during the period, although it has since faltered. The Poverty Reduction Strategy Papers proposed policies covering:

- Expansion of training programmes
- Removal of regulatory constraints
- Provision of infrastructure
- Supporting food manufacturing and garments and textiles for entry into foreign markets
- Attention to specifications and quality standards

A United Nations Industrial Development Organization (UNIDO) study, funded by the United Nations Development Programme (UNDP), explored ways in which technical assistance could enable Yemeni products to comply with the standards and technical regulations of client countries. Credibility and acceptance of compliance by foreign markets are as vital as compliance itself.[93] The ensuing programme focused on two key food processing sectors: fish and honey. There were five main objectives:

- Development of productive capacities
- Enhancing the capacity to meet market requirements
- Upgrading conformity capabilities
- Strengthening export promotion activities
- Enhancing negotiation capacity[94]

Marketing

Small farmers have limited access to extension services, which provide advice on markets for agricultural products. A Market Information System (MIS) was previously in place, operating under the General Directorate of Marketing and Agricultural Trade (GDMAT)/MAI. With European Union (EU) support, MIS Project II finished in 2006. Small farmers also suffer from the insufficient marketing opportunities provided by traditional retail and wholesale markets and the lack of associations and organizations. For many producers, the value chain creates limitations as the processing, packaging and storage industries are not sufficiently developed. Commercial farmers also face similar marketing constraints, but can overcome some of the obstacles due to their size and financial resources.

Commercial farmers need to strengthen their understanding of planning, strategies and business practices, especially if they intend to expand into export markets. While markets operate freely with little government intervention, additional support is needed. Priority areas include extension services to small-scale farmers, regulations to strengthen farmers' cooperatives and associations, the establishment and enforcement of grades and standards to improve quality, and the provision of credit to support the growth of the processing, packaging and storage industries.

There is great potential for Yemen to export a significant percentage of its high-quality fruit and vegetables. Currently agricultural products are predominantly exported to regional markets that accept imports of minimal standards. A system of grades and standards needs to be developed either by the government or private sector in order to elevate the image of Yemeni produce in foreign markets. This will eventually lead to stronger demand and higher prices. In addition, domestic consumers will also benefit from having varying grades of produce available, with quality-conscious consumers paying more and value-conscious consumers opting for cheaper produce.

A system of grades and standards will encourage farmers to employ better harvesting and handling practices. The proposed public or public/private system should be activated and a communication strategy needs to be developed to inform stakeholders and consumers about these standards. This will promote better quality produce, which will result in famers receiving higher prices per kg in the domestic and export markets.

The agriculture sector is not fulfilling its potential in exporting products. Despite producing some excellent quality goods, stakeholders are selling on a low cost basis and in an opportunistic fashion. While there are some knowledgeable exporters, many new companies are entering the export business and are building export centres and buying equipment before gaining sufficient knowledge of the sector. Export activities are also limited by inadequate packaging from local suppliers. Batches of local produce are often of mixed quality, size and appearance and less experienced exporters are shipping potentially high quality and high value produce at low prices due to the lack of sorting procedures and an official grading system. Although high quality goods are produced, consequent activities result in low prices and lead importers to consider Yemeni produce to be of poor standards.

The issue of limited technology transfer to farmers is closely related to the challenge of insufficient government funding. Assessing the public extension system in Yemen, it is evident that it is not functioning due to the lack of resources. This lack of support goes back 15 years. What is left of the extension service system does not employ current extension techniques or draw on any updated technical knowledge of current agronomic, business or farm management techniques. Business training is also not a component of the extension service system. This represents a tremendous challenge, but also a tremendous opportunity to start afresh by creating a new extension service that could be public, private or a combination of the two. At this point cash infusions and training courses for underpaid and unmotivated extension staff will not contribute meaningfully towards the development of the agriculture sector. A complete revitalization of the extension service is required and would contribute significantly towards improving the productivity of Yemeni agriculture and raising rural incomes.

Standards are becoming increasingly important in international trade, both in terms of products and processes and the types of standards applied to trade. In agriculture, three sectors stand out in terms of their economic importance and the relevance of standards: fish, horticultural and vegetable products.

Building Yemen's capacity to meet foreign countries' SPS standards is critical for improving current exports and diversifying into new products. A recently reintroduced ban on some Yemeni fruit and vegetable products imposed by several countries, which led to halting the export of such crops, makes it abundantly clear that failure to meet SPS standards can be a binding constraint on exports. Overcoming difficulties in fulfilling importing countries' regulations on exports such as mangoes, pomegranates and other horticultural products will lead to an increase in export earnings as products are sold at higher prices. In addition to building capacity to support increased exports, there is a need to streamline SPS procedures for imports.

The YSMO is the main body responsible for meeting exporters' requirements in terms of TBT/SPS compliance, which relate to: standards, testing, metrology, systems certification, inspection, traceability, packaging and labelling, infrastructure and the institutional services needed to support these requirements.

An independent National Accreditation Board (NAB) must be established. An NAB is vital to "conformity assessment infrastructure". At the domestic level, an NAB is responsible for accrediting laboratories, systems certifiers and inspection bodies. By subjecting itself to a peer-evaluation process undertaken by the International Laboratory Accreditation Cooperation and the International Accreditation Forum (for system certification), an NAB aspires to qualify for Mutual Recognition Agreements (MRAs) with these world bodies so that the local conformity assessment infrastructure obtains global recognition. This will facilitate, for example, the international recognition of tests conducted in Yemen's laboratories, without client countries having to resort to duplicative testing.

With the recent trade agreements and WTO accession, Yemen can realize its full market potential for horticultural products by providing products of consistent quality. It will only be able to penetrate international markets when exporters can demonstrate that products are free from pests and chemical residue. Horticultural products currently sell in the traditional bulk markets at discount prices because of low product quality. To command the higher prices paid by supermarkets in Dubai, Saudi Arabia and Kuwait, producers will need to ensure that Yemeni fruit and vegetables consistently meet consumers' higher quality standards. Okra, onions, green beans, melons, mangoes and pomegranates face stringent health and safety controls in Dubai, Saudi Arabia and Kuwait as well in EU supermarkets. Strong SPS measures, adequate post-harvest preparations, availability of laboratory facilities and legislative control will serve to advance the horticulture sub-sector.

The private sector has an important role in the establishment of SPS laws and regulations. This requires an understanding of SPS measures and the ability to implement good management practices that adhere to the standards throughout the value chain. The private sector is, to some extent, more organized that the public sector and stakeholders have the capacity to incorporate SPS standards into their operations. Public awareness campaigns about the importance of SPS measures will be essential in both the present state system and, in the near future, the federal system. Under the present state system, the emphasis should be placed on the private sector, while under the federal system the public sector will need to play a prominent intermediary role.

Capacity development in the private sector is also needed. Many commercial agriculture projects employ foreign experts to advise on their facilities instead of utilizing Yemeni experts. Technical training should be provided to private sector experts to ensure their knowledge is up to date. Also, an association of private sector technical and management advisors should be formed so that local government bodies, commercial producers, non-governmental organizations (NGOs) and donor programmes can easily locate and access experts.

The crop value chain

Yemen has unique and favourable climatic conditions and there is strong growth potential for the cultivation of horticultural products for export. However, for this sector to increase the volume of exports and to be effective, competitive and sustainable, the current challenges in both production and marketing aspects of the value chain must be overcome. Over the past decade Yemen has exported only 10-15 per cent of fruit and about 10 per cent of the vegetables produced nationally to various international markets. Another issue is the decline in productivity of some crops. Nevertheless, a focus on increased net returns per hectare, rather than yields per hectare is more beneficial to farmers, as well as to the country in general. The efficiency of the value chain needs to be enhanced, improving productivity, sustainability, quality and the competitiveness of products.[95]

Guided by the NASS and NAES, adopted in 2009 and 2012, respectively, the government launched several development programmes aimed at strengthening the value chain and enhancing the formation of coffee producer groups and processor and traders associations. It is likely to take several years for the on-going programmes to reach completion and for relationships within the value chain to be strengthened. In addition to the cooperation building process, it will take time and capacity-building efforts for the newly established institutions to become fully operational.

There are many wholesale markets in cities and in rural areas. Exporters prefer to buy from wholesale markets, where they can pressure farmers into selling their products as the farmers are likely to otherwise face significant losses because the wholesale markets lack the appropriate facilities to store perishable products. Nationwide, wholesale market infrastructure and facilities management are insufficient.

Market information is not available to farmers and major stakeholders such as market agents, financiers and agricultural consultants. They do not have access to data on market demand for product type and volume or current market prices and so cannot plan their marketing activities accordingly. No record keeping takes place in the wholesale markets and the information given to sellers and buyers is not accurate. Communication systems are lacking and wholesale market agents do not contact farmers to advise them on planning and timing their deliveries to the markets so as to avoid oversupply.

The EU Market Information System Project (MIS II) was supported by the EU from 2001 onwards, following Food and Agricultural Organization (FAO) assistance to the MIS Department. The specific objective of the MIS II project was the collection and dissemination of marketing and price information on crops in the most important market locations in Yemen. The regional coverage included those governorates covered by the MIS: Sana'a, Amran, Hajja, Al-Hodeidah, Ibb, Taiz, Laheg, Aden, Abyan and Hadramout). The GDAMT/MAI has also published and broadcast marketing information on prices of agricultural commodities (fruit and vegetables) for farmers, traders and consumers since 1996. Unfortunately, the MIS project was terminated in 2006.

Post-harvest activities are not undertaken by farmers or wholesalers. A limited number of mango exporters engage in primitive post-harvest techniques such as grading the fruit by hand. The supply chain stakeholders have not recognized the value of the cold chain process and its importance to shelf life and the quality of crops. This was apparent in the wholesale markets in Al-Hodeidah and in exporters' warehouses. Hygienic practices should be standard in post-harvest activities, but they are only employed by a few exporters.

The producers and exporters have minimal information on consumer preferences regarding product type, variety, size, flavour, colour, stage of maturity, quality grade, packaging type, packaging size or other characteristics. There is also a lack of information on the permitted use of post-harvest treatments such as ripening methods, pesticides, fungicides and organic materials.

Product quality, health and sanitary certification is essential for exporters and importers alike. At present, standards and certification are not fully controlled and steps must be taken to reduce the gap between the actual quality of domestic products and the standards required for export. Yemen Exporters, the accredited inspection body, should align itself with a reliable and trusted authoritative body.

The federal system

The proposed federal system, which has yet to be realised, will form six regions, each consisting of a number of governorates, where each governorate will manage and formulate its own socio-economic policies, plans and trade in keeping with Greater Arab Free Trade Area (GAFTA), GCC, WTO and bilateral trade agreements. Many of the current challenges to the agriculture sector will persist under the federal system, but institutional arrangements and regulations will be the responsibility of various federal government bodies. At the central level, the Ministry of Industry and Trade (MOIT) will be the authoritative body and at the governorate level, the Commission on National Trade Affairs.

The implementation of the WTO, SPS and Technical Barriers to Trade (TBT) agreements will require the participation of the ministries of agriculture, industry, science and technology, animal resources and health at both the central and governorate levels, as well as the Yemen Standardization, Metrology and Quality Control Organization (YSMO). The Central Bank of Yemen and Yemen Economic Consul set macroeconomic policies (including the exchange rate) and regulate the financial services sector. Each sector involved in international trade agreements, ranging from transport to telecommunications and audiovisual services, is governed by its own set of regulatory bodies.

Box (2): The impact of the fuel subsidy removal

On 30 July 2014 the GoY decided to remove the fuel subsidy, which had kept the price of fuel artificially low but at a significant cost to the state. Financial pressures and an intractable fuel shortage resulted in the decision to drop the subsidy in order to realign the government budget and increase the importation of fuel. The price of petrol increased by 60 per cent and diesel by 95 per cent. In order to gauge the immediate effects of the increase of fuel prices within the context of an ongoing fuel crisis,[96] Oxfam, through its Emergency Food Security and Livelihoods coordinator and field team in the Haradh and Abs districts in Al-Hodeidah governorate, conducted a mini rapid assessment. The main impacts reported by the assessment are:

- The cost of ploughing increased by 40 per cent
- The price of water increased by 300 per cent during the assessment week
- The cost of fodder for livestock is 50 per cent higher
- There have been proposals to raise the daily rate of casual labour by up to 50 per cent, reducing farmers' profits and motivation to cultivate land.

Linkages to other sectors

Many issues that affect the agriculture sector also impact other sectors; the predominant, over-arching obstacle being the current economic and trade environment. The provision of relevant data and support for the sustainable management of resources will both contribute to a better production system and assist Yemen in meeting its commitments to international standards as articulated in the WTO regulations.

Certain areas in Yemen are home to unique species of trees. Socotra Archipelago, for example, boasts the endemic Dragon Gum Tree (locally named Dam Al-Akhawain – blood of the two brothers) and over 250 plants species that are only found on Socotra. The island attracts many tourists when the security situation in Yemen is stable.

Agricultural and food producers supply supermarkets, traders, hotels and catering businesses in the major cities. The introduction and cultivation of new varieties of produce, such as tomatoes and cucumbers, through organic farming in the areas surrounding urban centres has created new demands in the cities. New investments in the cultivation of flowers have been growing and have spread to most urban cities, with demand on the rise. These investments provide new opportunities and have attracted many young people, especially new agriculture graduates.

Strategy and policy

The development of the agriculture sector in a sustainable manner is crucial for Yemen's integration in the multilateral trading system. The goal of the National Food Security Strategy (NFSS) is for "All Yemeni people to have access to sufficient and nutritious food at all times to live an active and healthy life – i.e. all people are food secure." The key objectives are to cut food insecurity by one-third by 2015, to ensure that 90 per cent of the population is food secure by 2020 and to reduce child malnutrition by at least one percentage point per annum. The NASS aims to contribute to reducing food insecurity and may have a larger contributing role than that envisioned in the NFSS given the recent increases in national food production and the perceived opportunities to further enhance productivity.

Current strategic plan

The overall objectives of the agriculture sector are to increase growth, sustainability and equity by raising agricultural output and to increase rural incomes, particularly for the economically disadvantaged. The NASS and its update place new emphasis on:

- Improving productivity of rainfed agriculture, including through terrace restoration, watershed management and water harvesting
- More efficient agricultural water management through the adoption of modern irrigation techniques and agronomic packages within sustainable community-led water resource management plans and increased efforts to improve productivity in rainfed agriculture through investment in all forms of water harvesting and the adoption of crop packages adapted to the arid environment and resilient to climate change
- An increased recognition of the role of rural women in meeting food needs, improving nutrition and protecting the environment
- Improving productivity in irrigated agriculture through modern irrigation techniques and advisory services
- A strong focus on improving the productivity and sustainability of livestock production, as this sub-sector has growth potential and livestock are the principal asset and economic activity of the economically disadvantaged and landless
- Diversification of crop patterns into new or revived cash crops (coffee, honey, almonds, oil crops) and into more nutritious foods to help improve and diversify household nutrition, and the development of related value chains and parallel reduction of area planted with qat

The NASS focuses on both growth and distribution and prioritizes the poverty reducing and nutritional role that agriculture and agricultural services can play. According to the report, "Although this strategy applies to all farmers, the balance differs somewhat between: (1) rainfed and smallholder agriculture; and (2) irrigated commercial agriculture. The growth strategy in rainfed and smallholder agriculture focuses more on inclusion and adding value to the assets of the economically disadvantaged and on improving their nutritional status."[97]

Current policies affecting agriculture

The Council of Ministers Resolution no. 14 (2007) describes the establishment of an institutional mechanism to promote agricultural and fish product exports. The following regulations, resolutions and decisions are also related to the sector:

- Cabinet Decision no. 83 (2003) in part focuses on agriculture and the support required for the export process
- Resolution no. 192 (2004) on the organization of the processing of agricultural exports
- MAI Decision no. 44 (2003) to form a technical committee to oversee the organization of agricultural exports
- Ministerial Decree no. 5 (2004) on the formation of sub-committees to organize agricultural exports and their regulation at the governorate level
- Resolution no. 21 (2007) on the approval of a development strategy for agricultural exports
- Directives of the Prime Minister to the MAI Ro/24/3365 (6/8/2007) and 7996 (24/10/2007) included the issuance of regulations on the marketing of fruit and vegetables for export as well as on wholesaling for local consumption
- Regulations governing the work of the fruit and vegetable markets are being prepared, according to the Council of Ministers Resolution no. 346 (2005)
- Council of Ministers Resolution no. 346 (2005) on the organization of the relationship between the relevant ministries and local authorities with respect to export markets and wholesale and consumer markets
- Laws and legislation: Agricultural Law no. 6; Plant Quarantine Law no. 6; Regulations for the Plant Quarantine Law no. 9; Seeds and Fertilizers Law no. 8; Executive Regulation to the Regulation of Pesticides no. 8; Regulations for the Seeds and Fertilizers Law; Law on the Circulation of Pesticides no. 9.
- Draft resolutions:[98] Ministerial Decree (2013) on organization and classification centres and the transport of fresh fruit and vegetables
- Draft Ministerial Resolution (2013) on the decision to regulate cold storage for fresh agricultural products, a draft resolution before the Council of Ministers has been forwarded to the Ministry of Legal Affairs
- Draft Council of Ministers Decision (2013) on regulating the export and import of agricultural products and quality control
- Draft Resolution on wholesale markets for fresh fruit and vegetables
- Draft Law no. 32 (1991) on commercial law and its amendments
- The rules of procedure for the Cooperative Centre for Agricultural Exports/ACU
- Land Registration Issues: Republican Resolution on Law no. 39 (1991) states that land rights must be registered. Land ownership and tenancy rights are problematic, as farmers are often not permitted to make improvements on farmland. According to the law, landowners are required to register their title with the Land Registry. If a landowner fails to do so they may not acquire the legal estate and may risk losing their land. The law does

not, however, state that if a landlord fails to register their title they shall not acquire the legal estate. Registration of the title does not provide an indefeasible title (as under a Torrens system) and so prevent courts from deciding for or against the registered title. This gap in the law is one of the reasons for the common occurrence of land disputes.

Only urban land is registered pursuant to the formal law. Most private rural land rights are documented under customary law, with community leaders preparing land title documents (basira) and issuing land inheritance certificates (fasl). The documentation usually includes a description of the land, boundaries and history of ownership. Land may be titled individually or jointly in Yemen, but the vast majority of land is titled in the name of the male head of household or extended family. Women with an individual title to land tend to be wealthy or educated urban residents. Only a small percentage of Yemen's land (an estimated 10–20 per cent) is registered. Eighty to ninety per cent of land transactions occur by basira or informal documentation. The low level of official registration of land affects access to credit, as all of the loan products of the leading agricultural banks require a land deed as security.

Investment policies

In recent years a succession of fiscal crises has eroded operating budgets and reduced the effectiveness of public services. The NASS and its update aim to restore capacity and activities at the field level through a fully financed programme for the integrated delivery of community-based investments and services (including the proposed Global Agriculture and Food Security Programme (GAFSP) in four governorates). At the central level, the NASS update programmes include changing the management agenda, restructuring the AFPPF and a progressive increase in recurrent budgets.

Taxation

Annual taxes of 5 per cent and 10 per cent are imposed on the total value of crops and products cultivated from rainfed and irrigated agriculture, respectively. In the past taxes were imposed on the import and export of goods, including agricultural products. Now taxes on agricultural commodities are waived, but specific customs levies are imposed by the Customs Authority, in keeping with WTO regulations. Important improvements in the tax administration have been initiated, such as the introduction of a new taxpayer identification system, computerized registration of taxpayers and the adoption of self-assessment procedures.

Private sector partnership and competitiveness

Exporters complain about the lengthy procedures in place at the Customs Authority and YSMO. The private sector considers this an obstacle to any plans to expand export activities. Both the Customs Authority and YSMO have announced plans to improve their relationships and interactions with the business community and improve their services.

Currently most of the public funds available to the agriculture sector are directed to the AFPPF, which makes grants for the purchase of equipment available to middle and higher income farmers that belong to government-run associations. There are several functions critical to the sector that the MAI does not effectively engage in, including:

- Setting and enforcing grades and standards for agricultural and livestock products
- Certification and testing of inputs including pesticides, fertilizers and seeds
- Effective inspection and quarantine services at the borders
- Providing extension services to small farmers

- Planning for land management and resource conservation

The many deficiencies in the marketing system inhibit farmers from attaining maximum profits and result in market demand in terms of the quality and quantity of produce not being met. To strengthen the marketing system, increased organization through the development of various associations and cooperatives is necessary. This will lead to improvements in information sharing and in quality. The development of cooperatives is key to providing marketing and production information to a wide range of farmers in an efficient manner. In general, cooperatives are formed for the purpose of obtaining subsidized inputs. While this is an important aspect, many additional benefits, such as improved information flow to allow better marketing decisions, are not currently being taken advantage of.

Improving links and services within Yemen to facilitate external trade through inland ports would enhance trade activity with neighbouring countries, which rely on import and export activities with Yemen and also the transit of commodities. The international coastal route that connects Yemen and Saudi Arabia to the north and Oman to the east requires basic infrastructure development to ease trade movements in and out of Yemen. Essential developments include building an internal (rural) road network, ensuring transport and trade facilitation links between Yemen and the GCC countries and establishing trade facilitation systems for efficient access to markets in the region and through the “Northeastern Corridor” to GCC countries.

Along the northern border Yemen shares five border crossings with Saudi Arabia: Al-Wadi’ah, Al-Twal, Al-Boq’a, Al-Malahed and Aleb. On the eastern border it shares three border points with Oman: Shahan, Sarfet and Hawf. All of these border points have customs and immigration facilities. The road network in Yemen currently consists of 10,000 km of asphalt roads, about 3,200 km of gravel roads and 54,000-60,000 km of dirt roads. The road network is divided into strategic roads that link the governorates and the international road network linking Yemen with its neighbouring countries. The length of these roads extends over 4,000 km and includes a coastal strip of 1,800 km joining Yemen with Saudi Arabia and Oman. The international coastal route passes through almost all Yemen’s seaports.

Yemen has 14 seaports; six are located along the coastal strip on the Red Sea (Al-Hodeidah, Al-Mokha, Salif, Al-Lahia, Ra’as Eisa and Al-Khokha), and the other nine ports are located along the coastal strip of the Aden Gulf, Arabian Sea and Indian Ocean (Aden, Aden Free Zone, Bouriqa, Dhabah, Al-Mukalla, Nishtoon, Seihoot and Belhaf). Most ports are located near the main regions of economic productivity. Those located on the Red Sea lie close to the well-known maritime passage Bab Al-Mandeb and Djibouti, while the ports located on the Arabian Sea and the Indian Ocean (Aden, Bouriqa, Nishtoon, Al-Mukalla and Belhaf) are also used for the export and import of gas and oil products.

Yemen also has six airports used for exportation and re-exportation in Aden, Al-Hodeidah, Rayyan, Sana’a, Sayoun and Taiz.

Donor activities and roles

There are six on-going IFAD-funded programmes and projects in Yemen that aim to empower the economically disadvantaged in rural areas and contribute towards improved, diversified and sustainable livelihoods. The projects largely focus on the most marginalized parts of the country, particularly mountainous zones and remote coastal areas. The projects, such as the Dhamar Participatory Rural Development Project and the Al-Dhala Community Resource Management Project, are investing in participatory rural development and resource management, rainfed agriculture and livestock, and social and economic services for rural communities.

The **Rainfed Agriculture and Livestock Project**, initiated and co-financed by the International Development Association (IDA), will assist rural communities in participating in and benefitting from community-based planning and development. Through capacity building and support for the establishment of rural producers' groups and committees, the project will improve rural communities' access to public and private services and to input and output markets. The project is one of the priorities of the government's public investment programme under the Third Five-Year Development Plan 2006-2010.

The EOF is a Yemeni public-private partnership aiming to improve the economic status of the rural population. The EOF is currently managing the Economic Opportunities Programme and the Fisheries Investment Project and is expected to gradually scale up its operations and take on the management of additional projects, programmes and financial resources.

The Economic Opportunities Programme 2010–16 will work with smallholder and landless households to develop the value chains for three high-value agricultural commodities: coffee, honey and horticultural products. These value chains have significant potential to contribute towards poverty reduction and economic growth and will create opportunities for export expansion, import substitution and rural employment generation. The programme will also promote micro-businesses so as to meet demand for goods and services in rural areas. The programme addresses three key priorities of the GoY and IFAD: (i) Creating sustainable pro-poor investments aligned with the government's poverty reduction and economic growth policies and IFAD's strategic objectives, (ii) Introducing a private sector-led approach to development operations, and (iii) Establishing a public-private partnership to effectively, efficiently and transparently manage development resources and create synergies.

The **Rural Growth Programme** aims to reduce poverty and food insecurity and increase small farmers' resilience to the impact of climate change, stimulating sustainable economic growth for women and men in rural communities. The components of the programme are: (i) Community empowerment and diversification of livelihoods, enabling households to manage their own development and engage in income-generating activities, (ii) Natural resource management and resilient infrastructure development, including integrated water management and soil conservation, and (iii) Agricultural development, focusing on improved, climate-resilient farming practices and technologies.

The **EU Delegation** is part of the G10 diplomatic group (Permanent 5 of the UN Security Council, the GCC and the EU Delegation), that sponsors and supports the GCC initiative signed in November 2011. The GCC initiative implemented a two-year transitional process that was expected to end with elections in February 2014 but due to the political and security situation, it did not. The EU is a lead donor in food security, state building, public health and humanitarian aid. The EU's support focuses on improving good governance and reducing poverty by stimulating economic growth and developing human capital in order to increase the delivery of basic social services, social protection and job creation. The EU is also an important donor to civil society activity.

The mid-term review of the European Commission Development Strategy 2007-2013 made it clear that interventions to support development in Yemen will draw on previous experience and will focus on enhancing economic development and livelihoods. These goals are closely connected to economic growth and a more favourable environment for private sector investment and export diversification. This, in turn, will necessitate a national export strategy.

The EU supports projects aimed at developing a competitive, diversified and sustainable economic environment that favours an inclusive and diverse private sector based on SMEs. The Yemen Economic Support Programme focuses on private sector development, particularly facilitating access to finance for SMEs with a specific focus on women and young people.

The EU is active in strengthening resilience, especially concerning social and economic development and livelihoods. With an aim to support the transition to a stable economy, EU intervention promotes agricultural development and food security at both community and institutional levels. At the community level, by supporting rural growth through a value chain approach, and at the institutional level, by strengthening relevant institutions linked to food security and improving the collection of data for improved policy making and timely management of potential food security crises.

FAO current and planned interventions. The FAO plans to implement a project to improve food safety and the quality control of agricultural inputs and ensure compliance with WTO, SPS and TBT measures. The FAO will assist the YSMO and MAI's general directorates of quality control, production requisites, and marketing and trade to strengthen and integrate government regulatory and institutional capacity for food safety and agricultural input controls, along with stronger agricultural input supply and food value chains, increased visibility of food safety and input certification and increased confidence in input supplies, food consumption and exportation.

The project will include: (i) Establishing a National Food Safety Council and strengthening and integrating food safety controls in all food-related sub-sectors; (ii) Strengthening the SPS analysis capacity of the YSMO and relevant agencies and their testing laboratories and monitoring and reporting mechanisms to meet Codex and WTO standards; (iii) Establishing a preventative risk-based approach involving different actors in the food and agricultural supply and marketing chains; (iv) Strengthening food and agricultural input border inspection points (including legal and regulatory arrangements, inclusion of modern risk-assessment principles, investment in modern equipment and skilled expertise); (v) Strengthening the capacities of the MAI to prepare for effective participation in WTO negotiations and comply with agriculture-related WTO agreements and multilateral trade arrangements, analysis, registration and certification of imported seeds, fertilizers, pesticides, etc. and reduce TBTs in improved seeds, quality fertilizers and pesticides and safe animal feed, medicines and vaccines. Also, further developing the capacity of identified actors in the food and input supply industries and non-government stakeholders to enhance food safety and agricultural input quality control and facilitate market access.

The FAO also plans to enhance post-harvest management of selected agricultural commodities within a value chain approach. The FAO will assist the MAI and its general directorates of plant production and marketing and trade, the Agricultural Research and Extension Agency (AREA), private sector organizations (e.g. chambers of commerce) and farmers' cooperative unions to review existing value chain analyses of key agricultural commodities (e.g. almonds, grapes, mangoes, onions, papaya, peach, potatoes, date palm and selected vegetables) and on-going value chain development initiatives (coffee, figs, honey and horticultural products such as cucumbers, strawberries and tomatoes), prepare strategies to address farm and community-level harvesting and post-harvest management weaknesses (e.g. collection, cleaning, grading, processing, packaging, storage and local transportation) identified in selected value chains, and implement these strategies in selected production areas. This will increase farm productivity, household food and nutritional security, income generation and employment opportunities (particularly for women and young people), as well as replacing the production of qat.

A project to control transboundary animal diseases (TADs) with special attention paid to border areas has been partially implemented. The project will determine the groundwork for a sustainable national programme for livestock disease control, protect public health and contribute to improved livestock productivity through: (i) Enhanced epidemiological capacity at the central level and surveillance centres at the governorate level and border entry points; (ii) Reduced number of TAD outbreaks due to rehabilitated disease surveillance networks and improved control, including vaccination campaigns; and (iii) Increased livestock productivity within communities hosting internally displaced persons through improved animal health practices and disease control. The project would also strengthen the Capacity for Regional Coordination to Combat TADs in Yemen and Border Countries of the Arabian Peninsula (Saudi Arabia and Oman).

In January 2014 the **World Bank**'s active portfolio consisted of 32 projects (including recipient-executed trust funds) with about US$ 900 million in net commitments, focused on increasing access to basic social services, improving infrastructure and enhancing governance and institutions. Seven projects have so far been approved since the political transition, with a strong emphasis on enhancing access to basic social services and safety nets.

In order to alleviate hardship for the most economically disadvantaged, a US$ 100 million Emergency Recovery Grant will provide cash transfers to around 400,000 households. The Labour Intensive Public Works Project (US$61 million) and the Additional Financing for Social Fund for Development (US$ 25 million) were approved in a bid to provide employment for the economically disadvantaged, particularly young people. To improve access to basic education, the World Bank also approved US$ 66 million for the Second Basic Education Development Project. The Road Asset Management Project (US$ 40 million) was approved to improve road conditions and maintenance.

Conclusion

Yemeni agriculture faces low to medium market access barriers. It is expected that this will change in light of Yemen's WTO accession and the hoped-for subsequent improvements in trade conditions and the economic environment, as well as the move toward the federal system, which will see the governorates enhance their competitive capacities and diversify into new markets and new products.

Yemen's WTO accession will create opportunities for trade development, but these opportunities can only be realized with supportive trade policies and strategies and expanded public and private participation and partnerships. With its linkages to other productive economic sectors, growth in the agriculture sector will increase incomes for the economically disadvantaged and increase GDP growth. In the short term improving productivity will require consideration of the trade competitiveness effects of macroeconomic policy, including a trade-off between inflation and currency appreciation. In the long term, Yemen must boost productivity in non-oil export sectors, first and foremost in traditional agriculture.

A system of grades and standards, developed either by the government or private sector, will elevate the image of Yemeni products in foreign markets and lead to stronger demand and higher prices. In addition, Yemen's consumers will also benefit from having varying grades of produce available, with quality-conscious consumers paying more and value-conscious consumers opting for cheaper produce.

To realize horticultural products' export potential, private-public cooperation is needed to build infrastructure and improve practices. Yemeni horticultural products are not realizing their full market potential because of inconsistent quality, and Yemen will not be able to penetrate international markets until exporters can demonstrate that these products are free of pests and chemical residue. Horticultural products currently sell in the traditional wholesale markets at discounted prices because of low product quality. To command the higher prices paid by supermarkets in Dubai, Saudi Arabia and Kuwait, producers will need to ensure that Yemeni fruit and vegetables consistently meet consumers' higher quality standards. Okra, onions, melons, bananas, mangoes and pomegranates also face stringent health and safety controls in Dubai, Saudi Arabia and Kuwait, as well as in EU supermarkets.

Capacity building programmes for public and private institutions and production value chains require continued financial and technical support through existing service providers backed by donors over a minimum period of five to 10 years. These programmes aim to establish stable, sustainable processes of policy reforms, institution building and value chain strengthening.

Official bodies at all levels should develop and promote well-tailored media programmes and extensive national campaigns to cover all aspects of export. The importance of export has been recognized in the National Dialogue and has been incorporated into the new constitution.

Recommendations

- Increase the productivity of agricultural products and livestock by planting high quality and high yield crop varieties and through the proper use of inputs, feeding rations and animal health and veterinary services.
- Increase investment in agricultural research, extension and dissemination of technology and thereby increase yields of crops with export potential such as fruit and vegetables, coffee, honey, mango, papaya and sesame. Technical and financial assistance from donors will be critical, which will involve a range of agencies, including the AREA under the current state system and the governorate authorities responsible for agriculture and livestock under the federal system.
- In order to improve the export sector, there is a need for strong associations between farmers, private sector processors, packers and exporters and the government authorities responsible for quality measures and export systems. Improved knowledge of export markets is required, as is stronger exporter-importer relationships, better knowledge of shipping alternatives, training on customs procedures, basic business skills training and knowledge of SPS requirements. The potential for growth is significant but the exporting sub-sector needs to be better equipped to take full advantage of export opportunities and to increase the quantity of products for export.
- Compliance with client countries’ food, plant and animal safety standards is a critical requirement for boosting non-oil exports and raising rural incomes. Yemen’s inability to meet foreign standards is at times a binding constraint to agricultural exports. Even when non-compliance with these standards does not fully halt exports, as has been the case with fruit and vegetables in certain years, failure to meet importing countries’ standards prevents exporters from receiving the best prices for their products. The private sector needs to increase its awareness of standards and capacity to meet them. Both public and private sector capacity for meeting these standards needs to be established before producers can realize Yemen’s high potential for agricultural exports. Many government agencies have mandates over the SPS regulations that are applied to imports.
- The Supreme Council for Export Development that was established in 1997 needs to be revived and to continue performing its original tasks. The marketing departments of the MOIT, MAI, and Ministry of Fish Wealth also need to be active.

Fisheries

Introduction

Yemen’s coast extends from the Yemen-Oman border in the Arabian Sea to the Yemen-Saudi Arabia border in the Red Sea and spans 10 coastal governorates, three along the Red Sea and seven along the Gulf of Aden and the Arabian Sea. The coastal strip stretches for 2,520 km and is divided between the Red Sea (650 km), the Gulf of Aden (1,550 km) and the Socotra Archipelago (320 km). The 552,669 km2 Exclusive Economic Zone (EEZ) includes significant areas of the region's continental shelf and fishing grounds. About 41,000 km2 of the zone is home to waters with high primary productivity levels and rich marine resources as well as a variety of important ecosystems such as coral reefs and mangroves. Around 65 commercially important species can be found in Yemen's waters, including invertebrates (shrimp, lobsters, cuttlefish and sea cucumbers), pelagic fish (yellowfin and longtail tuna, kingfish, Indian mackerel and Indian oil sardines) and demersal species (groupers, emperors and threadfin bream).

Although Yemen's extensive territorial waters and marine resources have the potential to produce 840,000 tonnes of fish each year, the fishing industry is relatively underdeveloped and consists largely of individual fishermen in small boats. Nevertheless, fisheries have always played a vital role in the economy. While industrial fishing was a large component of Yemen's fisheries sector in the 1980s, the government's policy since the mid 1990s has been to reduce industrial fishing activities and to support small-scale fishing. As a result, the small-scale fishing sector has grown significantly. This industry is largely located in rural areas along Yemen's Red Sea and Gulf of Aden coasts and in many localities it is the largest, if not the sole, source of income for the coastal communities.

Yemen's territorial waters contain more than 350 different types of fish and marine animals. Yemen enjoys a rich reserve of marine resources, including cephalopods and crustaceans of high market value, and 250,000 tonnes of fish and other marine animals are fished annually. The Ministry of Fish Wealth (MFW) coordinates the fisheries sector through the development of both artisanal and industrial fishing activities, ensuring domestic consumption and export demands are met.[99]

Policy and institutional framework

Yemen's Strategic Vision 2002-2025 identified the fisheries sector as one of the most important high-potential economic sectors. It emphasized the need to "increase the productivity and improve quality and competitiveness" of fish products through private sector-led equitable growth and public-private partnerships (PPPs). This vision builds on and supports the government's Poverty Reduction Strategy Papers 2003-2005 in which the fisheries sector was again portrayed as one of the most promising sectors in the Yemeni economy and the sustainable exploitation of marine resources is highly advocated.

Additionally, the Third Five-Year Development Plan based on the Millennium Development Goals considered fisheries as a key sector for ensuring national economic growth through job creation and economic diversification.

The Government of Yemen's (GoY) policy for the fisheries sector, as defined in the National Fisheries Sector Strategy 2012-2025, is "To enhance the fisheries sector's contribution to national economic growth whilst ensuring environmental and resource sustainability, improving community livelihoods, strengthening food security needs and creating jobs and economic empowerment opportunities with a focus on youth and women."[100]

The fisheries sector contributes up to 3 per cent of the country's gross domestic product (GDP) and is a major source of employment, income and food security throughout the coastal areas. After oil, fish products constitute Yemen's main source of export earnings and account for between 1.5 and 1.9 per cent of the national labour force, supporting the livelihoods of 3.2 per cent of the population.

The average annual total fish production between 2000 and 2013 was 185,500 tonnes and the average total production value was US$ 213 million, with annual growth rates of 1.2 to 5.7 per cent. The average annual production per boat was 11.1 tonnes, 3.1 tonnes per fishermen.[101]

However, these figures are considered to be inconsistent and inaccurate as a result of logistical difficulties in the collection of catch data, poor auction management (including limited weighing of fish sold) and deliberate misreporting of catches in order to avoid payment of a 3 per cent levy on the value of catches introduced by the government in 2004.[102]

After reaching its peak at 256,500 tonnes in 2004, fish production has been steadily declining, dropping to 132,000 tonnes in 2008. While fish production figures improved in 2009/2010 and 2011/2012, the overall picture is one of decline due to destructive fishing practices, lack of private investments and rising sea piracy.

The general pattern of catch composition for artisanal fisheries, taking into account seasonal influences, has not changed much since 2000. The pelagic carangids continue to dominate landings, followed by common demersal species and species-groups such as red snappers and groupers. Catches tend to be highest in the monsoon periods between March and May and October and November when sea conditions are most conducive to fishing and lowest during the months of the southeast trade winds between May and September, particularly in August when sea conditions are moderate to rough.

Fisheries Law no. 2 (2006) defined the powers of the MFW and provided various mechanisms for controlling fishing activities and protecting marine life and habitats.[103] It regulated fisheries management and assigned the MFW with the responsibility for protecting consumer health in relation to fish products for the domestic market and for export. According to the law, the MFW is the agency responsible for managing fisheries operations, including management, research, development and enforcement activities.

The continuous changes in the GoY's fisheries policy are reflected in the inconsistent implementation of the laws and regulations concerning fisheries and their activities. Yemen has not yet ratified the United Nations (UN) Fish Stocks Agreement or the UN Compliance Agreement and has not implemented the provisions of Food and Agricultural Organization's (FAO) International Plans of Action (IPOA) related to managing fishing capacity, illegal, unreported and unregulated (IUU) fishing, shark management or seabird by-catch (incidental take) in longline fisheries. As a result, no action plans for any of these issues have been incorporated into the national legislation. Certification of the provisions of the IPOA for IUU fishing has recently been made a requirement for the importation of fish into the European Union (EU) under EU Regulation 1005/2008.

Regulations related to the fisheries sector are currently weakly enforced and inspectors are poorly trained, underequipped and lack the necessary budget to fulfil their duties. This undermines the MFW's capacity to manage the fisheries sector and renders most existing fisheries' management measures ineffective. Furthermore, the regulations are difficult to enforce due to the presence of contradictory regulations and the absence of a system of administrative fines. All violations are prosecuted through the courts system.

Within the MFW, there has been little policy development and its management of the fisheries sector is largely ineffective. The ministry lacks sufficient organizational skills and its structure is inappropriate for managing and monitoring the sector's activities.

All fisheries sector operations are governed by the MFW. Its central office is located in Sana'a and is supported by four regional authorities, the Marine Science and Biological Research Authority (MSBRA) and the Aquaculture Research Centre (ARC).

The MFW is the competent authority for certifying the quality of fish products for export and providing the required export certification. Quality is assessed in the ministry's laboratories under a cost recovery policy. While the MFW is responsible for fish hygiene, safety and quality, there is no monitoring programme in place to control fish hygiene or quality along the value chain. The MFW's quality control division inspectors are responsible for quality control of fish from sea to end-destinations in Yemen, i.e. export points, processors and domestic markets. A total of 2,636 employees are engaged in the ministry's fisheries sector activities. The MFW has a number of responsibilities it alone can perform, including requesting the addition or removal of establishments on the EU-approved list for export, ensuring compliance with the Sanitary and Phytosanitary (SPS) provisions in Article 11(4) of European Commission (EC) Directive 91/493/EEC, certification that fish products have originated from an approved establishment, and communicating information and notifications from counterparts in the EC's Directorate General for Health and Consumer Protection (DG Sanco) and DG Fish, as well as the United States' (US) Food and Drug Administration (FDA).

The development of the current structure of the MFW and its fisheries management role provides a partial explanation of the MFW's current activities.

In October 2010, the Cabinet approved the project for restructuring the fisheries sector based on SMART proposals.[104] The Cabinet also issued directions for implementing the new structure, which is as follows:

- The MFW, based in Sana'a
- Four decentralized fisheries authorities (FAs), based in different governorates
- Fisheries Research Authority (FRA), based in Aden and with branches in Al-Hodeidah, and Hadramout

The new structure, including the establishment of the four FAs, has been completed except for the restructuring of MFW headquarters in Sana'a. In accordance with the resolution, four FAs were established in December 2010 and their organizational structure was approved in July 2012. The four FAs are the Aden Gulf FA, responsible for Aden, Laheg and Abyan, the Red Sea FA, covering Hajja, Al-Hodeidah and Taiz, the Arabian Sea FA, covering Hadramout and Shabwah, and the Al-Mahrah FA. Within their respective geographical jurisdiction they are in charge of implementing the GoY's policies, plans and programmes for the fisheries sector in the areas of management, operation, monitoring and development of fisheries and the exploitation and protection of marine species.

Is it imperative that the fisheries law be redesigned to tailor to the new institutional structure of the sector, as many of the responsibilities granted by the fisheries law to the MFW are now the responsibility of the FAs. Overlapping responsibilities include: the management and overseeing of the ports, landing sites, auction yards and markets; the licensing of artisanal fishing vessels; inspection; enforcement; and the nomination of fisheries inspectors. Only once the new structure of the MFW has been approved will it be possible to further assess and resolve issues of conflicting responsibilities. Some of the ministry's responsibilities also overlap with those of the Fishing Cooperatives (FCs) (e.g. data collection) and of the MSBRA.

The MSBRA, established in 2007, is a corporate body with financial and administrative autonomy supervised at the ministerial level. Its headquarters are in Aden and it has branches in Al-Hodeida and Al-Mukalla. It includes an Aquaculture Centre and a Marine Environmental Pollution Centre, which are based in Aden. Its roles involve carrying out scientific research and consultation studies in the field of marine sciences and biodiversity in Yemen's marine waters.

The MSBRA is currently staffed by well-trained and competent scientists who are nearly all approaching retirement age. They are unable to carry out effective research work due to budget deficiencies and a shortage of equipment. Also, no programmes have been devised for the training of young scientists.

There are many stakeholders involved in the fisheries sector, including several ministries and institutions.

The Yemen Coast Guard (YCG) was established in 2002 as a Maritime Security Authority under the supervision of the Ministry of Interior. Its main responsibilities include organizing the registration and numbering of all fishing, recreational and service vessels, as well as those operating within the regional sea, EEZ and the continental cliff of Yemen. However, its registration and numbering responsibilities overlap with the MFW's activities. The YCG has stated that it cannot carry out its tasks, as its officers require training. It is also hampered by the lack of a coordination mechanism with the MFW.

The FCs and Fisheries Cooperative Union (FCU) were established under Law no. 39 (1998). The FCU, based in Sana'a, represents the majority of the FCs. The cooperatives are regulated by the Ministry of Social Affairs and Labour and are an essential component of the fisheries sector. While their performance varies significantly, they undertake activities such as operating landing sites, providing auction facilities for fish sales and providing services to their members. The FCU needs considerable institutional development as there is currently no clear organizational management.

The Maritime Affairs Department of the Ministry of Transportation is also responsible for vessel registration in addition to submissions to the EU, in compliance with EU Regulation 105/2008, on IUU fishing. This apparent duplication of roles appears to be related to the size of vessels and whether the vessels are in survey or not. The Maritime Affairs Department is responsible for larger, industrial vessels while under the fisheries law the YCG is responsible for small vessels. This has resulted in larger industrial vessels generally being registered while smaller vessels seldom are and existing registrations are apparently not renewed on a regular basis.

Most processors and exporters are members of the Yemeni Seafood Exporters Association (YSEA). Currently it has 42 members, 16 of which hold EU import certificates, although not all of them are active. Six members have closed their businesses in the past year. The association focuses on issues related to fish product standards, quality testing and certification. It has received support from the World Trade Organization (WTO), through the Ministry of Industry and Trade (MOIT), to enhance its capacity. The YSEA is involved in ongoing dialogue with the MFW with regards to fisheries resource management and overall improvement of fish quality. However, there is a need for further dialogue between stakeholders in the fisheries sector.

The role of the private sector and the YSEA in the management of fisheries is still very weak. The private sector is underdeveloped and is often not able to take full advantage of development opportunities due to misunderstandings concerning the government's management arrangements and a lack of dialogue between the private sector and the MFW. Other issues include the poor quality of raw products due to unhygienic facilities on boats and at landing centres; difficulties in accessing credit, particularly from the commercial banking sector; the imposition of export levies; preferential fish auctioning practices whereby private sector buyers are charged 'unofficial' fees by the cooperative associations; badly equipped and maintained landing sites, auction areas and markets; poor aviation infrastructure and freight capacity; and shortages of certain raw products. At least two canning plants are unable to source sufficient tuna for their operations. The government has either refused to allow them to import the raw materials, or the costs of importations imposed by government make costs so high that they cannot maintain their operations and they are likely to close.

Other stakeholders include the Agriculture and Fisheries Encouragement Fund, the Ministry of Water and Environment, the Supreme Exports Council, the Chamber of Commerce and Industry, the General Investment Authority and the Cooperative and Agricultural Credit Bank.

The Indian Ocean Tuna Commission, established in 1996, is another important stakeholder in the regional fisheries sector. It is an intergovernmental organization established under the FAO and mandated to manage tuna and tuna-like species in the Indian Ocean and adjacent seas.

The jurisdiction and responsibilities of the various state institutions must be made clear in the legislation, as must the division of authority between the national, governorate and district level government bodies. Institutional arrangements should be clearly defined and relevant legal documents to indicate the roles and responsibilities of different institutions should be developed.

Women in fisheries

Women's contribution to the fisheries sector, other than in fish processing plants, is low and opportunities and potential are underdeveloped. This is due to limited institutional, technical, organizational, managerial, financial and policy-level support to women in all areas of the sector. At the institutional level, the inclusion of women in the sector is restricted by funding deficiencies, especially for the MFW's department of Coastal Women Development. This failing is exacerbated by limited human resources and the lack of technical capacity in the field of gender equality.

Currently, there are over 40 women's associations involved in traditional fish processing and related crafts. A cooperative union exists, but it lacks institutional and organizational structures and a national representative body. At the community level, in some regions near Al-Khokha women catch fish using small ring/swing nets near the coastal line for sale in local markets. It is reported that in some regions women are involved in smoking, drying and salting the fish for local markets. In some regions of Abyan, women are involved in the post-harvest processes of handling and transportation.

Women employees within the MFW constitute 28 per cent, the majority of whom work within the lower tiers of the system. A marginal 6 per cent work in the higher management levels. The exclusion of women from management roles results in important social knowledge being disregarded and thus leads to inefficiencies in resource use and hinders the overall development of the community's social capital. In private sector fish processing plants women are actively involved and constitute 40 – 60 per cent of the workforce.

There are abundant opportunities for women to be further included in fish processing. Growing poverty levels have resulted in women in most coastal communities seeking employment. In Al-Mukalla, where poverty levels are relatively low, women are not encouraged to be actively employed. In the Fokum fishing community, Aden, of the 3,000 fishers, only 10 to 12 women own boats with their families. FCs in some areas have been supporting women's groups by supplying the raw materials for fish products at subsidized prices, but there are no formal arrangements for such assistance.

In addition to providing a substantial portion of the income to communities in coastal areas, fishing activities at the community level promote social cohesion. The formation of local fishermen's associations, women's groups and FCs provide opportunities for community involvement in the fishing industry. However, there are also significant social challenges such as the dominant, effectively unregulated and often self-interested role of some of the FCs, to the detriment of the community. Child labour is also an issue. Although the Ministry of Labour and Social Affairs has established a Child Labour Unit, the problem of child labour, including within the fisheries sector, has worsened since 1990. A project being implemented by Global Communities is examining the issue of child labour in the fisheries industries in Al-Hodeida, Aden and Taiz, where the highest occurrences of child labour exist. A law drafted in 2002 on child labour has yet to be ratified by Parliament.

The increasing participation of women in the fisheries sector seems to be a result of increasing poverty. The significant and growing occurrence of child labour in the fisheries sector is also a result of increasing poverty in rural coastal areas. Improving the profitability of the small-scale fisheries sector is therefore key to reducing child labour and unrewarding jobs for women in the fisheries industries.

Women and their organizations could play a key role in the development of ancillary industries such as net making and repairing, handicrafts, processing and packaging and should be encouraged. The development of any co-management arrangements for the small-scale fisheries sector should include the various regional women's groups as key stakeholders and participants.

Small-scale fisheries

There is significant potential for the expansion of Yemen's marine fisheries and aquaculture activities but the sector has not realized its potential owing to persistent challenges.

The major challenges the fisheries sector is facing are categorized in the Fisheries Sector Strategy 2012-2025 under six thematic areas as follows:[105]

- Inadequacies in strategic planning and implementation
- Unknown stock carrying capacity of fisheries, uncertainties in fisheries' conditions and declining stocks
- Low quality of fish products limiting trade potential
- Low-productivity of fishing communities
- Under-utilization of fisherwomen's potential
- Limited private sector development and promotion

The fisheries sector consists of two sub-sectors, marine fisheries and aquaculture (mainly shrimp farming). While artisanal fisheries dominate the marine sub-sector, the development of aquaculture has been very much limited.

Artisanal fishing dominates Yemen's fisheries sector. Over 23,500 fishing boats are in operation, while there were only four industrial vessels licensed to operate in Yemeni waters in 2013. The majority of small-scale fishing is done either in fibreglass or wooden vessels (locally known as huri, sambuk and abri),[106] and involves hook and line fishing and/or gillnets, traps and small trawls.

Between 2000 and 2013, the number of boats increased from 12,500 to the current 23,500 at 5 per cent per annum.

Small-scale fishing is vital to the coastal communities of Yemen, supporting 3-4 per cent of the population (over 500,000 people) through direct or indirect employment and providing sustenance to about 1.7 million people. The catch of artisanal fishing represents around 98 per cent of total fish production.

The fisheries sector's infrastructure includes six fishing ports, 74 landing sites, 48 fish auction areas, 22 cold storage facilities, 21 freezer facilities, three jetties provisions, nine quays/wharfs, 10 workshops and 35 ice plants. The majority of the landing centres lack basic facilities such as auction halls and waste disposal systems.

There are 11 fibreglass boat-building yards and an estimated 150 artisanal wooden boat-builders with an annual maximum throughput of 1,500 and 150 new boats, respectively. An estimated 145 input stores sell fishing gear and there are three main agents with 12 dealerships/repair shops for boat engines and another 290 workshops offering marine-engine repair services. However, in the rural areas these workshops services are minimal, compelling fishermen to travel to the nearest urban locations for critical repair services.

There are 975 trucks, 42 fish processing plants and 52 licensed exporters supporting post-harvest operations such as transport, marketing, processing and exporting. Facilities at the domestic fish markets are still primitive. Fresh fish is exported by air from Aden and Al-Mukalla, both of which have small refrigerated holding facilities, and Sana'a, which has the largest refrigerated holding capacity of 150 tonnes, and by sea from Aden and Al-Hodeidah harbours, both capable of handling refrigerated/freezer containers.

The fishermen are the first phase in the fisheries sector's value chain, harvesting the raw material. The majority of fishermen operate on a small scale. Some earn additional income from other sources. Fishing may be undertaken part or full-time during the season, complementing non-fishing activity during the off-season. Underemployment is pervasive throughout the coastal communities.[107]

Between 2000 and 2013 the number of fishermen grew at 7 per cent per annum from 32,000 in 2000 to 83,000 in 2013. Based on boat ownership, fishers can be classified into: multiple boat owners (3 per cent of fishers), single boat owners (12 per cent), fishers with part ownership of a boat (17 per cent) and fishers without a share of boat ownership (64 per cent). Most fishermen are represented by the 129 FCs, but the majority of the cooperatives lack managerial, institutional, technical and financial capacities and are therefore only able to offer limited support services to fishermen.

Ninety per cent of fishermen reside in rural areas and are based in a number of large disorganized settlements that lack basic hygiene and waste disposal systems.[108] Only a few of these settlements have basic social facilities such as schools and health centres, and these are often non-operational. While some have electricity, the majority depend on privately financed generators. Potable water resources are limited and domestic water supply is a significant issue. Almost all settlements have easy access to roads, but transportation services are limited. Mobile phone penetration is high among fishing communities and this plays an important role in both marketing and rescue at sea activities.

The artisanal sub-sector also provides high quality fish for cross-border fish trade, with neighbouring countries Saudi Arabia and Oman consuming 60 per cent of the high quality demersal fish caught by the artisanal fishermen.[109]

Economic contribution of fisheries

It is estimated that the daily actual returns for a fisherman are between 0.3 and 5 per cent of the total revenue from a fishing trip. This translates to US$ 3.7 for a multiple boat owner, US$ 2.2 for a single boat owner, US$ 1.5 for a part owner and US$ 1.2 for crew members. For post-harvest labourers actual returns are estimated at around US$ 0.5 a day. For trader-exporters and domestic traders, the daily income is between US$ 60 to 80. The annual returns for exporters are estimated at around US$ 6,000.

On average, the total input costs for fishing operations account for 41 to 45 per cent of the total revenue from a fishing trip. Of this, fuel costs account for around 20 per cent. Also, fishermen pay a significant share of the gross value of their catch in a variety of taxes, ranging from 8 to 11 per cent.[110]

Concerning the collecting of GoY revenues from fish landed at landing centres, the Ministry of Finance and the committee the ministry assigned to investigating the FAs both reported that the system in place is not working and the FAs are not contributing revenue to the State Treasury.

Table (31) Estimated economic returns for fishermen and average total input costs for fishing trips[111]

	Value (Yemeni rial)			Per cent of total revenue		
	Socotra Archipelago	Gulf of Aden	Red Sea	Socotra Archipelago	Gulf of Aden	Red Sea
Investment	1,775,000	1,650,000	1,995,000			
Depreciation	410,000	379,167	409,000			
Number of crew (average)	5	4	6			
Average number of fishing days/year^{-1}	200	200	200			
Duration (days) of each fishing trip	1	1	12			
Total revenue	33,000	33,500	528,000			
Total operational costs	14,600	13,577	236,623	44.2	41.8	44.8
Gasoline (litres)	3,500	4,900	105,000	10.6	15.1	19.9
Diesel		1,200	24,000	-	3.7	4.5
Ice			30,000			5.7
Lines (lump sum)	2,100	2,727	28,235	6.4	8.4	5.4
Net and trap repair	4,000	4,000		12.1	12.3	

Maintenance/Supplies (lump sum)	5,000	750	9,388	15.2	2.3	1.8
Food (lump sum)			40,000			7.6
Fees and levies	2,640	2,600	58,080	8	8	11
Net revenue per fishing trip	30,360	16,323	233,297	47.8	50.2	44.2
Depreciation	2,050	1,896	24,059	6.2	5.8	4.6
Tax	2,056	2,165	15,840	6.2	6.7	3.0
Net income per fishing trip	26,254	12,263	193,398	35.3	37.7	36.6
Daily income for one crew member	1,277	1,680	901	3.9	5.2	0.2
Daily income for owner of one boat	2,554	3,360	3,603	7.7	9.4	0.7
Daily per capita household income for crew member	160	216	112	0.5	0.7	0.02
Daily per capita household income for owner of one boat	319	420	450	2.2	3.1	0.2

Fish consumption

Fish consumption in Yemen has steadily increased over the last two decades, influenced by a shift in government policy towards promoting artisanal fisheries and market liberalization, alongside other socioeconomic factors. Fish consumption appears to be increasing because of the large increases in the price of alternative protein sources such as beef, goat and chicken. The global average per capita fish consumption is 17 kg, according to a recent FAO report, whereas for the Middle East and North Africa (MENA) region it stands at 8 kg per capita. Most of the fish consumed locally is caught by the artisanal fleet, with a small percentage caught by the semi-industrial fleet.

Fish prices have been increasing since 1990. The annual average consumer price index (CPI) for fish increased substantially from 100 Yemeni rial in 1990 to 300 Yemeni rial in 2009, a yearly average increase of 15.0 index points. Prices fluctuate widely over each year, influenced by the seasonal trends in fish catch.

Contribution to employment

Official figures from the MFW estimate the number of fishermen actively involved in artisanal fishing at over 83,000 persons (85 per cent of them full-time), representing around 0.3 per cent of formal employment. Taking into account those employed in other jobs related to the fisheries sector, such as canning and processing, the number of people employed in the sector stands at about 500,000, roughly 1.7 per cent of formal employment. The sector also indirectly creates a number of other jobs that cannot be easily quantified, such as boat building, mechanical repairs, fishing supplies, transport activities, distribution and export logistics.

The number of people employed directly in the fisheries sector is about 94,000. Fishermen represent the vast majority of the sector’s workforce (79.5 per cent), and the public and private sectors represent 2.8 and 17.7 per cent, respectively. Domestic wholesale retail trade and regional fresh-fish export dominate private sector operations, accounting for 5.8 and 6.2 per cent of the sector’s workforce, respectively. Fish processing plants employ only 1.9 per cent of the entire sector’s workforce.

Table (32) Fisheries sector labour force[112]

	Employment	Labour force	
		Number	Per cent
1.	**Fishermen**	**74,857**	**79.5**
Private sector			**17.7**
2.	Boat yards	650	0.7
3.	Engine dealers	36	0.04
4.	Gear supply shops	450	0.5
5.	Engine repair shops	870	0.9
6.	Ice plants	280	0.3
7.	Auctioneers	1,200	1.3
8.	Transporters and traders (domestic)	1,060	1.1
9.	Whole sellers, including trucks (domestic)	2,380	2.5
10.	Retailers (domestic)	2,040	2.2
11.	Processing establishments	1,750	1.9
12.	Fresh fish exporters	3,330	3.5
13.	Transport to Saudi Arabia and Oman	2,500	2.7
14.	Transport for overseas export	175	0.2
15.	Public sector employees	2,636	2.8
	TOTAL	**94,214**	**100**

Lack of financial resources among fishermen is a major barrier to the sector's development. Fishermen do not have adequate working capital for fuel and equipment and do not have assets that would provide satisfactory collateral for accessing credit from banks. They are forced to rely on informal means of credit such as from fish traders. These loans can come with associated contractual obligations forcing fishermen to sell their catch to their creditor, leading to exploitation. In many areas, lack of profitability means that fishermen are unable to upgrade their fishing capacity by acquiring larger boats or equipping their boats with ice boxes, enabling higher quality fish to be landed after chilling and icing at sea.

The absence of income diversification and small to medium-sized enterprises (SMEs) and limited access to other economic opportunities leaves many communities entirely dependent on fishing-related activities. Neither savings nor credit facilities are available, particularly in the remote rural areas. A few institutions exist in urban areas, but their services are rarely available to fishermen. Safety-at-sea services such as communications equipment and on-board safety facilities are almost absent. This is one of the main reasons insurance companies refuse to offer their services to small-scale fishing boats, thus limiting fishermen's formal credit access. Although safety-at-sea regulations exist for vessels and crew, they are ineffective and more than 100 deaths at sea from fishing operations are reported annually.

In general, 52.6 per cent of the national population lives in the coastal governorates, accounting for 53.9 per cent of the rural poor. Of the 94,000 people directly involved in fishing-related activities, the vast majority are very poor. Only a very small number are above the poverty line and they are nevertheless considered to be vulnerable to external shocks.

Exports

Currently there are over than 43 fish processors/exporters working in Yemen and 16 hold EU import certificates. These factories export an average 89,000 tonnes/year of products to more than 50 countries. The fisheries export field is still open for new investment due to Yemen's vast wealth of natural resources in this area. The foreign earnings from fisheries exports were estimated at about US$ 238 million in 2010, US$ 290 million in 2011 and US$ 292 million in 2012. However, despite the MFW's conflicting statistics on exports of fish products, the sector is still limited and does not exceed 1.7 per cent of total exports.

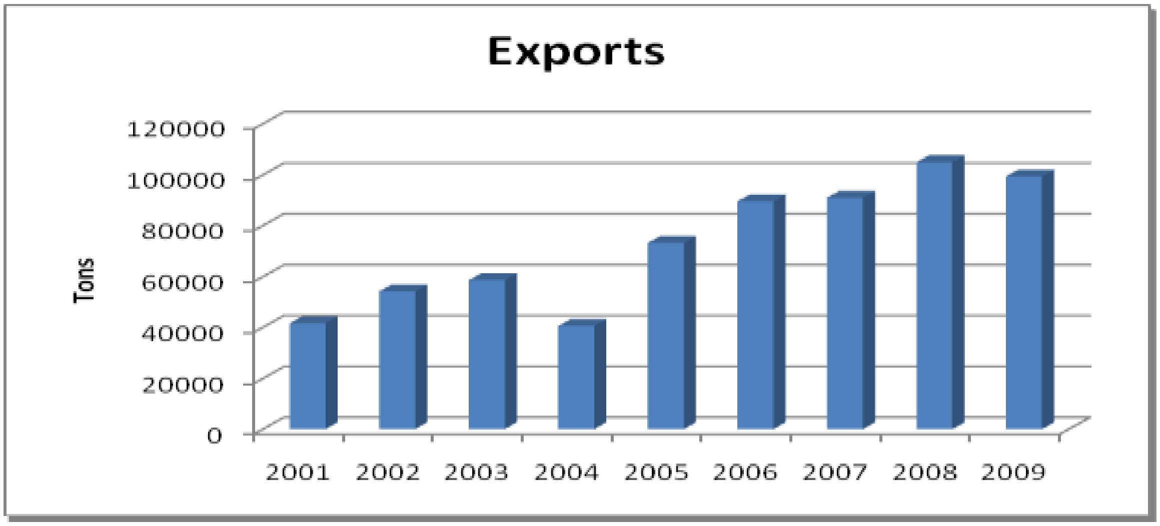
Exports of fish products have been increasing rapidly, particularly to neighbouring Arab states such as Saudi Arabia and the United Arab Emirates (UAE), which in 2009 accounted for around 60 per cent of exports (valued at approximately US$ 153 million) compared to less than 30 per cent in 2001. In 2009 Asia was the next largest market (32.8 per cent of exports by volume, up from 28.8 per cent in 2008), followed by the EU with 4 per cent, a significant drop from 9 per cent in 2008. This reduction in exports to the EU appears to be a result of Yemen's inability to consistently meet EU quality criteria.

Yemeni fish exports exceeded 89,500 tonnes during 2006, an increase of almost 5,500 tonnes compared to 2005 at a growth rate of 6.3 percentage points. In 2008 there was a 30 per cent rise in volume to 105,000 tonnes. In 2011 fish exports recorded 114,162 tonnes and in 2012 reached 115,258 tonnes.

About 57 per cent of the total fish production is exported to regional markets and high value markets in the EU and Asia. It is estimated that the fisheries sector could increase its revenue by at least 30 per cent, or US$ 56 million, per annum by increasing the quality and therefore value of fish products.

The majority of fish exports are whole fresh produce, but the figures also include processed fish, mainly fish fillets and shark fins. There is insufficient data to convert these processed exports to actual weight equivalents and therefore the cited figures underestimate the actual volume of exports.

Figure (14) Total exports of fish and fish products (2001-2009)



Source: MFW

Imports of tuna and billfish have been increasing rapidly and in 2006 comprised about 80 per cent of fish product imports, although total imports only recorded around 8,500 tonnes. Records of re-export are negligible, indicating that these imports were destined for canning factories for re-export as manufactured products since it is highly unlikely they were consumed in Yemen. Yemen is not a member of the Indian Ocean Tuna Commission or any other body regulating Port State Control of tuna landings so tuna and billfish caught illegally can be landed freely in Yemen.

The operational costs involved in trading and export are high. For fish processing plants the highest maintenance costs are owing to the high electricity and diesel consumption (as well as tariff rates) needed to maintain the bulk cold storage units.[113]

Aquaculture and SMEs

Yemen has long recognized the importance of developing aquaculture activities in order to cover the needs of the domestic market and increase exports. The sector was recognized as a priority field in Yemen's Strategic Vision 2002-2025 but as of yet has seen little development. Developing aquaculture's potential is now even more relevant given the challenges confronting the marine fishing sector. Growth in quantity of fish production in Yemen is more likely to be achieved through aquaculture production than marine fishing.

At present, aquaculture production is exceedingly limited. The only operating aquaculture farm is Musallam Trading Company based north of Al-Hodeidah on the Red Sea coast. The farm consists of 50 1ha shrimp ponds and produces around 400 tonnes of shrimp (mainly Penaeus indicus and Penaeus monodon) per year (8 tonnes/ha), although the original target was 500 tonnes per year.

Opportunities for developing aquaculture fall into two main categories. Firstly, through private investment in medium to large-scale integrated production companies. Secondly, through the promotion of small-scale farming by coastal communities and possibly, to a limited extent, by inland agricultural communities. Development in either category would contribute towards pro-poor economic growth, job creation and poverty alleviation in coastal and rural areas, with specific opportunities for women in certain types of aquaculture and supporting industries.

The National Fisheries Sector Strategy 2012-2025 identified several key constraints to aquaculture development in Yemen. These include:

- Uncertainties in the legal and regulatory framework
- Insufficient information on potential sites
- Difficulties in permit procedures and in the security of land tenure
- A lack of awareness among the private sector of the opportunities in aquaculture
- Limited technical knowledge
- Deterioration of the ARC facilities and activities in Aden, which should act as a hub of technical expertise and outreach

National aquaculture research capacity is limited to the ARC. The centre has had limited contact with the private sector and its research has not yet been translated into significant development of commercial aquaculture.

Currently, there is no coherent aquaculture strategy or legislation and aquaculture development has been extremely limited when compared with that of neighbouring countries. This is despite the large areas of coastline that are ideally suited to various forms of aquaculture. The lack of a legal framework regulating and supporting aquaculture activities is a factor behind the withdrawal of number of potential investors who were expected to establish aquaculture operations in Yemen in recent years. An aquaculture law should be designed to provide an overarching legal framework for all activities related to aquaculture development. Legislation on technical aspects of production should also be developed. Issues regarding land tenure in coastal areas and waters need to be addressed and proposals for the development of clear licensing and leasing regulations and associated procedures and costs should be made. It is important that the jurisdiction and responsibility of the various state institutions are made clear in the legislation and also the division of authority between the national, governorate and district levels. Weak procedures for allocating land to investors in aquaculture are a major obstacle to aquaculture development and result in conflicts with local communities.[114] Institutional structure should be clearly defined and the relevant legal documents to assign the roles and responsibilities of different institutions should be developed.

Recommendations

- In order to support small-scale aquaculture activities by individuals or communities, changes are needed in the legal framework concerning rights over areas of sea or seabed where aquaculture is practised.
- The MFW should establish an aquaculture department. Given the available infrastructure, this should be based in Aden, perhaps within the FRA. At a later stage, the development of branches in Al-Mukalla and Al-Hodeidah should also be considered.
- The Department of Animal Health (DAH) within the Ministry of Agriculture and Irrigation (MAI) should continue to be responsible for aquatic animal health.
- Quality issues associated with aquaculture production differ from those in marine fishing. For example, the use of chemicals and veterinary medicines tends to be a major concern in aquaculture production. The DAH should become the competent authority for

aquaculture products. Staff with experience in fish quality control should be transferred as secondees from the MFW to the DAH/MAI.

- The Ministry of Public Health and Population (MOPHP) should set the standards for quality of products consumed domestically, although inspections should be conducted by the DAH/MAI. The MOPHP should be authorized to validate laboratory results as needed.
- Compliance to legislation should be enforced through regular controls conducted by both the MFW and DAH.
- The Land Authority should be responsible for granting the leasing of coastal land for aquaculture operations, subject to technical approval of proposals by the ARC/MFW

The GoY hopes to stimulate growth and diversity within the SME sector. A 2007 study by the International Finance Corporation (IFC) and the World Bank estimated that there were 400,000 off-farm SMEs in Yemen, 66 per cent involved in trade, 20 per cent in services and only 14 per cent in production. Diversification into new areas and encouraging the expansion of SMEs, particularly into productive industries, were identified as priority reforms for Yemen. These essential developments would help address the increasing challenges of non-oil sector economic growth and employment generation. These findings were echoed in a German Agency for Technical Cooperation GmbH (GTZ) SME development strategy prepared in 2009. The fisheries sector has the potential to significantly contribute to SME development through aquaculture and its ancillary upstream and downstream industries.[115]

Issues and capacity constraints for fisheries SPS

Fish products are highly perishable commodities that require an established cold chain from the point of capture to the final consumer. Any breaks in the cold chain or damage to the product through poor handling or contamination will lead to an irreversible reduction in quality and value. In extreme cases, poor product quality may be injurious to the health of the consumer [116]. Interventions towards improving fish quality and safety must be applied throughout the value chain from the moment of capture through landing, transport, processing and retailing.

The challenges in assuring fish quality can be assessed during five different stages in the value chain. These are: (1) On-boat storage and handling, (2) Landing sites and auction facilities, (3) The domestic market and distribution system, (4) Processing for the export market and (5) Quality control management and assurance systems.

On-boat storage and handling

In general, fishermen are poorly educated on the need to immediately chill caught fish. Most boats lack cold storage and chilling facilities. The handling of fish, including killing, gutting, storage and loading within the boat and transfer to the shore, needs to be done with more care to prevent bruising and puncturing of the skin. It may be necessary to certify the quality of water used for ice production for seafood and other food industries. Other contamination sources include diesel and petrol from leaking fuel tanks.

Landing sites and auction facilities

Landing sites and auction centres are critical components of the value chain. They should work to optimize correlation between the available catch and market demand so that the maximum economic surplus is created. There are around 130 costal sites at which fish are landed and their conditions vary widely. Landing sites/auction centres are managed by the FA along the Red Sea and by FCs at most other sites. A few cooperatives maintain their landing sites/auction centres at the minimum acceptable standards while some premises are dilapidated. Informal landing sites are usually characterized by the absence of significant infrastructure.

An unknown amount of fish is sold through other unregulated and uncontrolled channels. According to the law, all fish must be sold at official auctions, though this is not currently feasible. The most common approach to sales along the Red Sea is for agents to manage auctions. The auction itself is handled by an auctioneer. An auctioneer must be nominated by at least 10 boat owners in order to receive a license. The auctioneer must also act as guarantor to fishermen in cases of non-payment by debtors. It is the responsibility of the auctioneer to facilitate the collection of the 3 per cent levy on behalf of the MFW. This tax fosters a lot of malpractices and is a disincentive for cooperatives to collect reliable catch data. There are also a number of fees and charges paid to auction hall owners (1 per cent) and cooperatives (2 per cent). In parts of the Red Sea where no cooperatives exist, auction hall owners take up to 3 per cent. The auctioneer collects a 2 per cent fee on the gross value of all fish sold.

Fishermen are sometimes taken advantage of by unscrupulous agents who provide credit and manage fish auctions, but influence prices and purchase stock. This risk would be mitigated by promoting contractual arrangements between fisheries' organizations and processors/exporters. Regulations should be enforced, imposing transparency in pricing. This would be advantageous throughout the value chain.

The 2010 EU Fisheries Sector Study stated that "existing landing centres structures do not meet hygiene and sanitary measures".[117] Fish landing sites and auction halls are widely regarded as a weak link in the quality control chain for a number of reasons, including the poor organization of fish landing areas and their insufficient capacity, the inadequate sanitary conditions and facilities, weak facility management and the lack of quality enforcement.

Domestic market and distribution system

The main infrastructure issue is the lack of side roads connecting landing sites to the main roads for the transport of fish products, with the majority of vehicles transporting the goods to the Saudi border at Haradh. At present there is little regulation of domestic or regional trade. All traders wishing to export fish products, whether via processors or directly over neighbouring borders by truck, must register with the MFW for an annual export licence. However, this register is not automated. Fresh fish is exported to Saudi Arabia at Haradh and trade is expected to begin soon at Al-Wadi'ah crossing point. The Oman border point at Hawf needs to meet final health inspection and excise requirements prior to any trading activity commencing. The facilities at these locations are insufficient and need to be equipped with proper cool storage, shelter and inspection areas.

Fresh fish is exported by air from Aden and Al-Mukalla, both of which have small refrigerated holding facilities, and Sana'a, which has the largest refrigerated holding capacity of 150 tonnes. Products are exported by sea from Aden and Al-Hodeidah harbours, both capable of handling refrigerated/freezer containers.

As with the coastal auctions, inland fish markets are characterized by inadequate facilities, poor product storage and limited management. Fish is usually displayed without ice and if unsold is simply returned to a refrigerator for overnight storage. The poor quality of this fish is a major deterrent to domestic consumption in inland areas of Yemen.

Processing for the export market

Fish products are sometimes held for considerable lengths of time and often without adequate cooling procedures, possibly due to the limited number of processing lines. This could be improved through better awareness and training in product flow management.

Hazard Analysis and Critical Control Point (HACCP) systems are poorly implemented in some plants. Food safety measures employed by plants vary depending on the level of experience, knowledge and competence of the quality control and production managers, and are also affected by the commercial pressures of operating in a cost-competitive environment, which has led to risks being taken with regards to product quality.

It is difficult to import more advanced equipment into Yemen and there are shortages of key consumables such as advanced disinfectants and packaging materials. Processors also report that they find EU food safety legislation difficult to understand and keep up to date with. This issue will be further complicated with the industry moving into aquaculture products .

Quality control and assurance management

According to Law no. 19 (2004), the MAI is responsible for fish and marine creatures and fish quality, hygiene and safety issues. According to the WTO negotiations, the MAI is responsible for implementing the SPS Measures Agreement.

Until 1995 the competent authority for fish exports was the DAH. Since the issuance of EC Decision 582/1999 the competent authority for fish exports has been based in the MFW. New EU regulations relating to fish exports are adapted to accommodate local circumstances and then introduced by ministerial decree by the minister of fish wealth. MFW inspections of establishments are constrained by a number of issues, including:

- Lack of basic equipment, including thermometers, sample preservation and transport materials and balances
- Insufficient skills and knowledge
- Poor industry awareness
- Insufficient knowledge and understanding of key market legislation
- Institutional overlap whereby canned products need to have heath certificates issued by both the MFW and MOIT and neither accept the other’s certification

Despite the training in quality control through funded projects over last 10 years, government staff still lack skills, especially in HACCP implementation, microbiology and practical laboratory operations. This is particularly evident at the regional level.[118] This issue has increased since the restructuring of the MFW's FAs. The EC Food and Veterinary Office (FVO) noted that a number of requirements of the EC’s Council Directive 91/493/EC were poorly understood and insufficiently implemented by MFW staff.

Although further awareness building on the importance and benefits of ensuring quality control is essential, there are those in the industry who consider that firm government enforcement will always be required to ensure industry-wide compliance.

The MFW has five laboratory facilities: in Aden, supported by the EU; in Al-Hodeidah, supported by the United Nations Development Programme (UNDP) and Enhanced Integrated Framework (EIF); in Al-Mukalla, supported by the EU, where all equipment has been installed and the laboratory has begun to operate but problems are ongoing due to electricity shortages and the operation of some equipment; and in Hajja, a small laboratory near the border with Saudi Arabia mainly used for the examination of fresh fish being exported to Saudi Arabia with limited staff and equipment. Currently, all the laboratories have problems due to electricity shortages.

The fish processing industry also uses other laboratories, including the MOPHP laboratory in Al-Mukalla, and a number of the larger exporters have their own private laboratories, which they use to test for histamines in tuna. All MFW laboratories would benefit from ISO 9001 certification, which would improve the administrative procedures for handling test samples and managing the laboratories. Also, ISO 17025 certification would enable them to demonstrate their capacity to consistently generate valid test results. The MFW laboratories charge for their services, thus generating the funds for operational costs, however finances are insufficient for replacing equipment, building maintenance and staff training. The Yemen Standards and Metrology Organization (YSMO) is responsible for calibrating certain equipment such as scales. All laboratories currently lack a long-term strategy and the budget for equipment maintenance and replacement, staff skill development or the introduction of new testing equipment for emerging health issues, such as antibiotic testing for aquaculture products. Of more immediate concern is the fact that none of the laboratories are certified by any internationally accepted body and they are unable to ensure adequate equipment calibration.

Control of regional trade through the border inspection points has become of increasing importance as trade with Saudi Arabia and Oman grows. There are three main border transit points, two with Saudi Arabia at Haradh, adjacent to the Red Sea coast, and inland at Al-Wadi'ah in Hadramout, where an asphalt road soon to be completed is likely to significantly increase fish exports, and with Oman in Al-Mahrah. Border processing includes the issuing of a health certificate, based on a visual inspection only, by the MFW followed by an export certificate issued by the customs department certifying the country of origin. The goods are then sealed before official reception in Jizan across the border in Saudi territory.[119] The capacity of existing laboratories needs to be enhanced and the necessary equipment needs to be provided. Staff training is required in laboratory management, laboratory safety, residue monitoring, EU regulations and international standards, microbiology tests, chemicals tests, ISO Accreditation, standard operating procedures and goods manufacturing procedures. Training in the processes of atomic absorption, high-performance liquid chromatography and gas chromatography is also needed.

Over the past few years Yemen has experience on average two rapid alerts per year under the EU's Rapid Alerts System for food and feeds. Shipments are returned because they fail to meet EU standards. In 2007 there was a ban on the addition of any new Yemeni establishments or vessels to the EU-approved list, mainly due to the failure of the MFW to implement several measures listed in its approved action plan for fish hygiene and quality. Six companies have been banned from exporting to the EU for these reasons. The last two EU audit reports concerning hygiene and sanitary conditions for export of fish products from Yemen conducted by the FVO revealed serious deficiencies in the following areas:

- Inadequate legislative framework
- Lack of consistent and reliable control throughout the fisheries value chain
- Lack of accredited laboratories
- Export to neighbouring countries without sanitary control

- Lack of technical capacities
- Poor handling and storage facilities through the supply chain
- Poor handling and preservation facilities on boats

Poor fish quality is a major issue in Yemen and not only impacts fish prices and access to markets but is also a significant public health and food safety issue. Hygiene and quality assurance practices are not pervasive in Yemeni production in general and this extends to the fisheries sector. The lack of basic quality control knowledge is evident in various organizations and among fishermen and consumers. There is also a lack of basic cold storage facilities throughout the fisheries supply chain. Consequently, there are low expectations and poor handling, storage and hygiene practices throughout the value chain. As a result, even the quality of fish landed on the beach is often very poor and through the subsequent processes of auctioning, transporting, storing and sale, either at local markets or export destinations, the quality further deteriorates. There is no monitoring programme in place that controls fish hygiene or quality along the value chain at MFW.

As Yemen is a UN-designated least developed country (LDC), developed markets provide preferential access to Yemeni exports on many products, subject to rules of origin being met . Yemeni suppliers have difficulties in meeting sanitary standards on food and fish exports to the EU, USA and Japan. However, like most obstacles to Yemen's exports, this is a supply side issue that should be addressed through the development of better inspection facilities, improved fish handling and preservation facilities and cold storage throughout the value chain.[120]

The Yemeni fisheries sector is strongly export-orientated. Emerging SPS standards in the international market will lead to greater opportunities, providing that stakeholders can respond effectively to them. National investment in quality-related infrastructure, official controls and the implementation of quality standards by both the GoY and enterprises should be undertaken within the frame of an SPS strategy which reflects the current and emerging demands of the main international markets targeted by Yemeni fish products. Such an approach should be reflected in government policy with regards to fish marketing and particularly towards SPS compliance and fish exports. At present there is no such coherent policy and this deficiency undermines existing and future investment in fish export capacity.[121]

Product quality must be improved in order for fish products to be competitive in the world market. Not only must products meet specifications, but the processing facilities also need to comply with international standards. Both the products and the facility must be evaluated and certified by the regulatory agency of the importing country. The MFW needs legal support through legislation and the GoY's and technical expertise in order to certify facilities and issue sanitation certificates to the regulatory agency of the importing country, particularly the EC.

In order for Yemen to continue trading fish products internationally, the regulators and industry stakeholders need to work together to successfully maintain food safety systems. Systems must be based on international regulations. Exported fish products must comply with the standards and technical regulations of client countries and proof of such compliance has to be internationally recognized. Local institutions need the capacity to assess whether imports meet international standards in order to protect consumers against potential health and safety risks. To achieve the best quality products, all the stakeholders along the value chain must be committed to best practices and a system to ensure compliance must be developed.

As the United Nations Industrial Development Organization (UNIDO) noted in its 2002 report, the fisheries sector has the potential to significantly increase Yemen's global trade opportunities. However, there are a number of non-tariff barriers to accessing the lucrative markets in the EU and US, mainly stemming from ever more stringent product quality standards. With regards to the EU market there are three main issues:

- EU standards for SPS measures
- EU legislation on residue levels and heavy metals in fish products
- EU legislation on labelling and traceability

While these measures are necessary for protecting the health of consumers, they represent additional costs to exporters in terms of meeting standards, technical compliance, verification and transitional arrangements .Considerable efforts are being made by development agencies to assist countries in overcoming these non-tariff barriers through bilateral aid. However, these efforts are predominantly aimed at improving the public sector's management capacity and relatively little is aimed at the private sector enterprises investing in exporting seafood.[122]

Yemen's accession to the WTO means integration into the global market and into the area of intellectual property rights, especially as Yemen can implement some preventive measures and policies to protect its products on account of its LDC status.

In addition to improving investment and assisting local products to access international markets, WTO accession will lead to competition emerging among local producers. This will promote quality improvement. The primary beneficiary of WTO accession will then be the domestic consumer, who will have the opportunity to choose among various products based on quality and price.

The fisheries sector will benefit significantly from WTO accession, particularly in economic development, an improved investment environment, job creation and increased investment throughout the value chain. As other member states' markets open up to Yemeni products, local producers will be motivated to improve the quality of their wares in order to compete in domestic and overseas markets. This will attract further investment in Yemen, meaning that legislative, policy and procedural reforms will be necessary.

With its long coasts and abundant fish wealth, Yemen has the opportunity to gain a significant position in global fish trade. The fishing community as well as processors and traders need to take advantage of this potential by employing the best methods of practice throughout the value chain.

Inter-sectoral linkages

Tourism can indirectly contribute to growth through its extensive linkages with other sectors, including the fishing sector. In Yemen, tourism has significant impacts on food industries that supply hotels, restaurants and in some cases the tourists directly. Yemen's fish resources can serve as an attraction for tourism. Yemen has several unique indigenous fish and the traditional cooking techniques are attractive to visitors. In many coastal areas, customers can buy fresh fish directly from the fishermen, a custom that appeals to tourists. Improvements in infrastructure are both a condition and a consequence of a growing tourism industry. Improving the local markets in line with international hygienic standards is crucial.

An adequate airport is particularly important. Air service is a potential source of synergy between tourism and fishing, through the provision of air cargo space. The government should provide a well-functioning airport and facilitate access for foreign airlines rather than protecting incumbent flag carriers. Yemen faces considerable obstacles to fully exploiting the economic potential of tourism, including the requirement of substantial investments in infrastructure and tourist facilities, an inability to fully capture any aspect of the value chain, mainly due to insufficient local supply, the tourism sector's vulnerability to various external shocks and pressures on fragile ecosystems. Environmental and cultural preservation can go hand-in-hand with tourism if Yemen capitalizes on its substantial natural, historical and cultural assets. The creation and strengthening of linkages between major local, regional or international actors in various sectors will lead to improved investment and export promotion, greater supply capacities and conformity to international standards.

Fisheries donor projects

The last 10 years have seen the speedy implementation of fisheries projects. One of the sector's most important projects was the development of Fishery Cooperatives (FCs) in the eastern coastal region of Yemen, known as the Fifth Fisheries Project. The project began in 1990, although actual implementation began in 1992. The project cost 6.3 billion Yemeni rial and included the establishment of coastal facilities in five fishing villages in Hadramout (Al-Mukalla, Al-Shehr, Al-Hami, Al-Garn, Al-Museina'a) and Seihoot in Al-Mahrah. Other components included the establishment of modern yards for the reception and preparation of fish, ice production factories of 10 tonnes/day capacity, warehouses for ice and cool storage for fish, water and fuel tanks, administration offices, depots and work equipment.

The coastal fishing project in the western regions was aimed at enhancing the productivity of conventional fishing. Project components included the procurement of 800 fibreglass fishing boats and 800 powered boat engines and the establishment of five ice plants each with five tonnes/day capacity.

Total investment in the fisheries sector financed through the Agriculture and Fisheries Production Promotion Fund reached 1.6 billion Yemeni rial between 1997 and 1999. The investment covered the procurement of 820 fibreglass fishing boats, which were donated to fishermen, the establishment of 13 fish yards and 10 ice factories with 10 tonnes/day capacity. It also covered the provision of low cost fishing equipment and fish marketing accessories, the sale of 33 fishing boats equipped with engines and ice storage through soft loans, the deepening of Al-Hodeida fishing basin, walling the port of Al-Hodeida and the provision of an operations loan for the Shugra fish packaging factory in Abyan.

The **World Bank/EU financed the Fisheries Resources Management and Conservation Project**, which focused, inter alia, on restructuring the MFW to enable it to fulfil its mandate and its commitments to international conventions concerning managing the fisheries sector, including the establishment of Fishery Authorities (FAs). The project has reached completion, with four FAs having been established, pending only the restructuring of the MFW head office.

Other fisheries projects include a development project on the Hadramout coastline costing US$ 14 million, financed by the **Arab Fund for Economic and Social Development**, which aims to improve fish production and investment. Some related projects are being launched in Socotra in at least three landing sites.[123]

A number of sector development activities were previously been undertaken. An understanding of these is essential to ensure that future interventions take advantage of and build on earlier work .These include:

The **Strengthening of Yemen's Fishery Products Quality Control System project- an EC-funded** initiative implemented between October 2000 and September 2001- aimed to strengthening quality control systems though providing equipment to Aden Laboratory and developing the capacities of the MFW.[124]

The **Integrated Framework trust fund**, through the Fisheries Quality Control for Export Promotion, provided the MFW with funding to establish the fish product quality control laboratory in Al-Hodeidah. The project included the provision of equipment, technical assistance and training to both laboratory staff and fishing communities in order to improve the methods of handling fish. The project started in 2006 and was completed in March 2010.

The **Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products (STDF 69) 2006/2008**, was a project designed to support the YSEA by developing the capacity of its members to better meet the commercial requirements of SPS measures and thereby improve the quality and safety of seafood products from Yemen. The total cost of the project was US$ 452,000.[125]

The **UNDP, through the Economic Diversification Support Programme (EDSP)**, prepared the National Fisheries Sector Strategy and completed other activities related to building the capacity of laboratories and improving fish quality.

There are also several projects and programmes that are currently being implemented or are in the final design process.

The **International Fund for Agricultural Development (IFAD) Yemen Fisheries Investment Project** currently being implemented is supporting the government in drafting legislation and strategies for the development of marine aquaculture for coastal communities. It is also involved in implementing a licensing system covering fisheries value chain actors (fishers, transporters, traders, processors, exporters), training and equipping teams of inspectors to enforce compliance with fisheries regulations, and updating regulations regarding compulsory safety equipment and vessel construction to improve safety-at-sea. These initiatives will be more effective if fitted into an overall updated fisheries and aquaculture legislative and regulatory framework. The budget for the project is US$ 35 million. It is one of the Economic Opportunities Fund (EOF) projects, jointly financed by seven donors, three of which are foreign. The EOF was created by Government Decree no. 183 (2010) as a public-private partnership working to improve the economic status of poor communities in rural and coastal areas. It serves as the focal institution to manage future IFAD-financed operations in Yemen as well as rural economic investments. As such, it will be positioned to attract external and domestic funds.

The **EU is in the final stages of designing a project on Enhancement of Livelihoods and Capacity Development of Coastal Communities** due to start in 2015. The project is expected to cost 2.9 million Euros. The objective is to develop the livelihoods of fishing and coastal communities in a sustainable manner, while preserving marine bio-diversity. The project includes plans to develop the harvesting of sea cucumbers, clams and cuttlefish for communities in Aden, Abyan and Al-Hodeida.

IFAD is in the final design stages of the Coastal Community Livelihoods and Resilience Programme. The goal is to reduce poverty and alleviate food insecurity through enhancing poor coastal households' resilience to shocks in the southern governorates of Abyan, Shabwah, Hadramout, Al-Mahrah and Socotra. The project is expected to take six years, starting in 2015, costing US$ 30-35 million.

Currently, the **FAO** is implementing a capacity building project with a budget of US$ 400,000 aimed at improving quality control of fish products, increasing fish exports and developing value-adding strategies.

The EU is currently designing a baseline study of past fisheries sector data and identifying needs for survey work at landing sites and on fishing vessels. The study was expected to have been completed before the end of 2014. Based on the results of the study, the EU and IFAD will confirm how meuch stock assessment work will be funded under their respective projects. It is likely, however, that there will be a funding shortfall of at least US$ 4 million for the five-year comprehensive sea survey that is required. This supplementary funding is being sought from additional donors.

Recommendations

In order to realize the potential of the fisheries sector, additional efforts have to be made to ensure that Yemen's fish products are competitive in global markets. Products and establishments have to comply with the standards and technical regulations of client countries and proof of compliance has to be internationally recognized. Given the current legal, institutional and economic situation, it is more vital than ever that the fisheries sector takes a leading role in the national development process. This will require effective institutional structures, a strong legal framework and the efficient use of resources.

In order to enhance the sector's capacity, the MFW must be supported in reviewing, updating and strengthening the fisheries institutions, regulations and legal framework. Efficient management systems need to be developed, based on best international practices and taking into account the sector's institutional arrangements and Yemen's international commitments. Improved cooperation with regional and international institutions will enable export, marketing, trade and quality control activities to meet local and international standards. Legislation on fish products must be developed to enforce international standards.

Sound support infrastructure must be developed at designated landing sites and high standards of inspection must be introduced. Improved infrastructure in local and export markets is essential. Ice boxes should be installed on boats to ensure proper preservation and an unbroken cold chain throughout handling.

Building the institutional, managerial and technical capacities of the MFW, fisheries stakeholders and affiliated institutions, as well as national corporations and cooperatives, will enhance safety systems and improve the quality of fish products throughout the value chain.

The fisheries sector's marketing, trade and export potential needs to be taken advantage of. Facilities at local markets should be developed. Technology related to fish processing and fish products can be acquired through cooperation with regional and international institutions, leading to value-adding activities. This will ensure increased economic returns and improve the sector's contribution to national food security.

An efficient research service should be established and priority given to stock assessment, ensuring environmental sustainability and supporting the management and development of marine capture fisheries. Integrated fisheries information systems need to be supported and strengthened through accurate data collection, utilization and dissemination. Operational and networking facilities should be established.

SMEs in the fisheries sector should be encouraged through the creation of policy framework and specific laws fostering SME development. Value chain analysis and guidelines for inclusive SME development are needed. The industrial SME strategy should be revised to reflect the needs and requirements of the private sector.

The fisheries sector's productivity and efficiency will be enhanced through the promotion and strengthening of the institutional, technical and managerial capacities of aquaculture activities. Laws and regulations must be developed to create an enabling environment. This will increase opportunities for alternative livelihoods, thus bringing sustainable economic, social and food security benefits without adverse impacts on the environment, biodiversity or other land water users.

Women's participation in the fisheries sector should be encouraged so as to decrease gender disparities. This can be achieved with legal reforms and enhancing the capacities and performance of the MFW's Coastal Women Department. Fisherwomen communities can be empowered through improved organizational structures. Establishing fisherwomen community-based organizations, providing credit facilities, creating business opportunities and identifying markets are activities that will enable development in this area.

Livelihoods structures and facilities should be enhanced. This will require improved basic social services and facilities, including for pre- and post-harvest processes, and the establishment/development of integrated landing centre management initiatives and boat yards at major landing centres. Training and capacity building in information technology and secretarial/administration work is needed, with a focus on youth and women. Fair access to credit facilities can be achieved through microfinance and a well-developed socio-economic database. Communities will be empowered through market-oriented technical and entrepreneurial training focusing on SME development.

The creation of a business friendly environment for aquaculture and SME development will increase and facilitate private sector investments. This will require extensive dialogue on policy frameworks with line ministries and organizations. Private sector exporters and the YSEA should be supported in complying with EU HACCP systems and international standards, EU regulations, trade agreements, SPS standards and appropriate handling methods to ensure high quality. This will increase the contribution of the private sector towards food security as local food value chains are improved and good quality fish products become available at affordable prices.

Tourism

Introduction

This chapter diagnoses the current state of Yemen's tourism sector, analyzes institutional issues and provides recommendations for the government in the areas of trade policy, institutions and trade agreements.

Overview of the tourism sector

Yemen is one of the oldest centres of civilization in the Middle East. It lies in a strategic geographical location and boasts an array of diverse attractions. It enjoys four unique world heritage sites: Shibam-Hadramout, Old Sana'a, Zabid and the natural heritage site Socotra. Yemen's territory includes more than 114 islands, Socotra being the largest and situated about 354 km to the south of mainland Yemen.

After the 1994 civil war ended, tourism in Yemen looked promising. Between 1995 and 1997 the number of tourists started to rise and international tour operators arranged large groups of visitors. Investors came to the country during 1996 to establish first class hotels and high-end restaurants.

Then instability and security threats worsened. After a tragic kidnapping incident in 1998, tourist arrivals dramatically dropped by more than 50 per cent, according to the Ministry of Tourism's (MOT) statistics. The government did not take a firm stance against the kidnappings but rather chose to meet the kidnappers' demands for money, which led to more incidents taking place. The attacks were not intended to cause harm to tourists but to put pressure on the government.

For legislative purposes, tourism was combined with other sectors (media and culture, then water and environment, and, finally, culture). After a presidential decree in 2006 approved the establishment of an independent MOT, more focus was placed on amending laws and regulations and on administrative improvements, although the MOT struggled to convince the Cabinet of the importance of tourism as a major economic sector.

The Cabinet assumed that only entities that transfer revenue straight to the treasury of the central bank are successfully generating income for the government. However, the Cabinet did issue several decrees to facilitate improvements to the budget and project approvals, but bureaucracy caused significant delays.

During the uprising of 2011 and the changing of the government, development was further delayed. Several crises occurred, including the unavailability of gas and diesel, the continuous loss of electricity and armed clashes in several areas, paralyzing the economy. Tourism activities were non-existent for the entire year.

Background

Tourism activities 25 years ago were limited and tour programmes were predominantly centred in North Yemen. After the unification in May 1990, new locations were added to tourism itineraries and more activities took place. Events to attract visitors, such as festivals, were arranged in Tihama, Hadramout and Sana'a and then spread to other regions like Taiz, Dhamar, Aden, Ibb and Mareb.

Between 2006 and 2009 a number of institutional developments took place as the MOT worked to improve the sector. It amended the tourism laws and established a number of executive regulations at the administrative level. The Yemen Tourism Promotion Board (YTPB) was restructured and thereby succeeded in increasing its revenues. It merged with the General Authority of Tourism Development in 2007.

A number of regulations were issued regarding travel and tourism agencies, hotels, tour operators, restaurants, the classification of tourism establishments, diving and sea trips, presidential awards, festivals, conferences and the publishing of promotional material.

A survey on tourism expenditure was conducted at a number of seaports, land ports and airports. The Cabinet approved the Tourism Development Plan and Investment Opportunities along with an investment map. The MOT prepared detailed studies for five pilot projects identified in the plan in Ras Omeira, Meidi, Al-Doymah Island, Dhabdab in Hadramout, Jazoleet beach and Al-Mark Island.

The MOT adopted a number of initiatives aimed at developing a database to enable effective measuring and monitoring of trends in tourism such as the number of visitors to the country, demand and supply, inbound and outbound tourism, hotel occupancy rates, and direct and indirect revenues generated. The ministry also drafted the National Tourism Strategy and published guidelines on tourism services. Around 160 ministry employees received training in information technology, English language skills, marketing, promotion, environmental issues and emergency preparedness.

A study was undertaken to assess obstacles to tourism. The MOT established a Risk Management Unit under the guidance of the United Nations World Tourism Organization (UNWTO), supported the Tourism Police in establishing the Tourism Security Unit and approved the installation of a tracking system on tourist vehicles so as to assist with tourism safety and security. The ministry also worked on reducing entry visa fees by Cabinet Decree no. 356 (2008).

Other reforms include the MOT approving the regulation of investment in hot natural springs in coordination with the Ministry of Water and Environment, the Ministry of Oil and Minerals and the Ministry of Public Health and Population. The MOT established a tourism company specializing in tourism development and participated in investment conferences and exhibitions held in Yemen.

The MOT identified priority locations for investment and signed an agreement with the General Authority for Land, Survey and Urban Planning (GALSUP). Forty-nine locations were identified at a cost of 18 million Yemeni rial for the first stage of development. The ministry also prepared an investment study for Hunaish Island and Al-Doymah Island and transferred the Kamaran Island project over to the General Investment Authority (GIA). This latter project involves developing the island in preparation for international investment. An agreement was also signed with the General Authority of Island Development to prepare a tourism plan for Hunaish Island. The MOT designed tourism projects involving the development of traditional clay desert villages and mountain villages, restaurants, eco-lodges and coastal bungalows. Three of these projects were particularly designed to support eco-tourism, in coordination with the UNWTO, and will contribute towards reducing poverty among local communities.

The ministry unified the various taxes applied to hotels and cancelled illegal fees in accordance with Cabinet Decree no. 51 (2009). A survey of 101 tourism sites was carried out and brochures were printed. Further brochures, maps, an electronic encyclopaedia, leaflets and books about eco-tourism and handicrafts were published and a strategy was formulated to develop tourism media. The MOT trained 210 tourist guides and installed 600 signboards for 160 sites.

Tourism in Yemen can play an important role in supporting and revitalizing the economy. Due to the potential economic, social and cultural impacts of the tourism sector, the MOT intends to develop it as a central pillar of the economy that will contribute significantly to gross domestic product (GDP), fund development projects, provide job opportunities for communities and improve living standards.

Instability in Yemen has affected the tourism sector's contribution to GDP, which in 2008 reached US$ 936 million. In addition to tourism taxation revenues, the number of employees in tourism businesses totalled around 74,000 in 2008. More than 80 per cent of staff in private sector tourism jobs have now lost their employment. The sector's contribution to GDP could increase by 50 to 60 per cent if the country reached political stability.[126]

Table (33) shows how expenditure related to tourism, including accommodation, food, internal and international transportation, activities, shopping and others generated revenue of US $1,161 million in 2009.

Table (33): Tourism revenues, per category of expenditure (in US$ million and as %), 2009

Expenditure	Tourism revenue (US$ million)	Per cent

Accommodation	197	17
Food	267	23
Cost of internal transportation	105	9
Entertainment and sporting activities	58	5
Cultural activities	12	1
Shopping	209	18
Health treatment	46	4
Tuition or training	11	1
International transportation	70	6
Others	186	18
Total	**1,161**	**100**

Source: MOT (2010) Statistics Report

Tourism could contribute significantly to the recovery of other interrelated economic sectors such as industry, agriculture and the fisheries sector. Agriculture and tourism jointly benefit from the environment and should therefore share responsibility for its protection and conservation. There are a number of local agricultural products like coffee, grapes, pomegranates, dates, almonds and honey that the country is famous for and can be promoted through tourism. Synergy between the two sectors could involve encouraging farmers to produce more and tour operators then promoting the farms as tourist destinations. Local farmers can also supply hotels and restaurants with their wares. Fish, as traditional cuisine, is a well-known attraction on tourists' itineraries. The fish market in Al-Hodeidah is also a tourist attraction.

Manufacturing industries, including traditional handicrafts and modern manufacturing, can be linked to the tourism sector. Links span from the furnishings and decor needed in hotels, restaurants and agencies to souvenirs and gift items.

In coordination with the Ministry of Agriculture and Ministry of Water and Environment, the MOT should encourage volunteer tourism. This could work to counter the resistance of some local communities to tourism while also raising international awareness about Yemeni society. As with any sector, the development of information management is critical to the successful growth of tourism in Yemen.

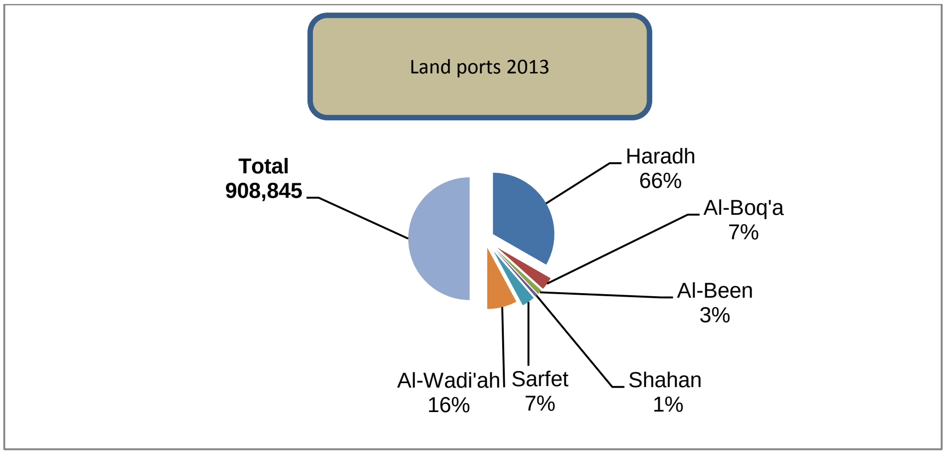
Key indicators for inbound tourism

Since 2007 the MOT has produced a number of very useful statistics, through their potential are not fully utilized fro policy formulation and monitoring purposes by MOT itself and other entities sucha as the YTPB.

Table (34): Total tourist arrivals to Yemen, 2013

Total	Land	Sea	Air
1,322,604	908,845	2,529	411,230

Figure (15): Tourist arrivals by land, 2013

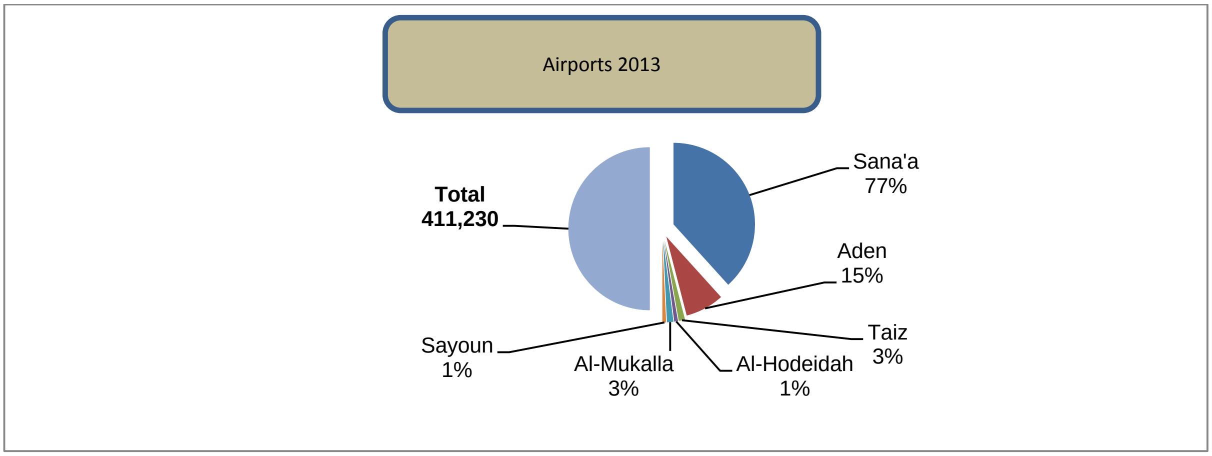


Source: MOT Statistics Report (2013)

Table (34) shows the total number of tourist arrivals to Yemen in 2013 disaggregated by mode of entry: land, air and sea. Figure (15) shows touris arrivals by land and indicates that 66 per cent of them came through Haradh land port. This is because Haradh land port is the nearest and most accessible border point for tourists from Saudi Arabia and other Gulf countries. The development of Haradh land port should therefore be a priority.

Figure (16) shows that 411,230 tourists arrived by air, with 77 per cent coming through Sana'a Airport. Therefore, Sana'a Airport should be the next highest priority for development. Currently all international flights arrive at Sana'a Airport. However, if Yemen investigated implementing an Open Skies policy, other airports could also receive international flights. It would then become necessary to further develop other domestic airports, particularly Hadibo Airport on Socotra Island.

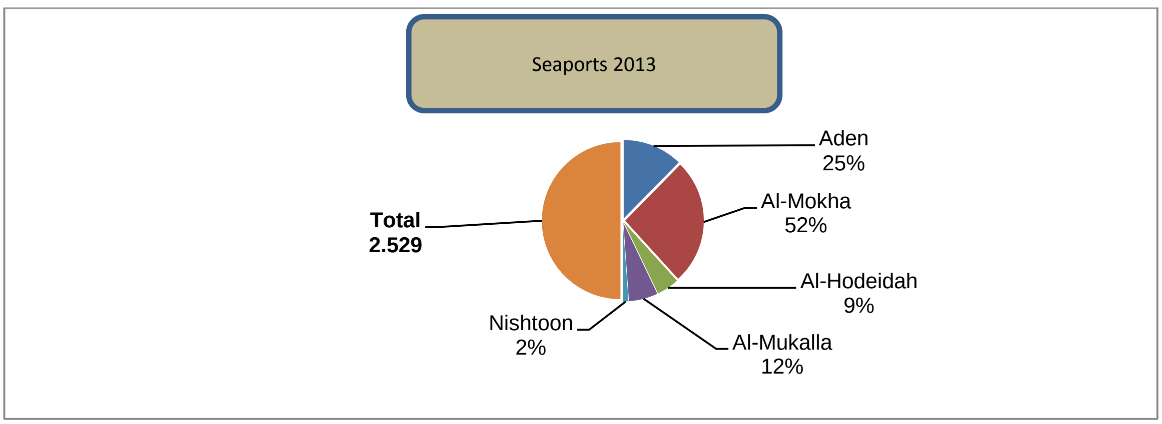
Figure (16): Tourist arrivals by air, 2013



Source: MOT Statistics Report (2013)

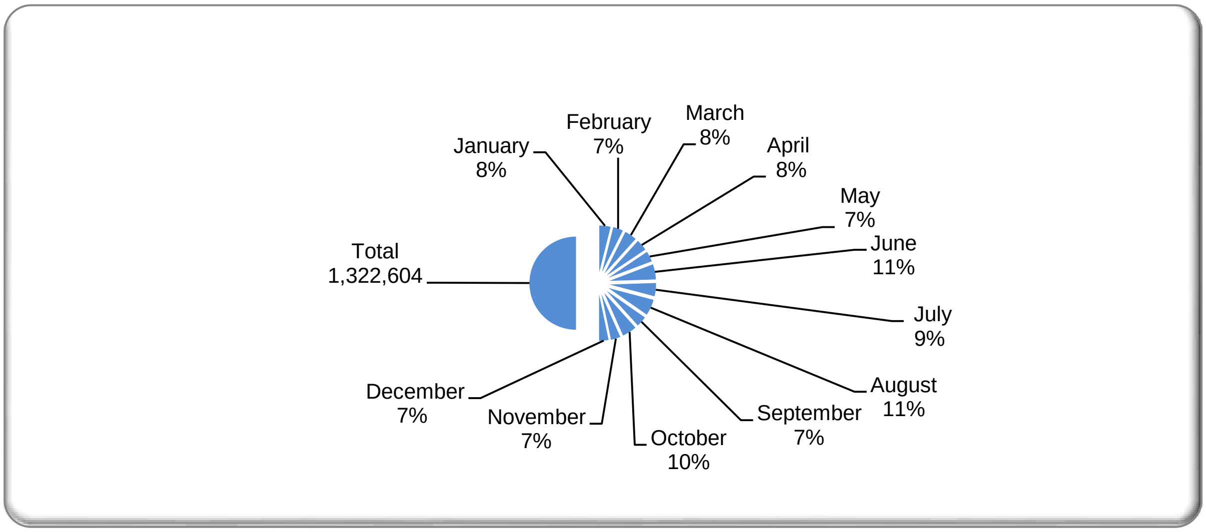
Figure (17) shows that 52 per cent of tourists that arrived by sea came through Al-Mokha seaport. The total number of tourists arriving by sea only reached 2,529 so the development of the seaports can be considered as a long-term project.

Figure (17): Tourist arrivals by sea, 2013



Source: MOT Statistics Report (2013)

Figure (18): Monthly arrivals of international visitors, 2013.



Source: MOT Statistics Report (2013)

The months of June and August recorded the highest percentage of visitors, with 11 per cent each, and October received 10 per cent. The rest of the months vary only slightly, ranging between 7 per cent and 9 per cent. However, tourism agencies consider October to December and January to April as the high seasons, as they coincide with tourists' holidays.

Current tourism activities

Despite the stability and security issues and the economic difficulties that Yemen experienced over 2011 and 2012, the YTPB continued to participate in international fairs in the main source markets of Germany, Italy and France.

In 2008 the MOT started to include Yemeni expatriates visiting the country in the tourist arrivals statistics, in accordance with the UNWTO's definitions and classifications of tourism statistics as set out at the Ottawa International Conference on Travel and Tourism Statistics in June 1993 and approved by the United Nations Statistical Commission.

The MOT's statistics show a 3 per cent increase in tourist arrivals in 2013 compared to 2012. Visitors were not all from the same main source markets. Yemeni expatriates continued to travel back and forth to Yemen and visitors of other nationalities visited Yemen for purposes other than tourism and were counted within the statistics, according to the UNWTO definition. The statistics of international tourist arrivals from 2011 to 2013 show the changing trends:

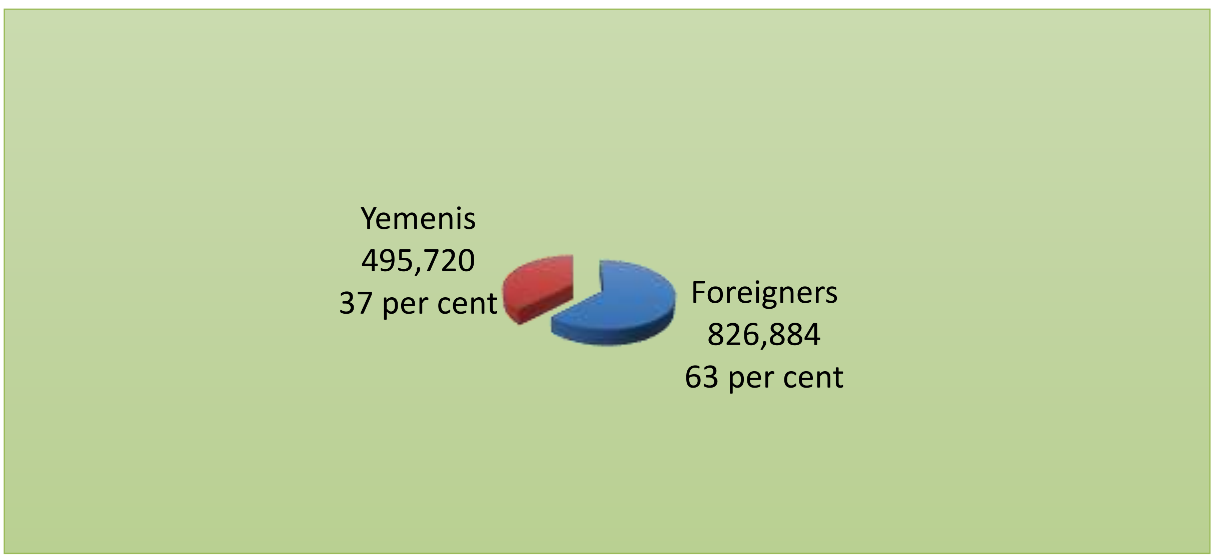
Table (35): International tourist arrivals by region of origin 2011-2013

Years/region	2011	2012	2013	Percentage change from previous year
Middle East	647,726	757,097	701,617	-7 per cent
Europe	13,380	16,354	16,542	1 per cent

Asia	38,068	46,365	56,442	22 per cent
Americas	18,275	27,894	30,022	8 per cent
Africa	15,719	19,210	21,759	13 per cent
Australia	425	567	502	-11 per cent
Total	**733,593**	**867,487**	**826,884**	**-5 per cent**
Yemeni expatriate arrivals	441,692	415,096	495,720	19 per cent
Total	**1,175,285**	**1,282,583**	**1,322,604**	**3 per cent**

Figure (19) shows that 63 per cent of visitors were foreigners during 2013. The inclusion of expatriates as tourists increased the official total figure significantly, as well as boosting calculated revenue from tourism.

Figure (19): Percentage distribution of torusits arrivals, 2013



Source: MOT (2013) Statistics Report

Tourism establishments and hotel occupancy

The latest survey of tourism establishments throughout the country was undertaken in 2010 and the figures show the following:

Table (36): Number and category of tourism establishments, 2010.

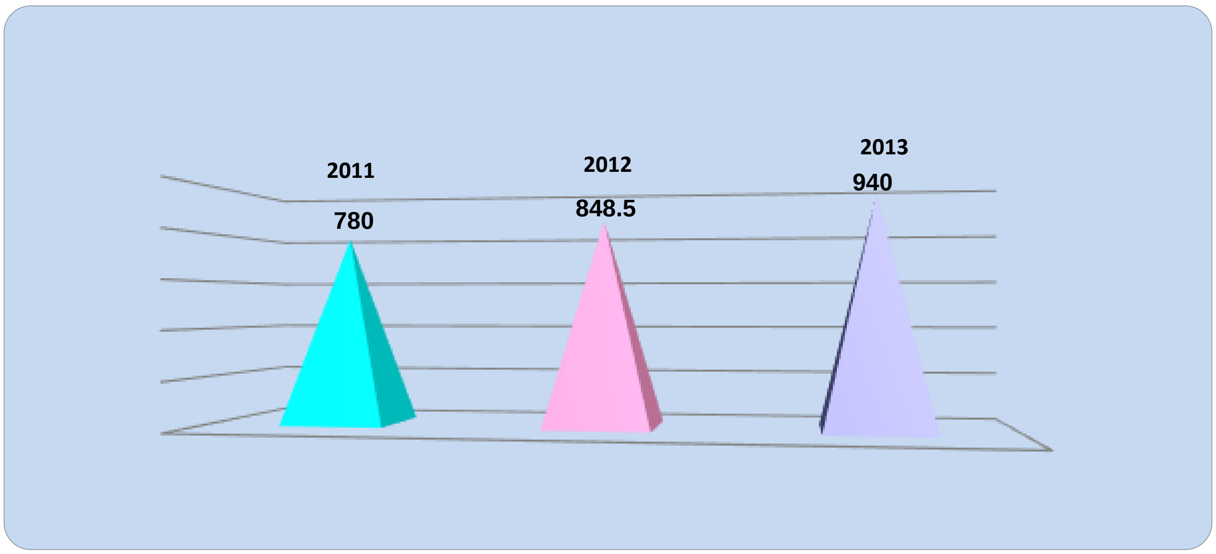
Establishments	Number
Hotels	1,479
Restaurants	3,121

Travel and tourism agencies	454
Training institutes	4
Handicraft centres	298

Source: MOT Survey (2010)

Figure (20) depicts the tourism receipts from 2011 to 2013. Revenue reached US$ 940 million in 2013, a US$ 91.5 million increase on the previous year. Despite the difficulties the country is facing, the tourism sector still generates significant revenue, proving its importance to the economy. The sector’s contribution will be even greater when political stability is restored.

Figure (20): Hotel receipts (in million US$), 2011-2013.



Source: MOT (2013) Statistics Report.

Recent tourism investments

Private sector investments in tourism, both domestic and international, dropped substantially during 2011, 2012 and 2013 compared to 2010.

Table (37): Investment in tourism 2010-2013

S.	Statement/year	2010	2011	2012	2013
1	Number of registered projects	33	12	7	9
2	Costs of registered tourism investment projects (in 1000 Yemeni rial) Domestic International	14,693,000 (12,827,000) (1,865,000)	3,445,000 (3,445,000) (- - - - - - - -)	1,218,000 (1,193,000) (25,000)	4,419,000 (4,411,000) (8,000)
3	Number of employees	972	271	155	249

Source: GIA Journal

When comparing the registered tourism investment projects with registered investment projects in other sectors during the same period, the following trends are apparent:

- The number of registered/permitted projects in the tourism sector accounted for 12 per cent of the total registered/permitted investment projects across the sectors between 2010 and 2013.
- The value of tourism investment projects accounted for around 5 per cent of the total value of registered investments projects during the same period.
- The registered tourism investment projects created 1,647 job opportunities, around 10 per cent of the total number of job opportunities created by registered investment projects across the sectors during the same period.

Major obstacles to investment

Yemen faces a variety of challenges, ranging from the lack of technical knowledge, low level of development and insufficient infrastructure, to stability and security issues. The 2011 unrest paralyzed tourism activities and investment in the sector. The major obstacles to investment in tourism can be summarized as follows:

- Poor basic infrastructure in remote areas and sites designated for tourism development, particularly beaches and islands
- Insecurity affecting tourist arrivals and investment
- Difficulties in sourcing funding and high interest rates
- Disputes over land and property ownership

The following obstacles affect all investment activity in Yemen:

- Weak law enforcement and compliance with regulations
- Transparency concerns
- Lengthy court processes commonly resulting in failure to reach a verdict
- Lack of skilled and qualified employees
- Excessive land speculation and inflated prices
- Failure to identify and designate land for new investments in areas with the potential to attract tourism and the lack of a comprehensive investment map

Suggested programmes

The Tourism Development Plan 2010-2015 included a series of projects aiming to establish tourism services and facilities. The plan focused on developing areas and locations that lack general tourism services, particularly hotels and restaurants. Since 2004 local, regional and international engineering consultancy firms have been carrying out studies on tourism sites and comprehensive studies and plans were developed for 11 locations. Eighteen projects still need studies and construction designs.

Tourism policies and strategies

National Tourism Strategy Plan 2010-2025

The National Tourism Strategy Plan (NTSP) 2010-2025 addressed tourism institutions, legislation, by-laws, regulations, sustainable development of tourism products and investment. It suggested improvements to the quality of tourism services, tourism promotion and marketing, national partnerships and monitoring and evaluation. The long-term strategy did not take into account the repercussions of significant changes in conditions. The document is exceedingly long and has thus not been read by many officials. Advisors have recommended shortening it and creating an executive summary.

The plan's SWOT analysis highlighted some of the tourism sector's weaknesses and strengths, including lack of staff training, financial and technical capacities, statistics, information technology, Tourism Satellite Accounts and international technical cooperation.

The NTSP provided a long term view but it has not been translated into short and medium-term priorities to mobilize partners into action; it lacks an implementation or action plan with a timeline and responsibilities.

One aspect to consider is the capacity of the MOT to respond to a more dynamic sector should investments in tourism materialize. The Risk Management Unit is an essential division within the MOT in this context, but the NTSP is silent about its role and needs.

The NTSP addressed multiple types of tourism, including coastal, diving, mountain, desert, ecological, health, cultural, historical, religious, shopping, business, educational, roots and sports tourism. The plan should have also included emerging types of tourism such as volunteer and scientific tourism.

The NTSP expectations for the year 2020 were based on continuously stable political and economic situations which considering recent devleopments in the country, will have to be revised.

Strategic Action for Sustainable Tourism Development Plan

The Strategic Action for Sustainable Tourism Development Plan, written during the instability of 2011, covered many major topics, including: the value of tourism, strategic tourism development, current organizational structure, legislation, touristic products and staff. The plan also outlined visitor and air access statistics, market trends, marketing, strategic approaches, communications, branding, awareness, private sector development, resource conservation and management organization. The report concluded with general issues, task division, resource allocation and a proposed sequence of actions.

The report analyzed the situation in Yemen in great detail and strongly recommended safeguarding the private sector and attraction base from further decline in preparation for when Yemen is able to receive visitors once more. This concept is important for all stakeholders to understand and bear in mind.

The key issues highlighted in the report relate to security and infrastructure challenges, both of which heavily obstruct the sector's development. When the report discussed the MOT's strategic plan, particularly regarding responsible tourism, it focused solely on the need to respect religion, faith and a code of ethics. However, responsible tourism should also involve protecting the environment.

The report mentioned that the MOT suffers from a lack of qualified and competent employees. The ministry’s low wages have forced many to find alternative jobs or to work part time. Some leave to join international organizations, oil companies or find employment in the private sector. The weaknesses of the MOT identified by the report are accurate and the MOT needs to address these points in the short and medium term. As the report suggested, there is a lack of career path development and staff are not motivated.

The report mentioned that the legal department of the MOT is becoming well organized and staff have received training. However stakeholders continue to complain about the incapacity of the personnel in the legal department.

The tourist arrivals statistics in the report are incorrect, perhaps due to a misunderstanding of UNWTO's definition of a tourist, which, as previously discussed, includes expatriates as tourists and considers their expenditure as part of the toruism economy. The report stated that, "national citizens residing abroad are not considered as tourists despite the fact that they have – for methodological reasons - that quality". This has caused mistakes as the tourism sector statistics do include expatriate arrivals and expenditure. The statistics the MOT produced in 2009 confirm that expatriate arrivals reached 529,000 and their spending in Yemen was in the region of US$ 416 million.

The report also looked at the YTPB. The branding of the board is not strong or consistent and its recent promotional material does not have a unified aesthetic. The YTPB commissioned a graphic designer to create a manual in 2009 but the work was lost in 2011 when the MOT's building was attacked. The board lost almost all of its information, database and equipment. While the report mentions that there was no marketing strategy in place, in fact a Marketing Strategy Plan was formulated in 2009 but the YTPB has not been able to implement it.

The honorary tourism ambassador concept porposed in the report is a very good idea. There are two tourism attachés in Europe, one for the French and Spanish and the other for UK and German markets. An Embassy Information Pack was created in 2007 and sent to embassies in the Gulf States, Europe and the Far East.

Tourism officials did not accept the suggested "YEMENHERiTAGE" brand put forward in the report. While such branding might not be necessary for products such as coffee and honey, marketing these types of products is a sound suggestion. The YTPB has practised this since it was established, drawing on the fact that Yemen proudly considers its produce as among the best in the world.

The Iconic Attraction Concept is another very good strategy suggested in the report in which development activities in areas with iconic attractions are prioritized.

In the report’s Community Benefit Rights section the list of stakeholders should have included the governorate authorities and the Ministry of Water and Environment, given the central role these bodies should play in such a strategy.

Although the report mentioned the role of women within the tourism sector, their potential involvement was not sufficiently addressed. Currently few women are involved in tourism activities, but the sector has the potential to provide equal opportunities in employment, training and high-level responsibilities.

In the report's Task Division and Resource Allocation section under *What Is Required* the funding figures are not all correct. For example, the awareness-raising campaign was estimated to cost US$ 250,000, while in reality at the time the report was drafted an awareness campaign would have cost around US$ 1,500,000 (including "entry points such as schools, offices, mosques, sport clubs and various media such as print, radio, TV and billboards). The anticipated costs of community initiatives, such as cleanest village, best visitor product and the school heritage project, were also incorrect.

The 2003 Diagnostic Trade Integration Study

Addressing the tourism sector as one of the most promising economic sectors and analyzing its condition at that time, the 2003 Diagnostic Trade Integration Study (DTIS) was focused and in-depth. The report summarized the tourism sector saying "Despite concerns about personal security, numbers of tourists going to Yemen continue to rise steadily. The main barriers to more rapid growth are continuing security concerns and the lack of tourist services, particularly in cultural regions located far from the cities. Developing tourism will require expenditure on facilities and infrastructure in selected areas and promotional programmes. Projects targeting restoration and preservation of historical buildings and support of regulatory regimes to ensure preservation of environmental, cultural and historical amenities are possibilities."[127]

The report specified critical issues and principal challenges, such as bureaucracy, which is one of the major obstacles to development. In addition, the issues of accessing land for projects and the negative perceptions conveyed by the international media about security and kidnappings were raised. The government must prioritize reengineering procedures to reduce the excessive amount of bureaucracy.

Need for improved Tourism policy

The government does not have well-defined or solid policy towards tourism. Authorities fluctuate between granting approvals for development projects and prioritizing religious, cultural, political and social obligations on an ad hoc basis. For example, the Cabinet has endorsed decrees on the MOT budget only for the Ministry of Finance (MOF) to obstruct their finalization.

The government needs to formulate a strong policy, focusing on planning the tourism sector's products and organizing its human resources. The market base must be broadened and the sector effectively monitored. This can be achieved through adopting economic measures and methodologies for evaluating the economic significance of tourism and monitoring the flow of foreign currencies, tourism receipts, employment and investment.

Policies should be based on a coherent set of regulations, guidelines, objectives and strategies for development and promotion that provides a framework for decision making. The tourism policy must take into account all political, economic, social and cultural stakeholders. The MOT has devised policies that advocate further involving the local communities. If properly implemented, these policies would increase the flow of tourism. A clearly defined policy will enable the government to forecast tourism market trends and will simultaneously form the foundation for an investment policy.

Regional Comparisons

The latest UNWTO barometer assessed tourist arrivals and the international ranking of arrival figures as well as international tourism receipts and their ranking. It is useful to compare Yemen's performance to those of the UAE, Egypt and Morocco. The UAE is geographically close to Yemen and has successfully bolstered its economy, including its tourism sector. It is also considered as the travel hub of the Middle East. Egypt and Morocco possess similarities to Yemen in terms of culture and biodiversity. Economically, their performances are not far greater than Yemen's, but they have made substantial progress in developing and improving tourism.

Table (38): Comparisons for the year 2013

Category ⇨ Country ⇩	Number of tourists arrival (thousand)	World ranking in arrivals	International tourism receipts (US$ 000)	World ranking in receipts
UAE	11,600*	30	11,600,000	28
Egypt	18,100	22	9,900,000	32
Morocco	6,700	39	5,200,000	38
Yemen	1,300	Not ranked	1,057,000	Not ranked

Source: UNWTO Barometer (2014) - *only Dubai

Table (38) demonstrates that Yemen's performance is below those of the comparator countries. While Egypt's tourism sector has experienced difficult periods, it still receives a substantial number of tourists when compared to Yemen. After a tragic incident that saw a group of tourists attacked and killed in 2010, the Egyptian government took the decision to waive tourism taxes for all tourism establishments for five years on the condition that the establishments offered package tours at a 70 per cent discount. The government sent a high-ranking mission to Egypt's European source markets to give assurances that their top officials were involved in resolving the security situation.

Morocco receives around five times the number of tourists that Yemen does. With the anticipated 15 per cent annual increase in tourist arrivals, Yemen will reach figures to rival Morocco's in about 28 years. The MOT and YTPB must redouble efforts to increase the number of arrivals and consequently improve annual growth rates.

According to the MOT statistics, over 1,300,000 tourists visited Yemen during 2013representing 2.5 per cent of the Middle East's market share of 51,900,000 tourists.[128] The MOT should set a long-term target to reach at least 5 per cent of the Middle East's market share.

Assessment of the impact of and outlook for tourism by region

Examples of the importance of the tourism sector can been found in regions such as Al-Hajara and Manakha villages in Haraz and Hababa, Thula and Kawkaban in Shibam. Around 80 per cent of the population in these villages worked in tourism. Some converted their houses into hotels and restaurants while others worked as tourist guides or souvenir merchants. Families are dependent on tourism and these regions are now suffering due to its decline.

In Helyal near Ibb city a few basic establishments owned by locals served food to tourists. The MOT offered to pay for the renovation of these establishments, requiring the owners to relinquish their premises for the six-month refurbishment period. Only one owner accepted the offer and the MOT implemented the work and handed the establishment back to the owner. Visiting tourists then preferred to eat at the well-presented, refurbished business. Other local establishments took note and soon all of the other owners started to renovate and improve their services.

In Mareb city from the mid -1990s onwards all tourism agencies taking groups across the desert to Hadramout would hire a Bedouin guide to escort them. The agencies would pay the guide around US$ 150. No security or kidnapping incidents were reported in the desert when the agencies employed a Bedouin guide.

Yemen’s most successful tourist destination is Socotra Archipelago and the islands are considered as a safe haven. Tourists are still travelling to the islands and some international operators have requested direct flights to Socotra without transiting in Sana'a Airport. The number of tourists to the archipelago was around 1,200 during 2013. Though this seems limited, the number of tourists visiting the island per day must be controlled with the support of the Governance and Biodiversity Project of the UNDP. The islands present an excellent opportunity for developing eco-tourism. The MOT, YTPB, international organizations and donors should concentrate their efforts and direct projects towards the unique archipelago as it is capable of attracting significant numbers of various types of tourists. The UNDP's project provides a great deal of information on the works that have been implemented across the islands.

Key challenges and opportunities

Table (39): Challenges and opportunities for the development of the tourism sector

Segment	Opportunities	Major challenges
Institutions	The government’s recognition of the importance of tourism and its role in the economy Commitment from the relevant authorities to work on developing the sector through improving policies and legislation Decentralization can reduce the burdens on the centralized authority and can directly lead to development, through partnerships with the private sector and the drafting and adopting of tourism strategies and policies that guarantee the full involvement of local communities The desire of the government to build technical and administrative capacity and approve of training as an essential tool to improving management Assurances on developing an information database for statistics systems in accordance with international standards	Weak application of laws and regulations and lack of commitment to applying them The absence of full cooperation between ministries and relevant agencies Lack of stability in tourism management Institutional establishments are still new and some of the legislation has not yet been finalized
Tourism products	Natural, historical and cultural characteristics mark out Yemen as one of the most important tourism destinations in the region	Low level of the air and land transportation services

	Manufacturing and handicraft production Geographical diversity offered by the Red Sea, the Arabian Sea, mountains, hot springs and desert, along with Yemen's history and four world heritage sites, is an excellent opportunity for developing sustainable tourism Government campaigns were carried out to protect archaeological sites and "cleanest city" competitions were announced Construction of rest stops along routes Tourism is one of the most important economic sectors for low-income groups, particularly in urban areas, and can reduce poverty and support sustainable development Partnerships between the government and private sector to develop technical capacities and skills of the tourism workforce	Corrosion of archaeological and historical sites and risk of theft Wasting of the natural resources and neglect in preserving biodiversity Desertification and environment pollution, which is spreading and defacing natural and cultural beauty Decline of handicraft production and its extinction in historical cities Lack of basic infrastructure and tourism services in locations targeted for tourism development Spread of unregulated construction and destruction of the marine environment
Marketing and promotion	Heading towards new markets Use of electronic marketing Strengthening partnerships between public and private sectors in promotion activities Strengthening marketing strategies and policies Continuous promotional campaigns to increase the number of international tourist arrivals Encouraging events and festivals in the governorates	Instability of security, safety, political, economic and social factors in Yemen and the wider Middle East Absence of feelings of security for tourists and the fear of kidnapping in some areas
Investment	The government's direction towards strengthening tourism and comprehensive development, demonstrated by approving the NTSP The unique and varied characteristics of the country represent opportunities to establish major tourism projects The government's focus on providing investment opportunities through legislation facilities and privileges Availability of tourism investment indicators Substantial opportunities to attract capital and invite investors to establish tourism projects in sectors such as diving The establishment of specialized funding organizations to increase the level of tourism investment	Uncertainty of security Land and property rights issues Lack of basic infrastructure Administrative corruption Overlapping responsibilities and lack of coordination between related bodies
Quality of services	The legal framework of the classification of tourism establishments allows upgrading the level of services in accordance with international standards Government support for the improvement of tourism services through opening training institutes and training tourist guides Increasing hotel and other serviced accommodation occupancy rates	Poor monitoring and evaluation of tourism establishments and services Shortage of sanitary facilities Weakness of human resources and capacity in tourism services Lack of services at tourism sites Limited benefits for local communities from tourism projects at present
Security and media	Increasing awareness of the importance of tourism The Yemeni people are characteristically hospitable and generous	Weakness of security and safety Limited media performance compared to regional and international media

	The government's efforts towards strengthening tourism security, prioritizing it and establishing a number of security units Security units dealing in resolving tourism emergencies and providing security for tourists Improved relationships between relevant bodies concerning countering insecurity and resolving the tourism crisis	

Outcomes of the National Dialogue for the tourism sector

The National Dialogue represents an opportunity for Yemen to attain a democratic, modern civil government that could bring freedom, dignity, prosperity and equality to the country.

The National Dialogue resulted in a number of decisions concerning the tourism sector, summarized and clarified in Table (40).

Table (40): National Dialogue Decisions concerning the tourism sector.

Item #	Segment	Outcomes	Notes
68	Comprehensive Sustainable Development	Promptness in implementing targeted tourism development projects and completing development on basic infrastructure for allocated tourism locations	Projects are offered to domestic and international private sector establishments Total costs of all projects: US$ 1,350,000,000 (costs of projects range between US$15 million and US$ 250 million)
69	Comprehensive Sustainable Development	Activating public sector tourism establishments, encouraging domestic and international tourism investment and reactivating closed and damaged tourism establishments	
70	Comprehensive Sustainable Development	Supporting government bodies related to tourism activities on both central and regional levels	
71	Comprehensive Sustainable Development	Approving a transparent, flexible, efficient and effective tourism policy, providing safety for tourists, reducing travel procedures and providing the necessary services at tourism sites and locations	
72	Comprehensive Sustainable Development	The government is committed to reactivating Aden Hospitality Institute	

Tourism institutions

Figure (22): Supreme Tourism Board organigram

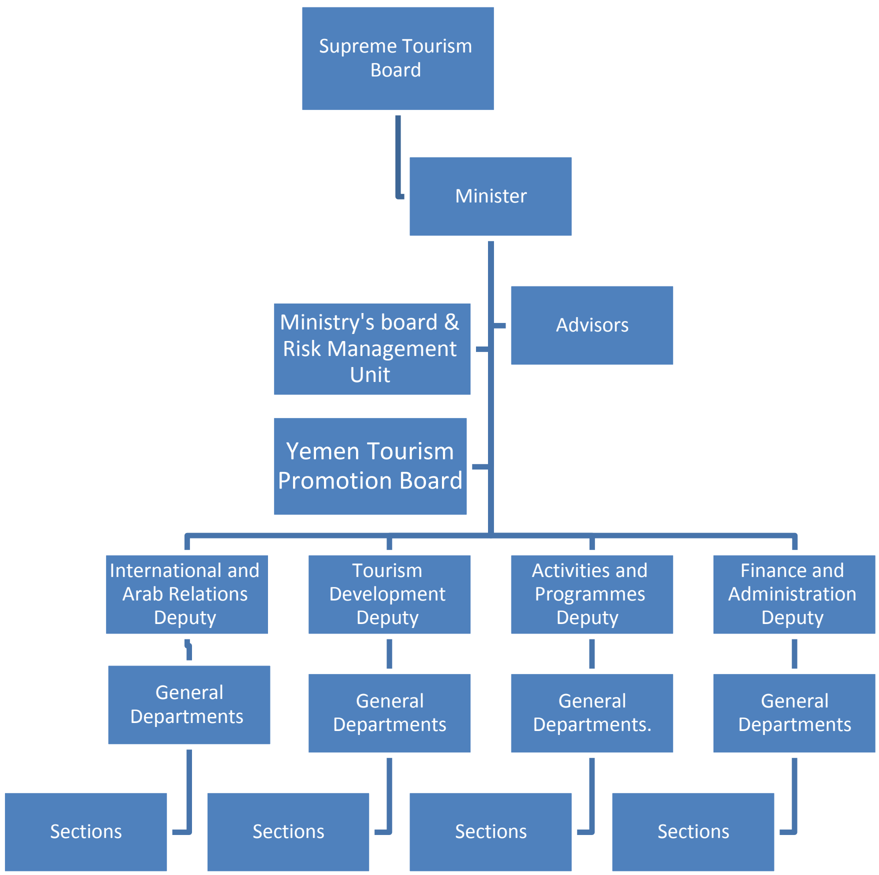


Figure (22) illustrates the policy making board established to facilitate decision making on the development of the sector. There are four major divisions supervised by deputies, beneath which there are general departments responsible for activities, programmes, awareness, tourist guiding, establishments, planning, statistics, development, investment, eco-tourism, monitoring, evaluation, Arab and international affairs, domestic tourism, administration and finance. The sections are divided in accordance with the mandates of the general departments and each has staff, secretaries and clerks.

The current structure is not well designed, as it does not have a vice-minister to perform the minister's duties during absences due to travel. The sectors within the structure of the MOT do not correspond with existent duties and tasks. The structure should be based on delegation of authority.

Supreme Tourism Board

Headed by the prime minister, the Supreme Tourism Board (STB) consists of 23 members: 12 ministers, two deputies, five chairmen of organizations and four members representing private sector hospitality, restaurants, travel and tourism agencies. The STB's mandate is to draw up general policies for developing and activating tourism. It approves suggested plans to enhance the tourism sector.

The ministries and various authorities coordinate to implement development plans and search for tourism investment opportunities, approve them and study the advantages of proposed projects.

The STB must evaluate the sector's performance and work towards resolving obstacles, particularly regarding allocating land for tourism projects. Ministries and the relevant authorities are obligated to adhere to decisions made by the STB and decrees issued by the chairman of the board.

The STB holds meetings every six months or more frequently if necessary. Given the participation of the relevant ministries and authorities, the STB is a vital body that the MOT should make full use of. It can serve to simplify processes and address issues in the most direct fashion.

General Authority of Antiquities and Museums (GAOAM)

The GAOAM has undertaken 13 projects to renovate historical sites including old religious schools, forts, castles, museums and mosques. The only funding the projects received was from the government and ranged between US$ 3,000 and US$ 10,000. The GAOAM has been granted very limited funds over the past 10 years and has only been able to carry out the minimum restoration and maintenance work required to protect the historic buildings from collapsing. During the 1990s the Government of the Netherlands funded the restoration of the National Museum. The GAOAM has stated that it lacks the financial support necessary to carry out its duties. It has, however, planned the future renovation of around 25 historical sites and monuments and hopes to establish further museums at an estimated cost of US$ 20 billion. It has planned additional renovation projects costing an expected US$ 300,000. The authority also has a list of studies on projects that need to be implemented.

Ministry of Culture (MOC) and General Authority for Historical Cities Protection (GAHCP)

The Ministry of Culture (MOC) and the General Authority for Historical Cities Protection (GAHCP) are jointly responsible for preserving historical cities. The MOT should coordinate with these bodies in identifying and targeting the areas that attract the largest numbers of tourists and prioritize projects in these areas. Sana'a and Zabid must be considered as priority concerns due to the threat to withdraw them from the World Heritage Sites list. Officials believe that this threat is a result of negligence from the MOC, GAHCP and local councils. The Government of Bahrain is supporting a project to restore three historical houses in Zabid. The budget for the campaign to protect the historical Old Sana'a was around US$ 1,767,000. The project was halted because the Capital Secretariat of Sana'a did not involve the GAHCP and the restoration was not in keeping with the traditional style. The various bodies have finally combined their efforts to save the cities from being withdrawn from the list. The government must focus on the cities and sites on the United Nations Educational, Scientific and Cultural Organization's (UNESCO) tentative list of heritage sites in Yemen: the archaeological site in Mareb, Belhaf/Buroum coastal area, the historic city of Sa'adah, Jabal Bura, Jabal Haraz, Jibla and its surroundings, Sharma/Jethmoun coastal area, the historic city of Thula and the Madrassa Amiriya of Rada. This will require redoubled efforts not only from the MOC and GAHCP but also from the local councils and international organizations and donors.

The Ministry of Transportation is not willing to expand or allow investment in land transport services due to the market already being overburdened with vehicles and buses. The Civil Aviation and Meteorology Authority (CAMA), which is under the ministry's supervision, should approve the Open Skies policy concept. Open Skies agreements will provide "sixth freedom" operations, which refers to the right to carry passengers or cargo from a second country to a third country by stopping in one's own country. This would allow for direct flights to Socotra and Aden.

The CAMA must accelerate the construction of the new international airport, which is expected to span 72,000 sqm and have the capacity to receive four million passengers annually. The planned landing areas can accommodate up to 60 different categories of aircraft per hour, including A380 and B474-400 aircraft. The new airport will include six passenger arrival-departure tubes. The total cost of the new airport is around US$ 500 million.

The challenges that the CAMA is facing with the new airport include:

- Designing airport security and safety systems
- Updating domestic and international airport infrastructure to comply with international aviation organizations
- Updating Yemeni territories' aviation communications

Expectations for the coming years include:

Updating the general infrastructure of the airports:

- Establishing passenger lounges in Al-Mukalla and Sayoun airports
- Expanding the airport in Hadibo, the capital of Socotra Archipelago and establishing a functioning airport at Abd Al-Kuri, a small island in the archipelago
- Establishing a passenger lounge and completing the infrastructure in Sa'adah Airport
- Restructuring landing and takeoff areas at Ataq Airport in Shabwah

The Ministry of Transportation could update its systems with the IATA's Enhancement and Financing Services, as was recommended to the YTPB. The IATA's systems support secure aviation infrastructure and the collection of airport fees and related charges including passenger fees, landing, parking, ground handling, check-in, night takeoff, aircraft escort, lighting charges, boarding bridge fees, cargo charge, fuel charge, noise charge, immigration and customs tax and ticket taxes.

Capacity of the Ministry of Tourism

The MOT is inhibited by the low annual budget allocated to it by the MOF. With only 160 employees, it does not have sufficient trained and qualified staff and struggles to retain those it does have as many immigrate or find other jobs. Yemen suffers from brain drain. Current employees do not receive proper technical or administrative training. The MOT depends on an older generation of staff nearing retirement age, rather than looking to young leadership. The older generation is still a valuable asset, particularly in advisory positions.

The MOT does not engage in evaluating staff performance. In the past it did not investigate why certain staff were underperforming or how the issue could be addressed. Up until now, the MOT has not drafted job descriptions for its employees. The MOT must reengineer and restructure its departments. The opportunity of representing Yemen in international meetings and conferences should be proffered to individuals based on their knowledge and experience.

The number of establishments is likely to remain constant for the time being, in correlation with tourist arrivals. There is a sufficient number of establishments to cater for the number of tourists and they have the capacity to accommodate more than the current figures.

The MOT, YTPB and other relevant entities must focus on raising awareness in order to preserve both the culture and environment, not only to endorse sustainable tourism but also to protect heritage, traditions and bio-diversity. This awareness-raising campaign should include a number of small projects in villages, with the support of international organizations and donors, designed to conserve natural resources and traditional crafts. The projects must have economic benefits for the local communities, which will encourage them to protect their own interests. The relevant entities must work together to protect bio-diversity by encouraging and supporting processes and products that are environmentally friendly.

The MOT and YTPB should also consider a partnership with the earthTV project to further expose Yemen's touristic sites to a global audience. EarthTV is a German satellite television network, which airs live broadcasts from its camera network around the world. It usually features beaches, mountains, seaside resorts, or skylines of major cities. The network distributes to over 35 TV-channels worldwide with programmes in 16 languages. The cumulative reach is over 1.8 billion viewers. The project would reflect aspects of Yemen that contradict its negative portrayal in the international media.

Yemen has been a member state of the UNWTO since 1977 and should take full advantage of its membership in order to:

- Gain access to worldwide strategic intelligence and cutting-edge research, in particular the extensive UNWTO e-library
- Interact with leading business decision makers and government officials
- Explore partnerships for specific projects and new business opportunities
- Enjoy industry-wide recognition and exposure for Yemen's brand through UNWTO publications
- Participate in leadership summits, partnership projects and workshops to help rejuvenate Yemen's products and services
- Exchange information on best practices to help promote accessible, competitive and sustainable tourism
- Position the MOT on the front line of the fight against climate change, poverty and social deprivation
- Demonstrate leadership and responsibility through Yemen's commitment to UNWTO global principles and strategies [129]

Regional offices of the MOT

The MOT has a tourism office in every governorate. The regional offices are mainly tasked with issuing permits for tourism establishments such as hotels and restaurants. Their responsibilities include monitoring the quality and performance of tourism establishments, but this is not done on a regular basis or in a professional manner. The regional offices also collect tourism taxes from hotels (3 per cent of all accommodation fees) and from restaurants (3 per cent of every bill) and permit fees. They act as coordinators between the MOT and the governorate authorities. The regional offices must conduct a survey of all the establishments in their governorates.

There are 23 regional tourism offices including two in Hadramout governorate, one in Al-Mukalla city and one in Sayoun city, and a representative on the Socotra Archipelago since the government designated Socotra a governorate. Almost all the regional offices lack basic equipment and some do not have a real office space. The offices staff lack expertise and experience and require training in most technical and administrative fields. Some do not have a sufficient number of personnel.

With the country heading towards federalism, most tasks will be designated to the local councils and subsequently to the regional offices. The new system will encourage investment and development in correlation with the available resources and overall situation in each governorate.

The regional tourism offices should host a variety of events and festivals as the offices in Dhamar, Ibb, Aden, Al-Mukalla and Taiz currently do. They should present suggestions to the MOT and governorate authorities including introducing entrance fees for selected and approved historical and archaeological sites. This could include Socotra Archipelago.

Yemen Tourism Promotion Board

The YTPB was established in 1999. It is financially and administratively independent and is the supervised by the minister of tourism, who acts as chairman of the board. Seventy per cent of the board's members are private sector stakeholders, such as travel and tourism agents, and 30 per cent are government officials, including representatives of the MOF and the General Authority for Antiquities and Museums (GAOAM). The board is financed by the US$ 8 tourism tax added to the cost of every international round trip air ticket.

The YTPB published a tourism encyclopaedia in Arabic, English and French. It also published a booklet on the travel and tourism code of ethics and has released thousands of different awareness-raising brochures targeting students, soldiers and other groups. The YTPB drafted a marketing strategy plan in 2009. It has also contracted public relations firms in Germany, France, Italy, England, Japan and the Gulf States.

The YTPB designed a website in Arabic and English and it annually participates in 12 regional and international exhibitions. The board produced footage about tourism in Yemen for release on CNN, BBC, Al Jazeera and Al Arabiya channels. It has produced 53 promotional films about tourism sites and around 50 documentary films about tourism in Yemen. The MOT and the YTPB have arranged festivals in Sana'a, Ibb, Al-Balda in Al-Mukalla, Dhamar and Al-Jawf. The festivals created opportunities for tourists to discover local handicrafts and enabled some women's charities to sell their products.

The MOT and YTPB have prepared radio programmes and also invited journalists, writers and photographers to visit and discover the country so as to publicize Yemen's attractions. In partnership with local investors, the YTPB established the Yemen FM radio station and the FeeCoffee Company. The board publishes a bimonthly magazine called Alseyaha (Tourism) and places advertisements in some European and Asian magazines.

The board employs a number of unqualified staff that burden the budget and reduce efficiency. Few staff members hold university degrees in marketing, finance or administration. Others do not have relevant work experience.

The YTPB has not created or even maintained a promotional brand identity for Yemen. Its advertisements and publications are uncoordinated and do not follow a consistent theme.

The board's website is not regularly updated and news from 2007 is still posted. Promotional materials are not in keeping with current trends and the board's slogan is the old cliché "One Country…Many destinations" that other countries also use. The current logo design is acceptable, but requires some artistic touches. The board should hire a company to manage the website and its content. Internationally well-known search engines like Google and social networks like Facebook, Twitter and WAYN can provide far greater exposure and are all valuable promotional and marketing tools. The YTPB should also improve attractions' visibility through TripAdvisor, the world's largest travel site where travellers post reviews, opinions, and photos of hotels, restaurants and attractions. It has links to low airfares, free travel guides, worldwide vacation rental listings and popular forums with advice on destinations. It is exceedingly widely used by travellers when they search for information about the destinations they will visit.

The YTPB could implement a system based on the International Air Transport Association's (IATA) Enhancement and Financing Services, which would improve its financial position and efficiency, reduce costs, simplify business processes and strengthen its ability to secure cost-effective investment financing.

The board could also adopt the Blue Ocean Strategy, an organizational strategy designed to maximize growth and profits. The Blue Ocean Strategy asserts that an organization should create new demand in an uncontested market space, or a "blue ocean", rather than compete head-to-head with other suppliers in an existing industry. The metaphor of red and blue oceans describes the market universe. Red oceans represent all the industries in existence today, the known market space. In red oceans, industry boundaries are defined and accepted, and the competitive rules of business are known. The strategy demonstrates how to create uncontested market space by reconstructing market boundaries, thereby reaching beyond existing demand. The strategy reduces planning risks and creates new demand by unlocking three tiers of noncustomers. A commercially viable blue ocean idea is launched by aligning unprecedented utility of an offering with strategic pricing and target costing and by overcoming adoption hurdles. This strategy can also be planned and practiced by tourism establishments such as travel and tourism agencies, hotels and restaurants.

Two years ago the YTPB took the decision to cancel its contracts with all the foreign public relations firms it had previously dealt with. This decision was untimely as these companies work closely with their clients during a crisis and the YTPB should have taken advantage of their expertise during that difficult period. They could have played a central role in countering the image portrayed in the international media.

Creating the Friends of Yemen Community was an idea suggested by the Promotional and Marketing Strategy and although it was well received it was never implemented. The community would include all foreigners living, working and studying in Yemen and could be of great benefit in conveying a positive image of the country to their relatives and friends abroad.

The YTPB should hire a media production firm with quality photographers, cinematographers and editors to produce up to date photos and footage to showcase Yemen's attractions. The YTPB should evaluate its performance and optimize the quality of work produced.

As many insurance companies will not offer travel insurance cover for high-risk destinations, the YTPB should coordinate with international insurance firms, local tourism agencies and international tour operators to offer travel insurance packages at reasonable costs for foreigners travelling to Yemen.

Box (3): Universal Travel and Tourism

Universal Travel and Tourism (UTT), established in 1982, is one of Yemen's leading tourism companies. It is been chosen as a case study as it is both a travel and tourism agency and because it has expanded its activities into many other industries related to tourism.

UTT started as a travel agency, booking and selling air tickets. It then expanded its business by buying DHL and Royal Jordanian Airlines franchises and also establishing a tourism section. In 1995, after the 1994 civil war, the company gradually started to build three and four star hotels in the major cities of Sana'a, Taiz, Al-Mahweet, Al-Mukalla, Shibam-Hadramout and Sayoun. UTT opened branches of its travel agency in Aden, Al-Hodeidah, Al-Mukalla, Sayoun and Taiz. It also managed a four star hotel in Mareb. The flourishing business went on to buy Hertz, Gulliver's

Travel, Diners Club, Turkish Airlines and Fly Dubai franchises and also employed a representative in Milan.

After the 1998 security incident, tourist arrivals started to drop and the company was obliged to lay off some of its staff and close down several branches. Tourists continued to visit Yemen but in lesser numbers, travelling in small groups or individually.

Although the tourism industry at that time was in decline, competitors entered the market mistakenly believing that business was promising and that the situation was ideal for establishing new agencies. UTT and many others companies began to struggle to find clients and the dire situation forced UTT to close down most of its offices and hotels. However, to this day UTT continues to participate in international tourism fairs and is anticipating an improvement in Yemen's tourism sector. Like other agencies, UTT started its business in outbound tourism to Turkey, Malaysia, Egypt and other destinations. It also established an office in Dubai but it closed it down after a time because it could not afford the expenditure.

Training institutions

Yemen has four technical institutes offering training in tourism, tourist guiding and hospitality. The institute in Aden is not operational, having been neglected by the Ministry of Technical Education and Vocational Training (MTEVT). There is also a tourism section at the University of Taiz.

The most recognized institute is the National Hospitality and Tourism Institute (NAHOTI) in Sana'a, funded by the EU. The institute was established in 2006 at a cost of around 3 million euros. The institute's premises are extensive and include a three star hotel, which is not currently functional and some of the rooms and equipment have suffered damage. The NAHOTI is in decline due to the limited financial support it receives from the government, consisting of US$ 33,000 annually. The NAHOTI has around 80 employees, 40 of whom are teachers and trainers and the rest are administrators. The institute previously offered two-year diplomas and courses in tourist guiding, hospitality management and food and beverages services at very low tuitions rates (US$ 190) that did not cover the institute's expenditures. Very few students enrolled and eventually the institute offered tuition free of charge. The NAHOTI management estimates the annual budget required for the institute to function effectively at around US$ 600,000.

The institute offered a variety of courses, including a catering class for women with learning difficulties, reception techniques, tourist guiding and food production. The institute received technical support from the International Organization for Migration (IOM) and United State Agency for International Development (USAID). The institute signed an agreement with the Government of Tunisia to establish a collaborative partnership.

The NAHOTI management hopes to expand the institute into a college for tourism sciences and renovate the premises, at an estimated cost of US$ 100,000 - 150,000. It also plans to build accommodation and a health club for its students and develop a programme to train 1,500 unemployed young people.

The MTEVT and MOT should approach international organizations and donors in order to source funding to maintain the existent institutes and establish further tourism training institutes in other governorates. The NAHOTI has a solid foundation and will eventually be able to finance its activities independently. The NAHOTI staff also require further technical training. Both the MOT and MTEVT should develop programmes to guarantee jobs for graduates of the institutes.

Related unions

There are two major trade unions involved in the tourism sector in Yemen. One is responsible for travel and tourism agencies and the other is for three to five stars hotels. There is also a community for below three star and local hotels.

The unions' mandate is to protect members from any sort of exploitation by any third party, to form a strong voice against any threats and defend members' interests, to share ideas and exchange experiences and to study how best to benefit from new businesses.

The unions will have to work harder on the issues their members are currently facing such as the diesel shortage and increase in fuel prices. They should consider working in partnership with airlines to provide special discounted packages, given the tourism sector's present situation.

Five star hotels have maintained their high prices even during the crisis and occupancy rates are only reaching 25 per cent, sometimes even less. Hotels will not be able to make any improvements to their establishments if the economic and security situations remain in their current state.

In 2009 the Cabinet took the decision to increase by 50 per cent the electricity bills for four and five star hotels that generate over 50 million Yemeni rial (US$ 232,000) annually. This drove hotel managers to stop using government-supplied electricity and instead use generators, purchasing diesel from the black market. This cost them far less than the electricity bills.

The situation became difficult when, due to the continuous electricity shortages, petrol and diesel were in short supply. Black market prices almost doubled. Petrol prices elsewhere increased by 60 per cent, leading to riots in the streets. Although the government announced that the prices of basic goods would not be affected by the increase, market prices of most commodities started to rise. In terms of tourism, the cost of air tickets, rental cars, accommodation, meals and services will all be affected.

The Union of Tourism and Travel Agencies should suggest modifying tour itineraries and offer long trips that can generate increased hotel occupancy rates, more revenues and visits to more sites and establishments in each region. This concept will be even more relevant with the transition towards decentralization and the federalism system.

Hotels should upgrade their buildings to ensure accessibility for visitors with disabilities. The EU is willing to support and fund such upgrades. Hotels should also plan to install Smart Solutions like sensors for reducing excessive water and electricity consumption. Smart Solutions systems would be of great benefit to hotels and agencies and the unions should encourage such conversions. In addition, unions should advocate for more female employees to be recruited for various positions within tourism services, particularly tourist guiding. There is currently only one female tourist guide, who requires further training and employment experience. The young generation of Yemeni women have dispelled the stigmas attached to women working in airlines, hotels, restaurants and agencies.

Donor porgrammes

For the purposes of this report stakeholders were contacted and consulted on the issues that affect tourism, either directly or indirectly, and were asked whether they are currently coordinating with the MOT.

The **UNDP published the Economic Diversification Support Programme (EDSP),** endorsing tourism as one of the sectors with the greatest potential to create revenue and employment and reduce the economy's current dependency on the oil industry. The EDSP focused on four promising sectors: agriculture, fisheries, trade and tourism. The UNDP has implemented the EDSP's tourism programme within the MOT, initiating the strategy and development plans. The

UNDP also produced the **Macroeconomic Policies for Growth, Employment and Poverty Reduction in Yemen in 2006**, which highlighted the many ways in which the tourism sector is linked to other high-potential sectors such as agriculture, fisheries, manufacturing and trade.

The report mentioned that, "boosting tourism within the services sector is also an obvious priority, as is exploiting Yemen's potential in providing port facilities for shipping." There is supportive evidence in the report as to the tourism industry's relationship with other economic sectors.

The report recommended that the government "promote the service sectors where it enjoys a potential comparative advantage – for example, in tourism and sea transport." In addition, the government should focus on promotional strategies due to the excessive competition in the region.

USAID designed a project in Yemen as part of the Competitive Agriculture Systems for High Value Crops (CASH) project. This five-year project will help to upgrade the value chains of handicrafts, honey, coffee and horticulture. In the **CASH project, Aid to Artisans (ATA)** is responsible for handicrafts. The foal of CASH is to improve problems in raw material supply, to upgrade design, production and quality, and to link participants to local, regional and export markets. ATA, a division of Creative Learning, is dedicated to developing artisan enterprises by transforming traditional hand skills into fashion-forward craft collections for tourism and export. ATA focuses on preserving local culture by using traditional techniques and ancient motifs for high quality, attractive products that are sellable in the global market place. It is dedicated to helping local artisans benefit from economic opportunities offered by tourism.

ATA's signature approach is based on market demand; upgrading hand-made local products to respond to the latest market trends through product development workshops for artisans led by international and local designers. Local artisan leaders and trainers are formed on the state-of-the-art business training modules of ATA's Market Readiness Programme, tailored to local needs. Linakges are promoted between artisans and their products with the target market through attractive store design, display and merchandising techniques, improved sales skills, and participation in tourism events, trade shows, exportation and personal introductions to buyers.

Emphasis is made on "training of trainers", so that new approaches can be disseminated widely by local trainees who are deeply embedded in the local communities. ATA seeks to meet the needs of vulnerable populations, particularly women and youth, and to encourage women artisans to earn greater income and use that income to benefit their families. Over the last 35 years ATA has developed craft businesses in more than 110 countries and most are owned and operated by women. The project could have a substantial impact on the craft industry, which is strongly linked to tourism.

The **International Finance Corporation (IFC)** was involved with tourism during 2009 and 2010, but activities were halted due to security issues and instability. The IFC intends to be involved in Yemen's tourism sector again in the future.

In 2000, the **German Federal Enterprise for International Cooperation (GIZ)** (previously known as GTZ) coordinated with the German Development Bank, the German Antiquities Institute, the Centre for International Immigration, the Social Fund for Development, local authorities and what was then the Ministry of Culture and Tourism to preserve historical cities, support traditional ways of living and encourage handicraft production. The projects targeted communities, living spaces, irrigation, women's welfare and the infrastructure of the historical cities Shibam-Hadramout and Zabid.

In 2008 the GIZ provided tourist guiding training for members of several communities, which proved to be a successful project. Between the years 2008 and 2011 it also coordinated with the

NAHOTI to provide training in ticketing and hospitality. The GIZ in Yemen is currently functioning under emergency protocol and only its local staff are operational. The German and Yemeni governments discussed a number activities for 2014 and 2015 and agreed on a framework which, due to the security situation, will be confined to the finalization of current projects with no support for implementing new projects. The current projects focus on water, the environment (recycling) and health.

WTO accession

Under WTO accession the level of competition is expected to rise, pushing domestic traders and executives to improve their products and services.

According to the Schedule of Specific Commitments on Services resulting from the negotiations between Yemen and WTO members, there are limitations for tourism on market access and national treatment under mode 4, which is unbound. For four and five star hotels (part of CPC 64110) and restaurants (CPC 74710), only mode 4 applies, corresponding with international standards. The CPC code on the classification registry is explained as "Lodging and related services typically provided by hotels. Related services comprise services normally furnished with and included in the lodging price and include room service, desk service, mail service and bellboy service. Hotels also generally make available other services such as parking, food, beverages, entertainment, swimming pools, banquet, convention and meeting facilities. Resort hotels may provide extensive recreational facilities."[130]

For travel agency and tour operator services code CPC 6421-6422 applies, defined as "Meal serving services with full restaurant service."[131]

The limitations on national treatment concerning foreign investment states that the minimum foreign investment is 50 million Yemeni rial (US$ 232,500) except in certain sectors, including travel agency and tour operator services. Concerning land acquisition, "Non-Yemenis are not allowed to purchase land and properties; however, they can lease land and properties for business purposes in specific sectors." Despite this limitation contradicting the GAOAM's law, the Ministry of Industry and Trade seems to have allowed a margin of space regarding the amendment of laws.

Opportunities are similar for Arab and international investors, but if insecurity persists investment will be limited. However, investors in tourism can focus on projects targeting middle and high-income Yemenis and foreign residents, for example in entertainment parks, events, festivals, cinemas, theatres, zoos, aerial tramways and circuses. Demand for such entertainment is high and currently these social groups travel abroad to Cairo, Dubai, Kuala Lumpur and other cities for leisure purposes.

Conclusions

Security is a fundamental challenge. Activities that will improve both development and the security situation should be prioritized. Infrastructure can either be developed in parallel with resolving political instability or can come at a later stage. It is not a secondary priority. Infrastructure development can sometimes help safeguard against insecurity.

Identifying tourist sites is an essential process due to varying opinions on the features a site must possess in order to be of touristic value. The improvement of these sites will elevate their competitive position in global tourism.

Laws and regulations must be applied by the courts of justice in order to regulate industries. Conducting trials and reaching verdicts are as vital as applying legislations.

If these issues are addressed, the tourism sector will be able to easily attract investment. Developing the institutional framework is a very important and should involve in parallel to imporvements in security and infrastructure. Technical and administrative training should top the list of necessary processes for institutional development.

During 2007 and 2008 the Authority of Immigration would grant entry visas at the port of arrival at a cost of US$ 25. This simple procedure was exceedingly accommodating for many tourists who might have otherwise found it difficult to obtain a visa to Yemen because of living far from a Yemeni embassy or living in a country that does not host a Yemeni embassy or consulate office. The procedure was stopped for security reasons. The MOFA and several ambassadors and consular personnel are making efforts to ease the entry visa process.

Recommendations

These recommendations focus on actions that the government and international organizations and donors could take to support tourism development in Yemen. Some donors believe tourism to be a high-potential sector, but it is not on their current agenda. Now is the time to support the sector and prepare Yemen to host tourists properly.

- With technical and financial support from international organizations and donors, the MOT must work on improving tourism sites, starting with the suggested pilot projects.
- Coinciding with the transition period towards the decentralization system, the MOT, governorate authorities, international organizations and donors should focus on enhancing the performance of staff in the MOT's regional offices and also of tourist guides and drivers.
- Improving infrastructure and rehabilitating and maintaining the areas and roads surrounding tourism sites will facilitate tourist arrivals and encourage investments. These activities must involve the Ministry of Public Works and Highways, the MOT, governorate authorities, international organizations and donors.
- In coordination with the Ministry of Education and MOT, international organizations and donors can work to integrate tourism concepts into the school curriculum and into programmes to eradicate illiteracy.
- The MOT, with the support of the Ministry of Media, international organizations and donors should carry out an awareness-raising campaign about tourism and its importance, targeting different communities.
- The Ministry of Defence, Ministry of Interior and MOT must improve security and stability, with the support of international organizations and donors.
- Improving tourism facilities by establishing rest stops along routes, eco-lodges, guesthouses, handicrafts centres and small motels at land ports can be achieved with coordination between the MOT, YTPB, governorate authorities, international organizations and donors.
- Adventure tourism should be encouraged through the establishment of camping facilities and centres for hiking, trekking, climbing, sand skiing, triathlons, paragliding, scuba diving and skydiving.

- The YTPB should take responsibility for implementing a "Yemen Identity" project that will include a website, photos and videos produced by a professional agency. It must also rehire public relations agencies in Europe, America and the Far East.

Labour Mobility and Diaspora Engagement

Introduction

The lack of decent employment opportunities and a labour market deficient of the principles of equity, security and human dignity remain the biggest challenges Yemen is facing during the current transitional period. These obstacles undermine the political stability and future security of the country. In the next 20 years the demographic pressure on Yemen's labour market is likely to continue and could potentially become more pronounced.

Almost 18 per cent of Yemen's labour force is unemployed and this exceedingly high percentage still does not reflect the shortage of job opportunities in Yemen. The lack of competition results in a dysfunctional job market in a context where the labour market is already very weak.

Net male and female enrolment rates in secondary education were low at 50.1 per cent and 33.7 per cent, respectively, in 2012. Gross enrolment in tertiary education was 6.3 per cent for females and 14.2 per cent for males in 2011. The rate of female and male participation in the labour force in 2013 was low at 26.4 per cent and 72.2 per cent, respectively.[132]

Rapid population growth has increased Yemen's working age population. As a result, in 2010 the working age population (ages 15 – 64) reached 13.2 million, up from 3.5 million in 1975. According to the 2010 child labour survey, most young people have been unemployed for a long period of time and the unemployment rate among young people is three times higher than the adult unemployment rate (34 per cent compared to 11 per cent). There are also significant gender imbalances, with the unemployment rate of young women at 74 per cent compared to 26 per cent for young men. [133]

Long-term unemployment and the accompanying lack of institutional social protection mean that many unemployed young people must rely on support from their parents.

All Yemenis are negatively affected by the country's insecurity and political instability, which has pushed many to migrate in search of work even when they are likely to be met with low wages, limited protection of rights and the absence of migration policies. Reasons such as these led to waves of Yemeni migrants returning from Saudi Arabia during the 1991 Gulf War. After 1991 Yemeni migrants lost the preferential treatment they enjoyed in the Gulf Cooperation Council (GCC) countries during the 1970s and 1980s. The number of Yemeni migrant workers and the volume of remittance diminished consequently.

The issue of how to increase the number of migrants while providing them with sufficient training in order to improve their skills and competitiveness abroad, protecting their rights and supporting them with institutional and financial services is a complex one.

Given its location, Yemen has a long history of migration, immigration and transit. Commonly, Yemenis migrate to:

- Access higher incomes in wealthier countries;
- Seek wider employment opportunities; with more than 70 per cent of Yemen's population living in rural areas with limited access to cultivable land there are very few available jobs and these are often undertaken by women, leaving male workers to seek employment abroad;
- Respond to foreign labour market demand;
- Benefit from social networks; migrants in host countries can provide information, job offers, references and even lend money to their relatives and friends

Characteristics of labour mobility and policy implications

Circularity and informality

Circular migration describes the temporary and often repetitive movement of people from their country of origin (sending country) to a host (receiving) country, typically for the purpose of employment. Circular migration is defined as international, temporary or repeat migration for economic reasons.[134] Scholar Anna Triandafyllidou identified three types of circular migration, classified according to the legality of the movement, the skill level of migrants and the length of stay and return. The three main categories are seasonal legal migrants, circular legal skilled workers and businesspersons, and low skilled workers who are based in the host country but return to their country of origin during periods of unemployment.

The wave of migration from Yemen that began from the 1950s to the Horn of Africa, the GCC countries, the United States (US), the United Kingdom (UK) and other countries is almost always circular and includes skilled and non-skilled workers, professionals and entrepreneurs. For example, Yemeni migrants to Saudi Arabia usually return home every one or two years to stay for one or two months of leave or for longer periods for business or family purposes. They then return to Saudi Arabia for work. Unregulated or "de facto migrants" such as informal workers, seasonal workers, nomads and informal traders also follow circular migration patterns.

Informality

Informality is a prevalent characteristic of Yemeni migration, particularly in recent years. For example, it is common for Yemenis to enter Saudi Arabia irregularly and remain in the country. There are two main reasons for this. Firstly, after the 1991 Gulf War Yemenis lost the preferential treatment in terms of entry and residence in Saudi Arabia they had previously enjoyed. Approximately 800,000 Yemenis returned from Saudi Arabia and Kuwait due to the change in conditions. In addition, Saudi Arabia and other GCC countries have introduced new labour market regulations as a result of security concerns that have restricted immigration. Opportunities for Yemeni migrants have thus been considerably reduced. Secondly, the Government of Yemen (GoY) has not established an effective migration policy to overcome these restrictions. Resultantly, many Yemenis have chosen to enter and work in Saudi Arabia illegally, thus increasing informal migration rates. The percentage of Yemeni migrants in Saudi Arabia without legal status is estimated at 35 to 40 per cent of total number of Yemeni migrants in the country.[135] Migrant remittance is also often transferred through informal systems. According to statements by migrants, 80 per cent of remittance is transferred via informal channels.

Circular migration is facilitated by the degree of economic integration between sending and receiving countries. High integration between countries leads to greater mobility and circular migration. Integration is a political issue in the sense that leaders can promote it or prevent it.

Dependence on one sole corridor

The path between sending and receiving countries along which migrants and remittance flow is referred to as a corridor. The World Bank and the United Nations Development Programme (UNDP)[136] classify corridors according to the geographic location of the sending and receiving countries on the South and North hemispheres.[137] Yemen-Saudi Arabia is a South-South corridor while Yemen-US is a South-North corridor. Corridors are assessed according to baseline criteria related to size, concentration, region, time period, socio-economic features, culture and politics.

Yemen is a sending and receiving country. It may be seen as a sub-region corridor when it adopts the six-region federal system advocated by the National Dialogue Conference held from 18 March 2013 to 25 January 2014. A migration policy must be developed that takes into account Yemen's regional and socio-economic characteristics, including the fact that migration is predominantly from rural areas. Estimates suggest that 90 per cent of Yemeni migrants originate from rural areas and these areas receive an equivalent percentage of remittance inflows. This pattern is common among countries with limited development. The lack of infrastructure in rural areas means that households areas are liable to bear high costs in funds transfers, which reduces the benefits of remittance and highlights the need for a consolidated migration policy that includes institutions and services.

Yemeni migrants who come from one area often gather in close proximity in host countries and have common cultural practices. Migration policy should take this trend into consideration when developing incentives, outreach and financial services and products for migrants.

Studies on migration stipulate that recent and circular migrants tend to remit more than the long-term emigrants. Circularity also helps reduce the brain drain phenomenon. Cultural and political criteria are significant factors in migration trends. For example, a Yemeni emigrant in a GCC country is more competitive than a Filipino worker with equal skills because the Yemeni shares cultural characteristics with GCC employers and clients. If the Yemeni authorities only took skill levels into consideration, they would underestimate the demand for Yemeni migrants and adversely reduce the development of technical education and vocational training (TEVT). Likewise, Yemen's political stability is more relevant to the GCC than that of Bangladesh. As low remittance inflows have a negative impact on the political stability of Yemen and indirectly on that of Saudi Arabia, Yemeni authorities should persuade Saudi Arabia to limit the deportation of Yemenis compared to that of Bengalis. The Yemen-Saudi border treaty of 1934 and the reconciliation accord of 1970 sponsored by Saudi Arabia between the royalists and the republicans in Yemen ensured preferential treatment for Yemeni workers in Saudi Arabia. The new Yemen-Saudi border treaty of 2000 did not reiterate the privilege. The commitments pledged by Saudi Arabia and other GCC countries to support the current political transition in Yemen could present an opportunity for this privilege to be reinstated.

Yemeni migrants circulate within a limited number of corridors and depend heavily on the Yemen-Saudi Arabia corridor. Figure (22) shows that in 2010, 894,000 migrants out of 1,134,700 migrants (78.8 per cent) were in Saudi Arabia. One of the consequences of such dependence is the impact of the high rates of deportation and return. Between 2012 and 2014, for example, 581,000 Yemenis were deported,[138] which resulted in a considerable decrease in remittance inflows.

Small size of migrant stock

The stock of migrants in 2010 reached 1,134,700, representing 4.7 per cent of the total population.[139] This rate is lower than the 5.3 per cent Middle East and North Africa (MENA) average.[140] Figure (22) shows the stock of migrants in 2010 for the 10 main corridors. The number of migrants as a ratio to the total population has been declining since 1990 with continuous waves of returnees.

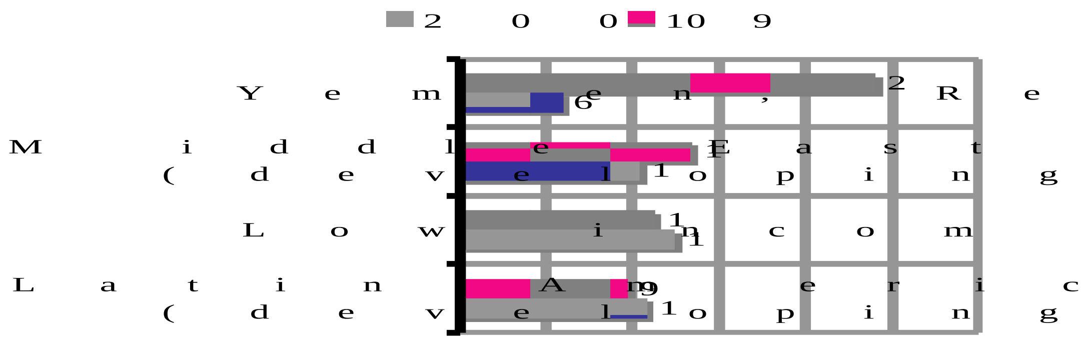
Figure (22): Migrant stock 2010, 10 main corridors.

Source: Ratha and Shaw (2007); updated with 71 destination countries as described in the Migration and Remittances Factbook 2011

Other relevant characteristic of Yemeni migration are the low percentages of female migrants and educated migrants. The lack of female migrants is explained by the fact that the majority of migrants work in Saudi Arabia and in temporary placements, tending to leave their spouses and children in Yemen.

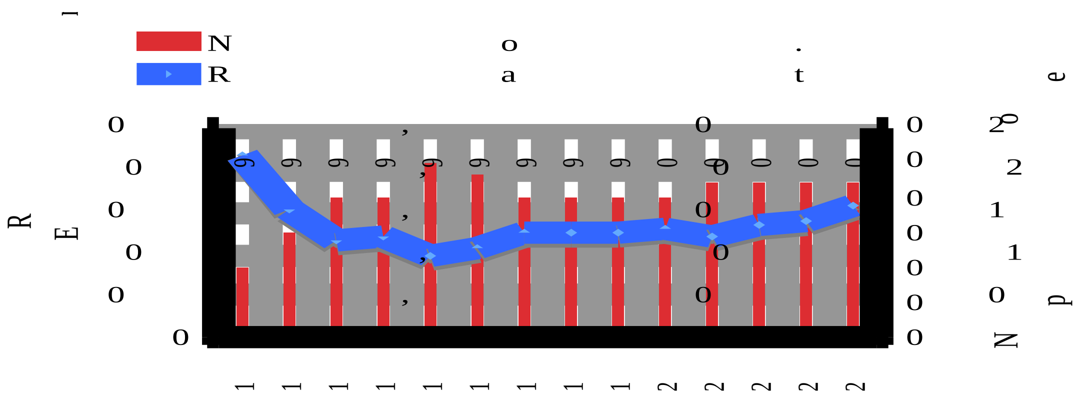
Qualified migrants only accounted for 6 per cent of total migrants in 2010. This compared to 38.6 per cent in Lebanon, 17 per cent in Morocco and 7.2 per cent in the West Bank and Gaza.[141] Figure (23) indicates that the percentage of migrants with tertiary education as a percentage of the total educated population between 1990 and 2000 was lower than that of other MENA countries and other groups of developing countries. The figure for 1990 was higher due to the massive wave of Yemeni returnees from Saudi Arabia, despite the fact that tertiary educated migrants are mainly found in North corridors. It also implies that total educated population of Yemen was small compared to that of other countries.

Figure (23): Migration of tertiary educated (per cent of total tertiary educated population)



Source: World Bank

Figure (24): Emigration of physicians and medical brain drain



Source: Beine et al. (2006)[142]

Figure (24) demonstrates the brain drain of Yemeni physicians. The number of medical professionals who have left the country is very modest compared to other MENA countries, although it represents a higher ratio when the number of physicians per 1,000 population is considered.

Brain drain

Figures (23) and (24) show growing migration among physicians and the tertiary educated. Many scholars consider the departure of skilled personnel as having a negative impact on the development of the country of origin. One response to these concerns is circular migration. Angenendt (2009) asserts that circular migration contributes less to the brain drain phenomenon and its effects than permanent migration does.[143] Circular migration programmes result in closer cooperation between the sending and receiving countries and provides incentives for the former to be more proactive in reducing illegal migration. In addition, migrants bring home institutional and technological innovations that improve the organization of businesses and government institutions and increase material production. Between the 1940s and 1960s, migrants working in the Horn of Africa, Aden (prior to reconciliation) and the UK contributed to political change in Yemen and the development of commerce. More recently the young Diaspora population in the UK, US and other North corridors vividly led media, financial and political campaigns supporting the popular uprising of 2011.

Whatever the case may be in other countries, the argument frequently evoked about migration and the brain drain phenomenon does not apply to Yemen. Factors that scholars use to prove brain drain include: (i) The ethical issue of rich countries exploiting poor countries by attracting the professionals they trained at great cost; (ii) Powerful markets are able to recruit the most talented employees from anywhere in the world; (iii) Rich governments tend to do the same and design policies to recruit the highest achievers; (vi) Poor governments train workers and export them; and (v) People are free to move as they wish. [144]

The GoY cannot prevent brain drain, especially given that it lacks the capacity and structures to retain qualified and talented people. Its priority must then be to promote circular migration and maximize remittance inflows.

Migration trends are influenced by the evolving political, economic, social and environmental factors at local, regional and international levels. High fertility rates, diminishing social services, an unstable government, poor institutional capacities and failed development will increasingly push more unskilled people to migrate to countries where their rights may not be protected. However, demand will only be for skilled migrant workers.

Global demographic, social and economic trends

According to recent data released by the United Nations (UN), there were 232 million migrants (3.2 per cent of the world's population) in 2013, up from 175 million in 2000. Also, South-South migration of 82.3 million (36 per cent) was slightly higher than South-North migration at 81.9 million (35 per cent).[145] A 2012 International Migration Institute (IMI) and Regional Mixed Migration Secretariat (RMMS) report pointed to an increase in the migration capacity and aspirations of people in the Horn of Africa region and Yemen, migrants and forced migrants alike.[146] This means that migration from Yemen to the GCC countries and the Horn of Africa is likely to increase, as these would be the main destinations for Yemenis.

Markets for labour mobility

The GCC Treaty allowed for a peaceful transfer of power. The outcomes of the National Dialogue Conference laid the foundations for a new democratic and decentralized federal state. The GCC and the five permanent members of the Security Council, who are sponsoring the transition process, are providing financial support and technical assistance to Yemen. This support is likely to continue and will assist in the establishment of better governance and the implementation of reforms, including an effective migration policy. A successful transition into the federal system will increase Yemen's chances of integration into the GCC. A labour mobility partnership framework that allows more Yemeni migrants to work in the GCC countries could be the first step towards economic integration.

Success will require political commitment and institutional capacity. Migrants interviewed recently complained of the passive role of the embassy and the consulates in Saudi Arabia in terms of protecting migrants' rights or supporting their associations. In Yemen, the Ministry of Immigration Affairs (MIA) does not coordinate with private recruitment agencies, which, according to those interviewed, manipulate information and offer Saudi work permits to those who can pay higher fees. A Yemeni recruitment agency established in Saudi Arabia complained that private recruitment agencies in Yemen do not respect deadlines and violate requirements and rules. As a result, agencies in Saudi Arabia recruit workers of other nationalities instead.

The GoY has failed to ensure security, enforce laws and prevent the border infiltration of armed groups and smugglers into Saudi Arabia. Saudi authorities reacted unilaterally, which led to the deportation of scores of Yemenis. According to interviewees, deportation is motivated by security and administrative factors and insufficient labour market demand for Yemeni workers.

The GCC countries have shifted their preference, now choosing workers of other nationalities over Arab migrant workers.[147] Also, since 2001 the scope of the war against Al-Qaeda has pushed the GCC countries to tighten entry requirements and enhance security measures at border control points, preventing the entry of seasonal and temporary workers. Saudi Arabia also passed new regulations on the labour market, further restricting the activities of Yemeni migrants. Rising anti-immigrant sentiment in Saudi Arabia[148] became evident with the deportation of Yemeni migrants during 2012 and 2013.[149]

Despite the financial hardships confronting the transition government in Yemen and Saudi Arabia’s commitment to supporting the transition process, the kingdom deported 581,000 Yemenis between June 2013 and October 2014[150] without offering any form of reintegration support. According to Foreign Policy magazine, Saudi Arabia is constructing a 1,100 mile network of sandbags, fences and electronic detection systems along its borders with Yemen while concurrently inhibiting the cross-border movement of Yemeni citizens.[151] Saudi Arabia should instead be working towards integrating Yemen and its labour force into the region's economy more successfully. The GCC and particularly Saudi Arabia could play a crucial role in stabilizing Yemen and the Arabian Peninsula more broadly through increased labour market integration.

Security is a serious concern hindering the admission of Yemeni workers into Saudi Arabia and other GCC countries. Forsythe writes that “there is no centralized security identification system in place in Yemen, so it is hard for GCC employers to have confidence in the competence and transparency of the current clearing and screening process.”[152] For instance, if Yemenis commit crimes inside the GCC and are deported, there is no system in place to record these offences and prevent them returning to the country in question.

GCC governments argue that the management of the labour market is a private business that should be mandated to private recruitment agencies. Yemeni authorities need to adapt to market requirements in terms of providing skills, information and networking. Currently, such capacities are so desperately lacking that Yemen cannot even absorb available resources for training. Qatari Silatech in 2009 initiated an ambitious training pilot project at Sana’a Community College. The project was suspended in 2011 and the GoY has demonstrated no serious efforts to resume it.

Trends in market demand for migrants

The GCC countries have become highly dependent on non-seasonal, low skilled and semi skilled migration and tend to enforce circularity through the rigid and often discriminatory migration regimes and poor working conditions and wages. Under the current system, most recruitment is undertaken by the private sector. Recruitment agencies or manpower companies are tasked with sourcing, screening and securing the best foreign labour.[153] Any commitments now made by GCC governments to address the situation can only have a limited impact and should be negotiated alongside circular migration schemes or arrangements. It is the responsibility of the GoY to enter into negotiations with receiving countries as well as to provide adequate education and vocational training to potential migrants.

Saudi and GCC market demand for Yemeni migrants

Although Saudi Arabia is contending with its own employment challenges, absorbing additional labourers from Yemen will not be detrimental to its economy.[154] On the contrary, Yemeni workers have historically provided an abundant source of low cost labour that has boosted growth in the Saudi private sector. There will always be demand in the GCC markets for labour in the construction, services and agriculture sectors.

Many studies have agreed on the fact that there is a labour shortage in GCC countries, including the Ministry of Planning and International Cooperation (MOPIC),[155] Ministry of Civil Service and Insurance (MCSI), Forsythe, MENA programme papers[156] and the RMMS.[157] Asharq Al-Awsat newspaper cites a labour market specialist defining the lack of specialists and professionals as the most serious challenge to the construction sector.[158] Businessmen confirm that security raids hoping to decrease illegal labour have worsened the labour shortage.

Many professions that are in demand in the GCC labour market[159] present opportunities for Yemeni migrants. In Saudi Arabia the highest percentage of the migrant labour force (38.4 per cent) are employed in the services sector, followed by engineering and assistant engineering professions (34.3 per cent) and skilled labour in agriculture and fisheries (7.7 per cent). In the United Arab Emirates (UAE) the highest percentage (25 per cent) of migrant workers are employed in sales and services, followed by specialists in scientific and technical professions (14.2 per cent), technicians and assistant specialists (13.7 per cent), handicrafts and similar professions (11.3 per cent) and other professions (10.6 per cent).

Saudi Arabia is the primary destination for Yemeni migrants, followed by the UAE. Kuwait, Qatar and Oman are promising potential destinations. During the last few years Saudi Arabia has launched enormous construction projects that have prompted investment in other sectors and increased demand for labour. Spending on the current and planned projects of the Saudi Industrial Zones, 2020 Dubai Expo and the 2022 World Cup in Qatar will exceed US$ 1 trillion.

Demand for unskilled Yemeni labourers in Saudi Arabia and other GCC countries is assured, as GCC nationals will not fill these jobs. Girigis[160] explains that Saudis are not available, qualified or even interested in these jobs, focusing only on securing management positions.

Demand for skilled and unskilled Yemeni workers is also confirmed by the fact that the majority of those who were deported were in employment. Saudi employers have complained about the arbitrary deportations and many tried to legalize the stay of their employees. Also, illegal migrants have been able to find work despite very limited mobility.

Yemeni authorities should seek to establish a labour mobility partnership framework with Saudi Arabia that incorporates agreements and programmes to allow regular entry and stay for temporary, seasonal and occasional workers.

Potential markets in the Horn of Africa

Yemen occupies a strategic position overlooking the Bab Al-Mandeb strait and the gateway to the entire Middle East. This makes Yemen an important partner in the region that deserves to benefit from the dynamic growth and trade, including future opportunities for Yemenis in the Horn of Africa. The 2012 IMI and RMMS report on Global Migration Futures used scenarios to explore possible future migration trends to the Horn of Africa (Uganda, Kenya, Ethiopia, Somaliland, Eritrea, Sudan and Djibouti) and Yemen.[161] Excluding Yemen, these countries have been experiencing economic growth and increased trade. The new wealth from extractive industries combined with significant private, public and foreign investment and the pivotal role of the ports of Djibouti and Mombasa will be important and possibly transformative aspects of the region's economy. The report explores possible scenarios for the development of these countries. The best-case scenario sees an ongoing transformation towards diversified and stable economies, democratic decentralized regimes, political stability and lower levels of socio-economic inequality.

If Yemen succeeds in its ongoing transition towards a democratic and decentralized state, it may evolve with a similar dynamic trend. This development will provide the foundation for expanding trade and migration with the Horn of Africa.

Skills development

Since the major destination of skilled migrants is the GCC market, the first step towards overcoming the challenge of skill development is to assess the current situation and identify the future needs of the GCC market for skilled workers. The greatest demand is for middle-level skills and experience. Skills in demand are in engineering of all categories, administration, logistics and finance, including banking and real estate. There is also an evident demand for skills in technical fields, information technology and client services, including hospitality, communications and transportation. As noted earlier, construction remains the major sector in need of skilled and unskilled workers.

The GCC countries have already established standards for professional education aligned with international standards. The UAE have set up the National Occupational Skills Standards, Qatar established the Skill Academy and Saudi Arabia created the Technical and Vocational Training Corporation. Yemeni institutions should comply with these standards in order to match graduate skills to market needs. Partnering with GCC private or public training institutions and establishing local examination centres will help in this endeavour. A US agency has developed an Occupational Outlook Handbook, which classifies and reviews requirements for finding employment. Equipping job seekers with internationally accredited skills would increase the competitiveness of Yemeni labour in GCC countries and North corridors.

TEVT and higher education systems in Yemen are lagging far behind in terms of providing students with the skills required to find employment. These systems lack political support, institutional capacity and financial resources. The challenges at the levels of inputs and outputs mentioned in the National Strategy for TEVT 2004-2014, the recent Appraisal of Yemen's Workforce Development supported by the United State Agency for International Development (USAID)[162] and the Assessment of the State of Vocational Training in Yemen all identified the following issues:

- Lack of productive cooperation with the private sector at the school level
- Lack of training for instructors
- No supplementary training is offered to trainers once they are in employment
- Outdated curriculum that does not mirror market practices
- No employment services offered to students
- Minimal “soft” skills (employability skills) training offered
- Reluctance of vocational training institute directors to act without the ministry's approval
- Absence of industry standards
- Centres are often functioning with obsolete equipment

Yemeni universities are suffering from the same limitations. Many interventions have been undertaken in order to improve the skills of the Yemeni workforce, but they have always been interrupted or suspended. There are available opportunities to obtain financial support and technical assistance to resume these attempts that should be explored.

Attempted interventions have included: (i) Updating the TEVT strategy; (ii) The ongoing reform of general education, TEVT and university programmes undertaken by the National Council for Education, supported by the World Bank; (iii) The USAID Yemen Workforce Development Appraisal of 2013; and (iv) GCC support such as Saudi Arabia building 19 TEVT institutes and continuing its financial support of training activities in Yemen, Silatech in 2009 launching a training model supported by the Qatari government and the UAE pledging to build 20 institutes.[163]

Diaspora engagement in development and poverty reduction

From the early 1970s until 1990 Yemeni circular migrants financed the first phases of development, particularly in rural areas. Their role has diminished since that time with the declining circular migration. However, Yemen already has an established Diaspora population worldwide, which represents a potential for investment in Yemen if incentives and outreach are provided.

Long-term Diaspora trends

The Diaspora community is engaged in long-term migration, which is to be considered separately from the recent circular migration. The Yemeni Diaspora historically spread with Islam in the 7th century AD. Subsequent waves to Asia, Africa, Europe and the US took place from the 11th century onwards. Migrants to Asia and Africa were mostly traders and shared characteristics with the

Levantine Diasporas (Lebanese, Syrian and Palestinian) between the 17th and early 20th centuries.[164]

More recent waves of migration took place in the late 19th century and the first half of the 20th century, as many groups of Yemenis left to Aden and then to the Horn of Africa. British and French merchant navies recruited Yemenis in the 1890s, as did the British and French armies during World War I and II. Recruited Yemeni migrants later settled in the coastal cities of Liverpool and Cardiff[165] and in Marseille and Algiers. Migrants staying in Aden and the Horn of Africa were circular, given the proximity of these areas to mainland Yemen.

The creation of the state of Israel in 1948 led to the Jewish exodus from Yemen, representing another wave of migration. These migrants settled in Israel, but some remain connected to the Jewish community in Yemen through remittance. A second wave of migration to Britain occurred in the mid-20th century during the post-war industrial boom. It consisted of skilled and unskilled labourers heading to industrial cities such as Birmingham, Sheffield and South Shields.[166]

There is no reliable data on the size of these Diaspora communities. One estimate puts the number of Yemenis in Indonesia at between 4 and 5 million, in addition to 10,000 in Singapore.[167] The Arab community in cosmopolitan Singapore is mostly of Hadrami (Yemeni) origin. The first Hadrami families re-emigrated with their wealth from Indonesia to Singapore at the time of its foundation in 1819.[168] They were already familiar with local customs and enjoyed respect as religious scholars who brought Islam to the Malays.

Hadramis in Singapore were major landowners, with big families having substantial properties held in wakaf (trusts). In recent decades the Hadrami community has lost this status due to government policies and regulations leading to the emergence of new socio-economic classes. However, even if the Hadrami Diaspora is less wealthy than it was in the past, it can contribute to Yemen's development through brain gains and networking rather than by capital assets.

Diaspora support for political change and development

From the early 1940s until late 1960s, Yemeni Diaspora around the world contributed to economic and political changes. The young Diaspora population were equally involved in the Yemeni popular uprising of 2011, demonstrating higher engagement and commitment than the older Diaspora groups, which signals that they will continue to engage in the future. All Yemenis, including the Diaspora, have long been aspiring for political change. The young Diaspora population are well positioned due to free media and global networking and are confident of accomplishing political change, economic participation and strong relations with their home country.[169] The young Yemeni Diaspora population have found a new sense of connection with their Yemeni heritage, which will prompt new engagement and commitment to invest in Yemen.

Diaspora communities are distinguished not by generations but by persistent identities and social and emotional ties to their home countries.[170] Such ties can be translated into concrete development and trade activities. Diaspora communities are potential investors, trade partners and focal points for strengthening bilateral cooperation between government authorities, companies and civil society organizations in Yemen and their host countries. Also, highly skilled migrants and investors induce what is called the "Diaspora effect". For example, a 10 per cent increase in the number of immigrants to the US from any country increases exports to that country by 4.7 per cent and imports by 8.3 per cent. For Canada, these figures are 1.3 per cent for exports and 3.3 per cent for imports.[171] The "Diaspora effect" is vital for international business.

Diaspora communities have the ability to connect with a wide range of potential partners and supporters in both their countries of origin and their countries of destination. These linkages create opportunities for investment, trade and outsourcing, foster strategic partnerships and tap into sources of political and financial capital that can facilitate the transfer of knowledge and technology from developed to developing countries.[172]

With Yemen's reunification in 1990, some of the recent Yemeni Diaspora started returning, believing that reunification would provide a better business environment. These returnees hoped to engage in investment activities but were met with risks and high costs. The country then succumbed to political crisis and the 1994 war. Those who had begun to invest cancelled their engagements and re-expatriated.[173] Similarly, the Yemeni authorities under the current transition period have neglected to engage the Diaspora. The GoY should have invited the young Diaspora population to participate in the National Dialogue Conference and discussions on the country's future development.

Assessment of remittances

Migrant's earnings are essentially divided between consumption and savings. Migrants remit a share of their savings to beneficiaries in their home country to support their living costs, invest in private business or contribute to the development of the local community.

Remittance is motivated by individual and institutional incentives as well as by other economic factors.[174] It is necessary to gain an understanding of these motivations in order to introduce a migration policy that stimulates and increases remittance inflows.

Many migrants send money home simply because they care about the well being of their relatives. Other reasons for remitting include making the migrant eligible for inheritance or other resources in his community of origin and elevating the family's social status. Insurance motives link remittances to informal insurance systems whereby family members in different locations reduce collective risk by sharing a portion of their income.

The importance of remittance for growth and poverty reduction

Economists and governments regard remittance as a valuable source for financing growth and reducing poverty. In Yemen, remittance finances households' basic consumption and hence combats short-term poverty. During the 1970s migrants also contributed to funding projects carried out by the Local Cooperative Associations for Development (LCAD) such as schools, health units, roads and water projects. These projects brought services to rural areas and reduced transportation costs, thus combating long-term poverty. Also, housing construction during that period was largely financed by remittance.

Remittance contributes to fiscal stability via taxes and to social security via support to migrants' families at home. Many migrants also invest in small-scale projects such as village stores or transportation and construction equipment to serve the community. Wealthier migrants invest in land acquisition and underground water pumps for commercial purposes, particularly qat cultivation, thus creating jobs. However, investing remittances in qat cultivation is undesirable, as it contributes to increasing qat consumption, which has undesirable impacts on household budgets, human health and water reserves.

Regarding policy formulation, private investors need guidance and incentives to redirect remittance towards investment and other sustainable products. LCAD were frozen in the early 1980s due to political reasons. To take a dynamic role in development, including through networking with migrants, the GoY must offer firm political and institutional support.

At the macro-level, remittance could generate twice the combined benefits of foreign aid, free trade and debt relief.[175] Remittance is an important source of foreign exchange, in addition to financing imports and investments. On average, remittance accounted for 8.8 per cent of Yemen's GDP over the period 1990 to 2013. Figure (15) depicts its decline from an average of 20 per cent between 1990 and 1999 to 11 per cent from 2000 to 2005 and to 5 per cent from 2006 to 2013.

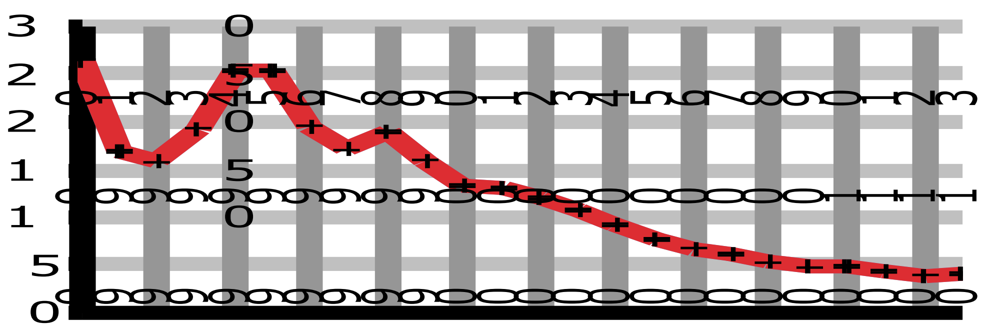
From 1990 to 2013 average remittance inflows were 7.2 times higher than the average net foreign direct investment (FDI) and 2.4 times the average net ODA.[176] Remittance was equivalent to 14.7 per cent of imports of goods, services and primary income between 2005 and 2013. The World Bank's most recent estimates show that recorded remittance globally was equivalent to 6.7 per cent of developing countries' imports and 7.5 per cent of domestic investment.[177]

The negative impact of remittance

Despite the contribution of remittance to the economy, excessive dependence is risky when migrants are concentrated in one corridor such as the case of the Yemen-Saudi Arabia corridor. Dependence leads to vulnerability, countercyclicality and volatility, as well as other undesirable side effects including the impact on the exchange rate.

For Yemen, the massive return and deportation of migrants from Saudi Arabia caused a dramatic drop in revenue and consumption and a rise in poverty, unemployment, inflation, inequality and insecurity and a deterioration of basic social services. Dependence on remittance can severely distort the budgets of receiving countries.[178]

Figure (25) Remittance flows as per cent of GDP



Source: World Bank, World Development Indicators

The absence of a well-developed capital market can create volatility. If the receiving country does not have the capacity to absorb assets resulting from increased remittance inflows, negative effects such as ostentatious consumption or unproductive investment are likely. In the case of inflows decreasing, the economy would fail to compensate consumption and investment needs from internal sources. Similarly, an increase in remittance inflows in times of economic downturn can create countercyclical effects, causing more socio-economic inequalities.[179] Yemeni migrants have adopted an ostentatious consumption pattern from GCC countries that puts pressure on imports and keeps the currency overvalued, thus reducing export activities. This further reinforces social and economic inequalities between receivers and non-receivers of remittances. Countercyclicality can also lead to capital flight.

Financial structure for remittance

The financial structure for remittance in Yemen consists of formal financial institutions (FFIs), quasi-formal financial institutions (QFFIs) and informal financial institutions (IFIs).

FFIs in Yemen that handle remittance include the Central Bank of Yemen, 18 commercial banks (of which two are owned by the government, four are mixed ownership, three are foreign-owned and the rest are privately owned by nationals), 565 private moneychangers licensed by the central bank and 315 post offices in urban centres which offer financial products such as current and savings accounts.[180]

Commercial banks, post offices and moneychangers offer remittance transfer through the traditional mode of cash-to-cash transfer. FFI products and services continue to be limited. Migrants are not encouraged to explore options such as savings accounts and investment opportunities.

In 2008 the Cooperative and Agricultural Credit Bank (CACB) established a joint initiative with the MIA according to which the CACB offers migrants two innovative banking packages (Rahal (Traveller) and Tahwil Sarea (Rapid Remittance). The services include options to transfer remittance via mobile phone, debit card, credit card and online banking, management and currency conversion.[181] Transfers are free of charge or at low fees for migrants holding CACB accounts.[182]

The Yemeni Post Office proposed a "messenger" service for sending remittance in the form of phone credit. It also introduced an online “e-rial” service, which allows the transfer of remittance and the conversion of foreign currencies via the internet. However, these services have not gained popularity.

Migrants tend to prefer not to make transactions through FFIs. Observations and interviews show that around 80 per cent of remittance enters Yemen via informal channels. This trend is in sharp contrast to that of other countries, where informal remittance services are no longer used. Globally, commercial banks are the most widely used institutions for remittance transfers and credit and savings cooperatives are the second most widely used.[183]

Remitting via FFIs is basically limited to the North corridors, Yemen-US, Yemen-UK and others. While money transfer operators may be formal, their receiving partners in Yemen may be informal since most Yemeni migrants do not hold bank accounts and thus remit through a cash-to-cash mode. This category of QFFIs includes:

Al-Kuraimi and Al-Jazeera, formal money transfer operators established in Yemen with branches or corresponding agents in Saudi Arabia. They operate primarily on a cash-to-cash basis, in addition to using debit account-to-account transactions via mobile phones. [184]

Al-Amoudi, Ya'ala and sons, Halwani and sons and Al-Zamel and sons are money transfer operators established in Saudi Arabia with corresponding agents in Yemen. They offer the same services provided by the previous group.

Western Union is an international money transfer operators with branches in Yemen and across the world.

IFIs dominate the remittance market in Yemen for the following reasons:

Until 1995 foreign financial transactions were restricted to the Yemeni Bank for Reconstruction and Development, which used to process about 80 per cent of foreign transactions.[185] Other commercial banks were denied the right to provide this service, thus limiting options and pushing migrants towards informal channels. Since 1988 foreign reserves have diminished and led to a gap between official and black market exchange rates, hence pushing remittance further away from banks towards informal money transfer operators. The central bank at that time imposed restrictions forbidding commercial banks from opening foreign currency accounts.[186]

The informality of Yemeni migration itself and of remittance transfers

IFIs provide easier access and quicker services at lower costs, operate over longer opening hours and are less risky for illegal migrants in host countries than formal options

The following three categories of IFIs intermediate between migrants and their beneficiaries in Yemen:

Commercial intermediaries such as moneychangers and traders who have a contact person in Saudi Arabia and a second in Yemen; the first takes the money from a sender in Saudi Arabia and transmits an order to the contact in Yemen to deliver the money to the beneficiary at agreed fees paid by the sender or the recipient. These intermediaries may include travel and tourism offices.

Individual intermediaries who originate from the same area as the sender or beneficiary who operate in a similar way as a commercial intermediary, but with limited activity. Some also exchange foreign currencies.

Physical transfers, which were more frequent for small amounts of money and before the restrictions were put in place by the Saudi authorities. Through this system migrants send funds to their families with relatives or friends travelling back to Yemen.

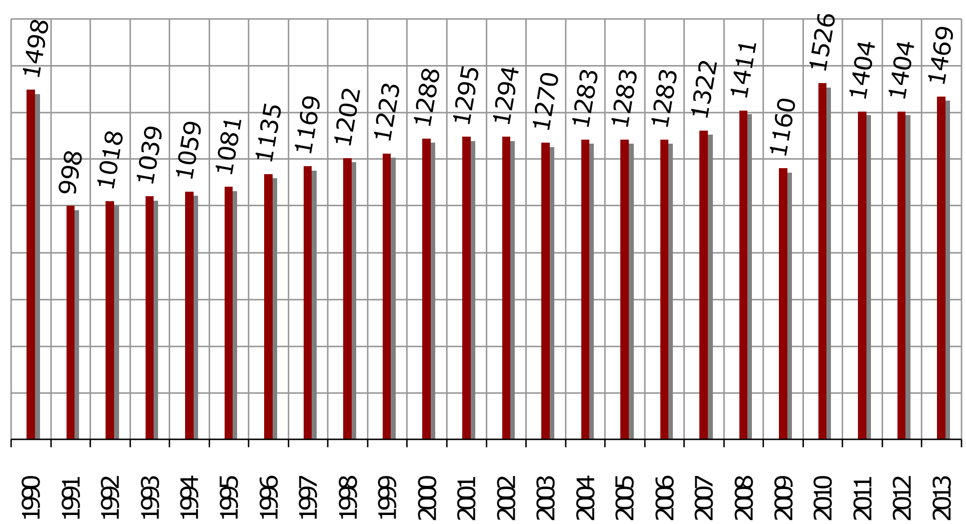
The persistence of IFIs is due to the fact that FFIs in Yemen are inefficient and restrictive. Also, migrants lack financial awareness and incentives. Banks limit the access of migrants to services with the long queues and inconvenient opening hours and requirements that migrants receive approval from their sponsor to hold a bank account and present an identification card that illegal migrants do not possess.[187]

IFIs may incur more costs than formal options through exchange rate errors, high fees and risks. Still, the informal option may remain preferable to beneficiaries in rural areas who wish to avoid travelling to the nearest service point. One of the main challenges associated with the informal remittance system is the inability to track records of transactions. Also, it does not permit client bases to expand so that innovative products and services can be provided along with offers of lower costs and schemes to engage migrants in development. When informal channels are used, the Diaspora cannot enable development and migrants cannot benefit from other opportunities such as investing in banks or in credit unions. In the US and Mexico new technology (prepaid debit cards linked via mobile phone-to-mobile phone transactions) facilitates access to low-cost financial transactions, allowing remittance to be sent directly to family accounts.

Remittance costs

Remittance transferred through informal channels must also be taken into account. When the central bank changed the method of estimating remittance in 2012, the amount more than doubled to US$ 3,351 million compared to US$ 1,404 million in 2011.

Figure (26): Remittance flows to Yemen (US$ million)



Source: World Bank

Development Indicators

There are many estimates on the global volume of remittance flows, with some academics purporting that figures underestimate the true volume by between a third and a quarter.[188] O'Neill argues that global "parallel transfers" might be between two and ten times greater than officially reported flows.

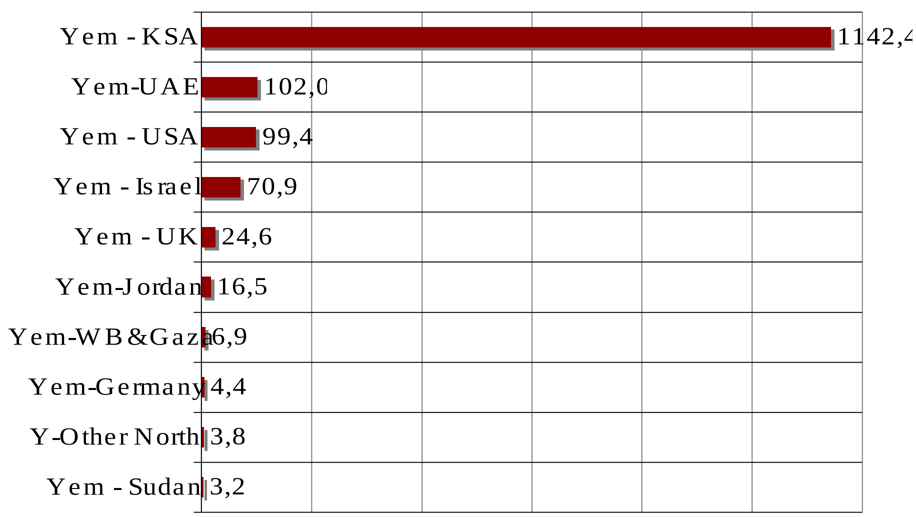
From a growth perspective, remittance flows to Yemen did not follow the international trend. Worldwide flows, including those to high-income countries, are estimated to have grown to US$ 268 billion in 2006.[189] This amount, however, only reflects transfers through official channels.

Figure (27): Comparable growth rates of remittances

Source: Ratha et al. (2014) for MENA and Developing Countries; for Yemen calculated from Figure (26)

Yemen's remittance flows by corridor in 2012 confirm the high level of dependence on Saudi Arabia, which accounted for 77 per cent of total remittance to Yemen.

Figure (28) Remittance flows, 10 main corridors (US$ million)



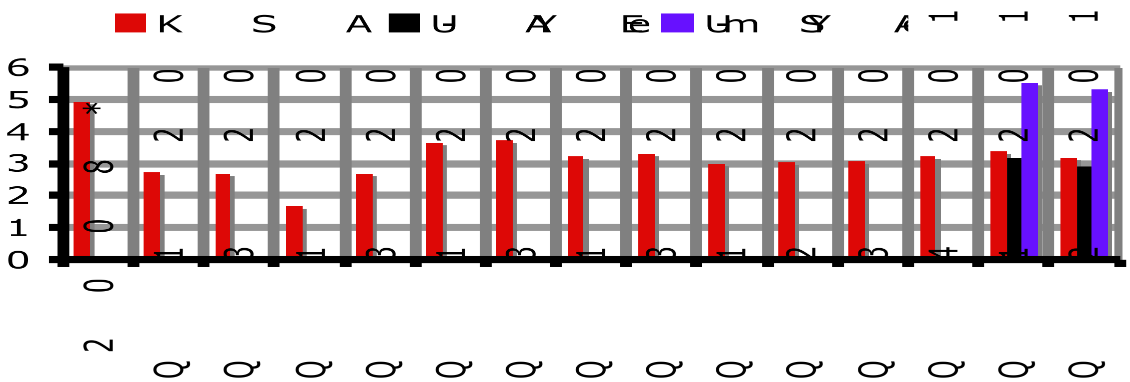
Source: World Bank 'Data and Research Prospects; Bilateral Remittance Estimates for 2010, 2011 and 2012" (Using Migrant Stocks, Host Country Incomes and Origin Country Incomes) http://go.worldbank.org/JITC7NYTT0

Remittance cost by corridor

The Yemen-Saudi Arabia corridor accounts for 78.8 per cent of migrants and 77 per cent of remittance. Around 80 per cent of remittance inflow through this corridor is transferred via informal channels. To send 750 Saudi riyal or US$ 200 via money transfer operators costs 3.2 per cent of the amount in addition to a 0.6 per cent exchange rate margin. The transfer takes between two to 12 hours through Xpress Money, Western Union or MoneyGram transfer services. Sending 1,000 Saudi riyal via informal channels costs 25-30 Saudi riyal for legal residents and around 50 Saudi riyal for illegal residents. According to interviews and a 2014 Economic Observatory for

Studies & Consultancy (EOSC) - Economic and Social Commission for Western Asia (ESCWA) study the cost is progressive, starting at 3 per cent for 1,000 Saudi riyal, 4 per cent for 10,000 Saudi riyal and 5 per cent for 20,000 Saudi riyal.

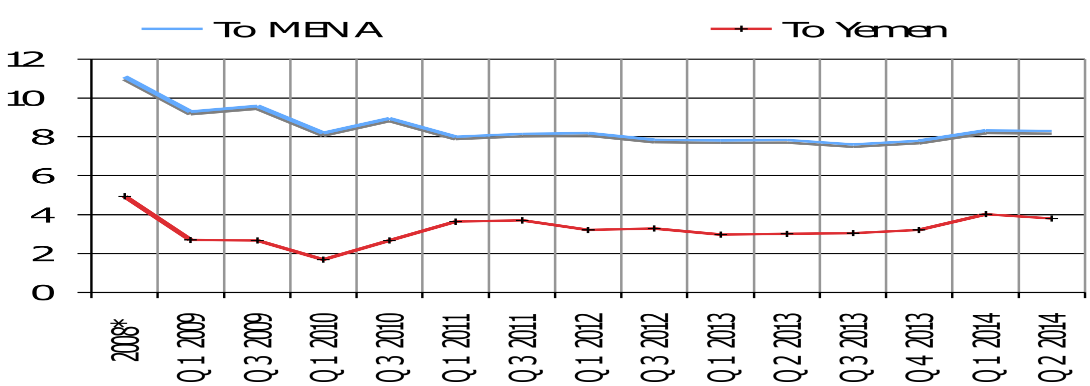
Figure (29) Average cost of sending US$ 200 (per cent)



Source: World Bank (2014) "Remittance price worldwide", issue no. 10,

The average cost of remittance transfer to Yemen is lower than or equal to the lowest cost in the MENA region. However, sometimes conversion errors occur that cause the sender to lose money. Also, costs should take into account other associated costs borne by the beneficiary. Indirect costs of claiming remittance include transportation, food and lodging if the beneficiary resides far from an urban centre, as well as losses due to the temporary closure of a business.

Figure (30) Remittance costs - lowest and highest (average cost of sending US$ 200)



Source: World Bank (2014) "Remittance price worldwide", issue no. 10.

Trends in remittance flow and cost

Globally, remittance is expected to continue to increase as it has over the past few years. Average growth of remittance flows to developing countries in US$ from 2000 to 2013 was 7.2 per cent.[190] This rate is expected to accelerate to an annual average of 8.4 per cent over the next three years.[191]

For Yemen, the remittance trend remains dependent on increasing the stock of migrants and improving their skills as a means to increase their earnings. Yemeni migration has been in decline since 1990, with waves of massive deportation and return from Saudi Arabia. Average growth of remittance flows to Yemen from 1990 to 2013 was 0.35 per cent and reached 1.5 per cent between 2000 and 2013.[192] Remittance flows as a share of GDP has been declining in comparison to other MENA countries and least developed countries (LDCs). The current insecurity and political uncertainty is not stimulating the Diaspora communities to undertake initiatives and transfer a share of their savings or invest in Yemen. This situation is likely to persist in the medium term and probably continue in the longer term.

Skill levels remain low and are not expected to change rapidly to yield increases in migrants' earnings and remittance transfers. The remittance trend is a function of migration policy.

In Yemen cost-related obstacles to transferring remittance through formal channels lie in the underdeveloped financial infrastructure, particularly in rural areas. In the main receiving country of Saudi Arabia, limited competition among operators is a factor in the relatively high costs, as remittance transfers are monopolized by one bank[193] and four money transfer operators.194 Banks also require identification documents and 35 – 40 per cent of Yemeni workers do not have legal residence permits.

Recommendations

The GoY has no strategy or clear policy for migration and resorts to isolated and abrupt interventions at sporadic intervals. In 2000 the GoY made migration a cornerstone of its Strategic Vision 2002-2025,[195] anticipating around US$ 20-30 billion of investments from remittance and Diaspora financial resources. However, 15 years on no concrete results in attracting Diaspora investments have been achieved. In 2010 the MCSI announced a plan to train 225,000 Yemenis over three years for the Saudi and Qatari labour markets. The plan was based on expected demand for Yemeni workers and on the assumption that Saudi Arabia would hire about 10,000 workers a month. Earlier this year the MIA drafted a new by-law regulating the role of public employment offices and private recruitment agencies in sending Yemenis abroad.[196] It is quite ironic that the MIA undertook this initiative at this late stage and that the MCSI launched a training plan instead of the MIA, Ministry of Social Affairs and Labour (MOSAL) or Ministry of Technical Education and Vocational Training (MTEVT). These initiatives will not be successful unless implemented within a comprehensive framework for labour mobility. There are three principles without which a migration policy cannot exist:

- Political commitment that did not exist in the past
- Effective and sustainable security, as insecurity ignites the concerns of receiving countries
- Institutional capacities that use various instruments and measures to promote migration

The goal of promoting migration is to ensure more job opportunities abroad for Yemenis and to increase their earnings and hence remittance flows. The focus should be on reaching a mobility framework agreement with receiving countries to increase circular migration, protect migrants' rights, maximize Diaspora engagement and build institutional capacity related to migration.

Mobility partnership for circular migration

Circular migration programmes should merge diverse policy goals, particularly when they are incorporated in a partnership framework. Mobility partnership implies mutual obligations between sending and receiving countries.[197] According to Ratha et al., "partnerships are composed of a political declaration and an annex of initiatives in four areas: (i) Legal migration and integration; (ii) Border management and measures against illegal migration; (iii) Migration and development, mainly to support Diaspora engagement in local development projects and return migration; and (iv) Asylum and the protection of migrants."[198] Yemen's political leadership should avoid any potential rifts with neighbouring countries and should assure them of border and national security measures. Specifically, this would commit Yemen to protecting Saudi borders from infiltration by armed groups and smuggling activity. The following obligations are applicable to all corridors, but focus on specific obligations regarding the main corridor of Yemen-Saudi Arabia:

- Yemen must readmit migrants without legal status, combat illegal migration and ensure better control of all its borders.
- Receiving countries should consider expanding access to their labour markets, easing procedures for obtaining visas and introducing measures to reduce brain drain by promoting circular and return migration. Specifically, Saudi Arabia should contribute to funding skill development in Yemen and re-integration for migrants returning from regulated programmes.
- Receiving countries should ensure permits for legal entrance and residence for a specific period of time. Saudi Arabia should reconsider according Yemenis preferential treatment, including the relaxation of the Kafala (sponsorship) system, and programmes for seasonal farm and livestock workers.
- Returning persons should be succeeded by new migrants or given specific privileges for re-entry.
- Yemen must develop legal instruments and institutional arrangements to promote circular migration such as providing skilled migrants and professionals, seasonal workers and trainees with training contracts.

Many sending countries such as Mexico, some North African countries and Eastern European countries have developed mobility frameworks with main receiving countries including the US and European countries. Yemen can learn from their experiences and establish similar partnership agreements, starting with the main receiving block of GCC countries.

Temporary and seasonal programmes

A labour mobility framework would enable the following temporary employment programmes for Yemenis in Saudi Arabia and other GCC countries:

- Ramadan-Pilgrimage employment could provide work for thousands of Yemenis during the season of Ramadan and Al-Hajj for four months a year, since more workers in the services sector are required during this season.
- Saudi farms could allow Yemenis living in rural areas, particularly close to Saudi borders, temporary seasonal jobs. Currently there is stiff competition from African migrants. This

programme could involve limiting the mobility of migrant farm workers originating from outside Yemen's rural regions.

- The Qatar 2022 World Cup and Dubai 2020 Expo could offer temporary jobs for Yemenis in construction and services. Programmes such as this provide jobs within the period of construction up until after the event ends.

These short-term and temporary programmes have several advantages. They enable Saudi Arabia, Qatar and the UAE to meet their labour shortages during the peak seasons. Also, the programmes offer migrants the possibility to return seasonally, which will make their decision to return home easier and will limit attempts of illegal entry. Another advantage is that the GoY would find alternative activities to enable workers to spend their time between seasons in productive activities. Complementary arrangements to be aligned with such programmes would include:

- A permanent and regularly updated databank of available applicants and job opportunities to be shared by employers, migrants and recruitment agencies
- Outreach tools and financial education for migrants
- Education and vocational training between employment seasons

Enhancing diaspora engagement

Yemeni emigrants lack organization and are disconnected from national development plans and from local communities. Emigration authorities have not provided support in establishing and developing HTAs or creating networks with local partners to mobilize savings. They have not offered any outreach activities or financial education to migrants. To maximize remittance and engage the Diaspora in development, the following plans should be adopted:

- Supporting the establishment and development of HTAs for migrants
- Reinvigorating LCAD alongside HTAs
- Developing mechanisms for networking and partnership between LCAD and other actors in development and poverty reduction activities in rural areas such as the Social Fund for Development (SFD)
- Establishing outreach mechanisms and programmes to provide financial education to migrants and maximize and mobilize remittance for development
- Supporting networking and partnership between HTAs, LCAD and the SFD

Supporting skills development among migrants

Skills development is the mandate of the MTEVT, with migrants accounting for a small portion of the system's direct beneficiaries. Services for migrants remain limited and coordination between the MIA and MTEVT is required. The MOSAL is responsible for migrant workers, but has no mandate to provide employment opportunities. Similarly, the MIA has not provided any support to HTA establishment or worked to ensure coordination with private recruitment agencies. Nor has it exercised any real control over the treatment of migrants. Overall, none of these authorities ensure the protection of migrants' rights. However, providing employment to migrants and maximizing remittance flows are common objectives of the three ministries. By working separately, as is the case, these ministries will continue to waste resources and mismanage existing capacities. Building the capacity of migration authorities and stakeholders effectively will require the following actions:

- Establishing a new agency distinct from the MOSAL responsible for employment creation, including for migrants
- Merging this new agency with the MIA, MTEVT and the proposed National Secretariat for Youth Employment
- Establishing within this new agency Labour Mobility Programmes and a Labour Market Studies Unit to oversee circular migration and match skill development with labour market needs

Conclusion

Political convergence and institutional capacities are fundamental to migration. The position of the GoY in the 1991 Gulf War led to the return of 800,000 Yemeni migrants. Yemenis then lost the preferential treatment they had been afforded in terms of unrestricted entry and residence in Saudi Arabia. The stock of migrants and their ratio to the total population is small compared to other MENA region and low-income countries. Since 2012 the Saudi authorities have deported approximately 581,000 Yemenis in light of new migration regulations. The GoY did not have the capacity to negotiate for any exceptional treatment for Yemenis nor to provide reintegration support to returnees.

Fewer migrants means lower remittance inflow. Remittance has not shown considerable growth since 1990 and its ratio to GDP declined from 25 per cent in 1990 to only 4.7 per cent in 2013. The number of educated Yemeni migrants is limited in comparison to that of other countries. The MTEVT should exert further efforts towards elevating migrants' competitiveness and their earnings. Brain drain is not a serious problem for Yemen for the time being as the negative implications are still outweighed by the advantages gained through the flow of remittance.

Opportunities for Yemen to increase migration and remittance inflow will depend on its migration policy. With 78.8 per cent of migrants dependent on the Yemen-Saudi Arabia corridor, policy should prioritize political convergence and security. Given that Yemeni migration is mostly circular, programmes should focus on mobility agreements with the GCC countries and on services and products that maximize remittance and minimize remitting costs, including institutional and financial services and outreach to migrants.

Demographic, economic and social trends in Yemen, the region and worldwide indicate an increasing demand for migrant labour. Markets and technology shifts show increasing need for skilled and highly skilled migrants. The political situation in Yemen will depend on the ongoing transition and the implementation of outcomes reached in the National Dialogue Conference. This process has strong political support from donors and should culminate in security, political stability and economic growth; otherwise further security and political issues, as well as regional conflicts and more migration, will arise.

The GoY's capacities are very limited, including in terms of developing and managing migration policy. Due to these constraints, the TEVT and higher education systems are far from being able to provide students with the skills required in the labour market. Educational and training institutions lack political support, human resources and financial resources. The MTEVT does not cooperate with the private sector at the school and training levels and its curriculum is outdated and does not reflect market requirements. Also, it does not offer minimal "soft skills" training and its systems do not meet industry standards.

Regional economic dynamics reveal a potential demand for Yemeni migrants in the GCC and the Horn of Africa countries. Common cultural, economic and political values exist between Yemen and these countries that imply a potential preference for Yemeni migrants.

The GCC could extend work visas and permits to skilled and unskilled Yemeni migrants. All that is required is an effective policy whereby Yemen undertakes serious measures to combat illegal border crossing, smuggling and the activities of armed groups. In return, Saudi authorities could commit through bilateral agreements to offer preferential treatment to Yemeni circular migrants, as was the case until 1990. The GoY must offer political support to the migration policy, build capacity and provide financial resources. A tailored migration policy must be developed that is adapted to the security concerns of the neighbouring Saudi Arabia as the main receiving country.

The outcomes of the National Dialogue Conference and the federal state system will provide solutions to many of the problems surrounding regulations. Challenges of this nature are surmountable if political commitment is assured.

Manufacturing and mining

Introduction

The Government of Yemen (GoY) hopes to further develop domestic manufacturing and mining and expand these sectors' capacity to reduce national poverty, as they are currently under-achieving in this regard. This chapter of the Diagnostic Trade Integration Study (DTIS) presents an analytical report, diagnosing the current condition of the manufacturing and mining sectors, analyzing the institutional issues and providing trade-related recommendations for the GoY. Also, the chapter discusses the key issues impacting the manufacturing and mining sectors, such as planned and existing industrial zones, the implications of federalism, the importance of backward and forward economic linkages, potential for synergies with other sectors, and regulatory and institutional constraints to management.

In the 2003 DTIS the team carried out in depth analyses of six economic sectors, one of which was manufacturing. The report discussed the manufacturing sector in general but did not address the mining industry in Yemen. The study drew on the extensive work conducted by the World Bank through 2001 and 2002. However, the 2003 DTIS report did not provide a comprehensive analysis on the manufacturing sector. The chapter on manufacturing was limited to four pages, with a brief background on manufacturing, very general challenges and also insightful solutions to some obstacles. The objective of this DTIS is to build on the efforts of the previous team and fill in the gaps in the earlier report. Some parts from the 2003 DTIS report have been adapted and included in this chapter.

Background

In many countries manufacturing and mining play an important role in economic development, yet the Yemeni industrial sector's contribution to economic growth has been minimal. The GoY has to take proactive measures to revive industrial activities. In the early 1970s, Yemen experienced considerable economic recovery across the sectors. The government developed plans, policies and programmes to support the industrial sector, encouraging private sector and expatriate investment. Industries began to produce goods for the domestic market and accommodate the growing labour force as a result of the government's policy of protecting local production. This protection came through the imposition of import restrictions and high tariffs on foreign goods, allowing the domestic industrial sector to grow and develop with little competition until the early 1990s. In 1995 the GoY liberalised foreign trade, lifted the restrictions on import licenses and reduced tariffs. Due to the weak structure and low productivity of domestic industry, the sector was unable to sustain growth and development. Increasing production costs and the inability to compete with higher quality and lower cost foreign goods forced many companies to go out of business.

The oil and gas sector is currently the GoY's main source of revenue and has been a major source of foreign exchange.[199] Given that oil reserves are depleting and oil production is declining, the GoY must diversify its sources of revenue. More emphasis should be placed on sectors such as manufacturing and mining (mines and quarrying sites). According to the Central Statistical Organization (CSO), industry in Yemen can be categorized into manufacturing and mining and quarrying. Mining and quarrying comprises oil and gas and other mined and quarried materials such as natural stones.[200]

The Poverty Reduction Strategy Papers 2003-2005 predicted that the industrial sector would be a major source of economic growth. The strategy papers proposed policies including:[201]

- Expanding training programmes
- Removing regulatory constraints
- Providing infrastructure
- Supporting food manufacturing and garments/textiles products in entering foreign markets
- Adhering to specifications and quality standards

According to the Central Bank of Yemen, at constant market prices, the manufacturing sector registered a growth rate of 7.2 per cent in 2012, compared to a decline of 13.5 per cent in 2011, resulting in an increase in its contribution to gross domestic product (GDP) from 5.4 per cent in 2011 to 5.6 per cent in 2012.[202] This, however, could be a result of the industry's recovery after the instability during the 2011 uprising in Yemen and not necessarily due to the sector improving. Figure (31) represents the manufacturing sector's contribution to GDP and the GDP growth rate for the period 2008-2012.

Manufacturing establishments are predominantly located in Yemen's main cities. That is, Sana'a (19 per cent), Taiz (14 per cent), Ibb (11 per cent), Hadramout (8 per cent), Al-Hodeidah (7 per cent) and Aden (3 per cent). It is important to note here the low percentage of industrial establishments in the two very strategic port cities of Aden and Al-Hodeidah. The main factor behind these low percentages is the centralized decision-making authority. Most government agencies are located in Sana'a, a factor that has contributed to the weak autonomy of governorates' local authorities. It is expected that federalism will strengthen autonomy and regional authority. Table (41) presents the manufacturing facilities in Yemen by region.[203]

Figure (31): Manufacturing growth rate and GDP contribution. 2008-2012

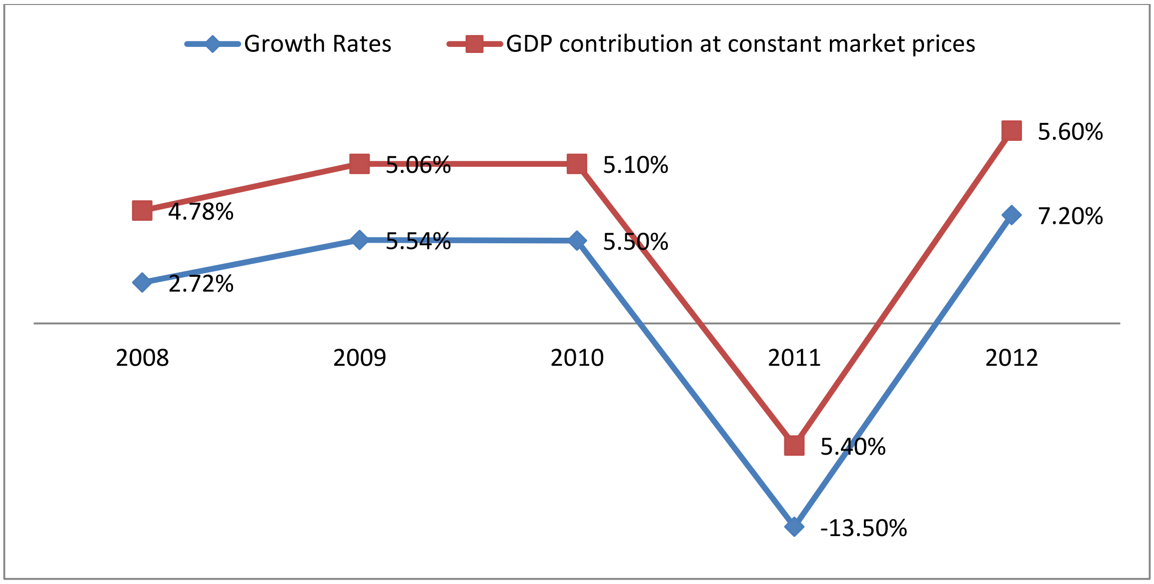


Table (41): Manufacturing enterprises in Yemen by region

Rank		Small	Medium	Large	V. Large	Total	%
1	Capital Secretariat	5,843	1,239	324	91	7,497	19%
2	Taiz	4,830	443	111	1	5,385	14%
3	Ibb	4,085	198	36	3	4,322	11%
4	Hadramout	2,665	301	85	3	3,054	8%
5	Al-Hodeidah	1,962	527	130	4	2,623	7%
6	Dhamar	2,653	119	22	14	2,808	7%
7	Amran	1,330	63	8	-	1,401	4%
8	Al-Baida	931	59	231	46	1,267	3%
9	Hajja	937	72	22	36	1,067	3%
10	Shabwah	1,009	83	19	37	1,148	3%
11	Sa'adah	1,272	68	13	2	1,355	3%
12	Sana'a	1,043	35	12	7	1,097	3%
13	Aden	919	289	87	1	1,296	3%
14	Laheg	928	60	10	3	1,001	3%
15	Abyan	562	59	10	5	636	2%

16	Al-Dhale	805	53	1	-	859	2%
17	Al-Jawf	291	9	7	42	349	1%
18	Mareb	387	34	9	-	430	1%
19	Al-Mahweet	525	3	7	-	535	1%
20	Al-Mahrah	121	24	17	295	457	1%
21	Reymah	459	3	-	-	462	1%
	Total	33,557	3,741	1,161	590	39,049	100%
	%	85%	10%	3%	2%	100%	

Source: Ministry of Industry and Trade

The 2002 World Bank study on Economic Growth: Sources, Constraints and Potentials[204] noted the following defining characteristics of Yemen's manufacturing sector:

- Small-sized enterprises
- High geographic concentration of industry
- Family and private ownership
- A low ratio of value added to inputs and self-financing of investment and activities

In 2001 the total number of manufacturing and mining establishments reached almost 43,500. As classified by the CSO, of these enterprises 0.6 per cent are establishments with more than 24 workers, 2.1 per cent employ 10-24 workers, 8.8 per cent have 5-9 workers and the remaining 88.5 per cent employ1-4 workers. Table (42) shows that most establishments (almost half) are involved in food processing. Other trades include construction, clothing, woodwork and furniture.[205]

Table (42): Manufacturing and mining activities

International Standard Industrial Classification (ISIC) activity						
	Mining and quarrying	**>24 workers**	**10>24 workers**	**5-9 workers**	**1-4 workers**	**Total**
14	Other mines and quarrying sites	25	52	117	98	292
	Manufacturing					
15	Foodstuffs and non-alcoholic beverages	64	182	940	16,931	18,117
16	Tobacco products	2	7	36	115	160
17	Textiles	1	7	55	646	709

18	Dressmaking and fur dyeing	8	105	372	5,249	5,734
19	Bags, shoes and hides tanning	9	9	9	64	91
20	Wood products, excluding furniture	1	15	242	2,287	2,545
21	Paper and paper products	10	1		2	13
22	Printing, publishing and photocopying	5	38	68	124	235
23	Refined petroleum products	14	19	6		39
24	Chemicals and chemical by-products	14	5		9	28
25	Plastic products	26	17	19	13	75
26	Constructional non-metallic products	46	204	1043	3,234	4,527
27	Manufacture of alkaline metals (basic)	2	1			3
28	Worked metal products	23	168	709	5,367	6,267
29	Machinery and equipment	5	8	4	29	46
31	Electric equipment and appliances	1	3			4
33	Medical equipment and instruments				2	2
34	Manufacture of vehicle engines	1				1
35	Other transport equipment	2			12	14
36	Furniture	3	38	164	1,769	1,974
37	Recycling				5	5
40	Electrical supplies			9	650	659
41	Collection, purification and distribution of water		12	20	1,765	1,797

Source: Industrial Survey 2011

Over 147,500 people are employed in manufacturing in the private and public sectors, mainly in food processing. Very large establishments employ 23.1 per cent, large establishments employ 8.4 per cent, medium-sized establishments employ 18.3 per cent and small establishments employ 50.3 per cent. Small-scale enterprises are a major contributor to the manufacturing and mining sectors as well as to employment. Table (43) depicts important Yemeni industrial sector indicators.

Given Yemen's wealth of natural resources and mineral reserves, the mining and quarrying sector is one of the economy's most promising and untapped resources.[206] The Yemen Geological Survey and Mineral Resources Board (YGSMRB) classifies mining activities into three main categories: metallic minerals, industrial minerals and natural stones. Table (44) presents each category and the corresponding natural resources available in Yemen.

Table (43): Gross output and value-added of the manufacturing sector 2011 (million Yemeni rial)

Firms (by size)	No. of enterprises	Gross output	Value-added	No. of employees	Labour productivity	Value added per employee
Very large	262	787,556	240,542	34,043	23.1	7.1
% of total	0.6	55.3	49.0	23.1		
Large	891	56217	25113	12,406	4.4	2.0
% of total	2.1	4.0	5.1	8.4		
Medium	3813	104718	45702	27032	3.9	1.7
% of total	8.8	7.4	9.3	18.3		
Small	38,371	476,084	179,984	74,227	2.4	6.4
% of total	88.5	33.4	36.6	50.3		
Total	43,337 100%	1424,574 100%	491,341 100%	147,708 100%	9.7	3.3

Source: Industrial Survey 2011

Table (44): Main categories of mineral resources in Yemen

Metallic minerals	Industrial minerals	Natural stones
Gold	Natural zeolite	Marble
Zinc	Magnesite	Granite and gabbro
Lead and silver	Dolomite	Carbonate rocks
Copper, nickel and platinum	Pure limestone	Tuff and ignimbrite
Rare earth elements	Rock salt	Basalt
Iron and titanium	Gypsum	Gemstone
Radioactive elements	Pumice	
Tin and tungsten	Heavy metals	
	Feldspar	

	Pure sandstone and quartz	
	Scoria	
	Basalt	
	Clay minerals	

Source: YGSMRB

Yemen boasts 292 mines and quarrying sites (other than oil and gas). The majority of mining and quarrying establishments operate in natural stone quarrying: building stones, decorative materials, marble and granite. Only a handful of companies are exploring and operating in metallic and industrial minerals. The mining and quarrying sector employs almost 3,000 people, constituting nearly 2 per cent of total employment.[207] In spite of popular demand, locally and regionally, the domestic stone industry and market is in need of further development in operations and technology management and marketing activities. According to the World Bank 2009 Yemen - Mineral Sector Review, the natural stones industry is neither well-developed nor well-organized and marketing organization and structure is poor. This view is supported by another study conducted by the Mitsubishi Research Institute Inc. on the Yemeni building stone sector.[208] The World Bank study concluded that there is high potential for gold mining and zinc and nickel-copper-cobalt extraction, and evidence of a range of other marketable metallic minerals. The study suggested that further research is needed to identify possible markets and a deeper understanding of the economics of industrial minerals is essential in order to place the potential in context.[209]

Current policies and strategies

Despite the attention the GoY has focused on manufacturing and mining and its recognition of the sectors' potential contribution to a pro-poor economy, there is still no clear strategic plan for development except for the micro, small and medium-sized enterprise (MSME) strategy, which has not been implemented due to financial and political constraints. The ambitious Strategic Vision 2002-2025 adopted by the government advocated the encouragement of private sector investment in the industrial sector. The strategy also listed a general set of very optimistic policies, priority programmes and projects. The GoY's Transitional Programme for Stabilization and Development 2012-2014[210] laid out specific policies and programmes of action focusing on manufacturing and mining, which for most part have not yet been implemented. These include:

- Completing the legislation on industrial activity, focusing on small and medium-sized enterprises (SMEs)
- Improving the infrastructure and basic facilities required for industrial investment and production
- Developing SMEs, given their significance in reducing poverty and unemployment
- Providing the final outputs of the Comprehensive Industrial Survey 2010
- Drawing up an executive programme to increase cement production and addressing the technical and administrative issues of the General Cement Corporation

- Improving the conditions of the textile corporations in Sana'a and Aden
- Rehabilitating the industrial zones
- Proceeding with mining and drilling operations in promising mineralization areas
- Improving geological, technical and economic know-how on mineral wealth and related investment opportunities and creating a geological database
- Promoting investment opportunities in the mining sector and encouraging domestic and international investments
- Marketing metal and non-metal ores nationally and internationally
- Completing the zinc, lead and silver project in Nehm district, Sana'a

Land-related issues pose major obstacles to investors in manufacturing and mining. With the current high prices, SMEs are often unable to purchase land, and if they are able to afford it they face ownership issues with defaulters. Registering ownership of land can be problematic due to the weak legal and judicial systems and lack of enforcement of the laws protecting property rights. In 2012 Yemen's judicial independence ranked exceedingly poorly at 139th out of 142 countries.[211] Registering land with the registration authority does not protect the owner against occupiers and defaulters in most cases. The limited government protection of property rights, weak commercial courts and lack of law enforcement burden investors and lead to many conflicts over land.[212]

National strategies and policies have been well laid out but not fully implemented. Manufacturing and mining policies need to be further simplified and reformed to encourage private investment. However, the GoY's shortcomings are generally not in planning but in executing policies and strategies. The GoY is stuck in the "paralysis of analysis" stage. Several studies and analyses on manufacturing, mining and other sectors have been conducted by donors and local experts. However, the limited capacity of some government agencies long with public employee demotivation have impeded development. Other factors include political instability and corruption in most government agencies, which hinder the top down dissemination and execution of policies and strategies. According to the Transparency International index 2013, Yemen ranked 167th out of 177 countries and scored 18 out of 100 on the corruption perception index.[213] This is a serious concern for potential investors that must be addressed by the GoY.

Enhancing competitiveness

While its current rates of export activity are low, Yemen possesses potential competitive advantages regionally in food, tobacco, textiles, garments, natural stones, furniture and woodwork production.[214] In 2013 Transparency International ranked Yemen 140th out of 142 countries in the global competitiveness index.[215] However, Yemen can improve its competitiveness if five key issues in manufacturing and mining are addressed: product quality, product price, human resources, marketing strategy and business enabling environment.

Product quality

Quality is a major factor in the local and regional competitiveness ranking of Yemeni manufacturing and mining products, many of which fail to reach high quality standards. For example, cut granite and marble establishments still use old and primitive methods of quarrying, such as dynamite, which affect the quality of the cut and shape of the stones. The Yemeni market is flooded with Saudi, Omani and Emirati products, which are well received by Yemeni consumers and are considered to be of better quality than domestic goods. Interviews with local electrical contractors, for example, showed that they prefer to purchase Saudi electrical wires because of their reliability and durability. One of the main reasons why some small Yemeni manufacturing businesses closed down in the 1990s was their inability to compete with higher quality products in the market once international trade was liberalized. The 2013 United Nations Industrial Development Organization (UNIDO) report cited the quality of products as a high priority factor that must be addressed for manufacturing to grow and maintain success.[216]

In order to increase local demand and the export of Yemeni products to the region and globally, more must be done by local firms and enforcement authorities towards improving product quality. The GoY has made some progress towards ensuring the quality of the inputs and outputs of the production process. One measure was the creation of the Yemen Standardization, Metrology and Quality Control Organization (YSMO). While it has established standards for import and export procedures, the YSMO needs to play a more proactive role in ensuring that Yemeni products meet international quality standards in order to compete with regional and international products. The capacity of the YSMO must be built through employee training, assessment and monitoring. The YSMO's role must be greater than monitoring and controlling local ports. A partnership should be developed between the YSMO and local manufacturers that can work towards improving the quality of Yemeni manufacturing and mining products according to international standards and markets.

Product price

Price is another highly important factor in competiveness, both domestically and internationally. Price affects consumer behaviour and local demand for products, especially in low-income countries like Yemen. Some Yemeni small and medium-sized manufacturing facilities could not sustain themselves in the market, as they could not compete with the lower prices of some international products. ..For example, some Yemeni steel cookware is more expensive than Chinese cookware of similar or better quality. There are two primary reasons behind the higher price of the local products. The first is that the raw materials are not produced locally and have to be imported, usually from China. The second reason is the inefficient operating and management practices of manufacturing facilities. The majority of small and medium-sized manufacturing facilities are owned and operated by family businesses[217] and many managing owners lack awareness of modern approaches to operations and waste management techniques, such as lean manufacturing systems, quality control and improvement techniques. Another example, in terms of mining, is Indian and Chinese granite being cheaper than Yemeni granite due to those countries' efficient mining and extraction methods. Visits to some local enterprises[218] revealed the high levels of waste in operations and management processes. There is a need for industrial support centres that can provide consulting services to manufacturing and mining facilities. Enterprises require information on how to build management capacity, save on manufacturing and mining operations costs, minimize waste, increase efficiency and minimize unit cost. This can be achieved through encouraging universities, community colleges and vocational training centres to be more proactive in meeting this need. The GoY's weak control over smuggling is another factor affecting prices.

Human resources

Human resources capacity also affects the competitiveness of Yemeni manufacturing and mining products. Yemen has an advantage in terms of the potential number of employees (manpower) yet it has a shortage of skilled and qualified labour. Thus, most Yemeni manufacturers rely heavily on foreigners for highly skilled positions such as maintenance technicians. The Yemeni manufacturing sector, according to an interview with some manufacturers, is in serious need of a qualified labour force. There is a shortage of employees with the technical qualifications needed to operate and maintain manufacturing facilities. This shortage is due to the disparity between the industry's needs and the focus of educational institutions.

The GoY, through the Ministry of Higher Education and Scientific Research (MOHE) and the Ministry of Technical Education and Vocational Training (MTEVT), has to take corrective action to reorient higher and technical education towards employability. Universities, community colleges, technical institutes and vocational training centres must establish links with local enterprises so as to understand the needs of manufacturing and mining industries. Education programmes in Yemen should be designed to produce employable graduates that can be absorbed by the local labour market so that enterprises do not look to foreign employees for skilled labour. This will increase youth employment rates.

Marketing strategy

Despite the efforts of the Ministry of Industry and Trade (MOIT) and the Yemeni Industrialists Association (YAI) in launching the Made in Yemen directory, Yemeni products have poor visibility in local, regional and international markets. Most manufacturers do not develop a marketing strategy and view it as a cost-adding activity rather than a value-adding activity. More emphasis is needed on marketing Yemeni products locally and internationally. The YAI, along with the General Investment Authority (GIA) and the MOIT, should be more proactive in finding creative strategies for marketing Yemeni products. Having a directory of the manufacturing facilities and products is a good start, but more is needed. A dedicated export-oriented agency needs to be established to help increase Yemeni manufacturers' product visibility locally and internationally. The MOIT, through the export department, needs to have a strategic plan to facilitate export activities.

Business enabling environment

Manufacturing and mining facilities require a positive business environment in order to attain higher productivity and efficiency. The GoY, through the GIA, has placed more emphasis on attracting investment in the manufacturing and mining sectors, but not in sustaining it. Despite the establishment of the GIA as a means to promote investment opportunities and streamline investment procedures, many businessmen and investors still complain about the lengthy and complex processes behind establishing and managing an investment. Industry observers are concerned about the number of government agencies involved in authorizing and licensing manufacturing and mining establishments, and the roles and responsibilities of each government agency. The large number of government agencies involved over-complicates the procedures for establishing a business. In addition, manufacturing and mining facilities face problems with property rights, arbitrary taxes and the Customs Authority. Some observers are still sceptical about the weak implementation of the investment law and limited protection for investments.

The GoY needs to review and reform the policies and regulations surrounding manufacturing and mining. Roles and responsibilities need to be further clarified among regulators and relevant authorities in order to better streamline investment procedures in the industrial sector. Also, the GoY needs to work on reducing the redundancy and conflict among the relevant authorities. Once the roles and responsibilities are defined, capacity building in proper governance is needed so that the manufacturing and mining sectors can be managed effectively and efficiently.

Situational analysis of manufacturing and mining

Yemen is rich with natural resources and has great mineral potential that could contribute significantly to economic growth. However, there are currently only nine domestic and international companies working in mineral exploration and exploitation. The vast majority of existing mining enterprises work in quarrying natural stones. There has been an increase in local and regional demand for natural resources, which should attract more investment to this sector. Accession to the World Trade Organization (WTO) may be of further benefit. The GoY has taken proactive steps to attract more regional and foreign investment. In addition, Yemen is situated close to an international shipping route, which allows for relatively low shipping costs.

However, Yemen is facing many challenges that affect the development and sustainability of manufacturing and mining industries. The main challenge is the country's weak infrastructure (power, roads, water). Small and medium-sized manufacturers and miners have stated that their businesses have suffered greatly from the recent power and fuel shortages. Most have had to rely heavily on generators to solve the issue of continuous power interruption. This has had a considerable impact on the sustainability of manufacturing and mining businesses, small and large; since they require substantial amounts of power to run their operations, the use of generators leads to higher operating costs. Other industries, such as quarrying, depend on heavy machinery and earth movers, and have faced difficulties in securing diesel or gasoline due to fluctuating availability on the market. The GoY announced it would lift the oil subsidies in July 2014, which lead to regular availability of diesel and gasoline on the market at an 80 per cent price increase. It is too early to assess the impact that the lifting of the subsidies will have on manufacturing and mining, but locating fuel is no longer problematic.

Observers are criticizing the complexity of the policies and the weak governance surrounding manufacturing and mining. Despite the existence of the GIA, investors are still complaining about the obstacles they have to overcome for their enterprises to become operational. Problems include ill-defined tax categories, high tariffs and inefficient tax administration, regulatory arbitrariness, high cost of licenses and permits, and corruption.[219] The weak legal and judicial system is another major issue for investors, especially in manufacturing and mining. Manufacturing and mining enterprises' operations are sometimes disrupted by security threats and tribal conflicts, particularly quarrying and mining. This is due to the lack of clear protective laws and regulations concerning land ownership and utilization of natural resources. The World Bank study on mineral potential states that social factors, especially regarding access to tribal lands, must be addressed carefully and, along with the strengthening of government regulatory institutions, resolutions are required for the sector's growth.[220]

Manufacturing and mining industries face difficulties in securing finances for their businesses. In most cases investors have to rely on personal savings or funding. Local banks charge a high interest rate of 22.1 per cent,[221] and demand estates as loan guarantee. This further constrains investment and development in the manufacturing and mining sectors by discouraging SMEs.

Another challenge manufacturers face is in sourcing skilled labour. The GoY has to develop a strategic industrial training plan to enhance manufacturing and mining skill acquisition. This can be accomplished through establishing links between manufacturing and mining enterprises and universities, colleges, technical institutes and vocational training centres. These links are necessary to reorient the output of the education system towards employability. Relationships between industries and educational institutions would also contribute to improving research and development in the sector.

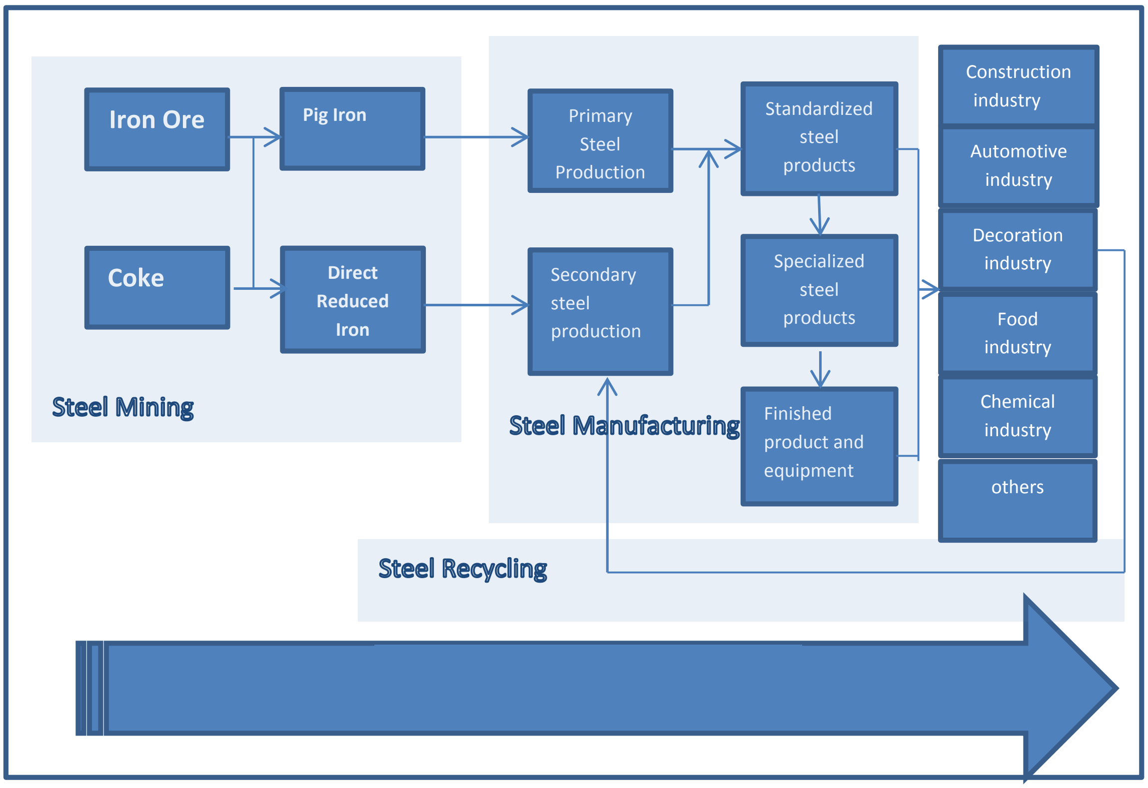
Manufacturing and mining industries also face issues with poor quality control and improvement practices. The majority of local manufacturers and miners rely on local demand, yet local demand is very low, even non-existent for some products, due to the low income of the Yemeni population. Given the low level of quality, most Yemeni products fail to meet international standards and manufacturers and miners thus face difficulties in exporting their products. The GoY's export authorities have made little effort to market Yemeni products regionally and internationally, and the same can be said of local firms. A 2002 UNIDO study, funded by the United Nations Development Programme (UNDP), explored ways in which technical assistance could help Yemeni products comply with the standards and technical regulations of client countries. While compliance is vital, credibility and the acknowledgement of compliance from foreign markets are equally necessary.[222] A National Export Strategy was designed, with support from the European Union (EU), and the first phase was completed in September 2013.[223] This strategy, if coupled with an industrial strategy, would be of great benefit to the manufacturing and mining sectors.

The new Yemeni federal system is likely to have a considerable impact on manufacturing and mining activities. The incapacity of governorate authorities in managing revenue and expenditure has been a primary challenge to development, as all of these decisions were managed centrally. Observers anticipate difficulties in revenue management, irresponsible spending, local corruption, inequality between the regions, and reluctance from the central government to decentralize authority.[224] During interviews with stakeholders, concern was expressed that policy coordination and coherence might decline during the transition from centralized to decentralized governance. However, there was a general consensus among stakeholders that the management capacity of regional authorities will improve exponentially if the central government manages the transition effectively and efficiently. Stakeholders stressed the importance of creating a communication system to connect the central government with the regional authorities as a monitoring and control mechanism for local activities in terms of manufacturing and mining revenue and expenditure.

Stakeholders also contended that concentration of revenue within the regions is an opportunity to attract local investment in manufacturing and mining. This will help to balance the regions' growth by creating forward and backward linkages. A forward linkage is created when investment in a particular project encourages investment in subsequent stages of production. A backward linkage is created when a project encourages investment in facilities that enable the project to succeed.[225] From an industrial perspective, forward and backward linkages comprise all activities from the collection of raw materials all the way to distribution of the final products to consumers.

For example, the steel industry has backward linkages to coal and iron ore mining. It has forward linkages to activities such as canning. The higher the total number of linkages, the better the spinoff effects on the national economy. The importance of the value chain is in the creation of other directly and indirectly linked enterprises, which will increase employment and human development in each region and boost the overall economy. Examples of directly linked establishments are suppliers of machinery, tools, packaging materials, logistics, distributions and marketing. Indirectly linked examples are supporting services such as cleaning services, caterers, insurance companies, housing, consulting services and training centres. Figure (32) illustrates an example of the value chain concept for the steel industry and demonstrates the potential benefit a single industry can bring to a region directly or indirectly.

Figure (32): Steel industry value chain.



In mining the largest ongoing operating expenses are fuel for machinery and equipment, earth moving machinery, utilities, food services and machinery maintenance services. In the short to medium term opportunities for the establishment of domestic enterprises to service mining companies may involve machinery maintenance and training technical personnel in a wide range of capacities, including business services, accounting and safety standards. The same concept could be applied to other industries or sectors, such as agriculture. In the long term, there may be opportunities for high-value agricultural activities like organic fruit and vegetable production and agro-processing industries whose products can meet the demands of mining companies. Mining could also lead the way for ventures in producing new high quality medical materials from local limestone, which is a major source of calcium carbonate.[226]

Linkages between mining and manufacturing industries are very weak in Yemen. From the perspective of the value chain, mining requires inputs like high-tech equipment and consumables such as drill bits and mill balls. Also, the mining outputs from limestone and oil and gas can be used in finished goods such as the materials used in dentistry and chemical products. Many potential linkages between mining and manufacturing are not being explored. There has to be collaboration between the industrial development department at the MOIT and the Yemen Geological Survey and Mineral Resources Board (YGSMRB) to bridge this gap and strengthen linkages between manufacturing and mining.

Dependence on imported raw materials is high, which for some competitive goods contributes to higher production costs. A good example is the plastics industry, where the resins ethylene and propylene, which come from crude oil, are imported from China and India. Manufacturers need to focus on vertical integration in the value chain in order to have more control over their operations. This will also have the indirect benefit of creating opportunities for other tier suppliers and distributors through forward and backward linkages to the production process. Understanding the value chain and its management techniques can help manufacturing and mining firms to overcome some operational inefficiencies.

Yemen has great potentials in natural resource-based manufactured products such as honey, fish, tobacco, leather, fruit and vegetables. Food processing has the potential to create forward and backward linkages, which generate synergy with the agriculture and fisheries sectors. In an economy such as Yemen's, where foreign investment has stalled or is relatively low, linkages can be a good way of stimulating domestic economic activity and import substitution. This is achieved by taking advantage of existing resources. Demand for minerals in the regional market is high and currently increasing, which presents an opportunity the GoY needs to capitalize on. Yemen's rich natural resources and its strategic location between Asia, Africa and Europe will facilitate export to regional and international markets.

To maximize strengths and capitalize on opportunities, the GoY has to pay more attention to the threats local manufacturing and mining are facing. One such threat is the strong competition from regional and international products. Many Saudi, Emirati, Omani and Chinese products are pouring into the local market at cheaper prices and with higher standards of quality. For Yemeni products to compete, the GoY has to provide the necessary business environment for manufacturing and mining enterprises to operate effectively and efficiently. Yemen's domestic security and political instability is another major threat. Investments have a lower chance of sustainability and progress in an unstable environment. The recent political changes and instability threatened several manufacturing and mining investments and some enterprises had to close down their businesses.

Table (45): SWOT analysis of manufacturing and mining

Strengths	Weaknesses
- Large pool of labour/manpower - Proximity to international shipping route - Rich natural resources and high mineral potential - Trade liberalization and WTO accession	- Weak infrastructure - Investors' difficulties in accessing financial resources - Inefficient factory operations management - Firms' low level of quality control - Complexity of laws and policies - Limited efforts to market Yemeni products in international markets

	- Reliance on imported raw materials - Unclear industrial strategy - Lack of research and development centres - Lack of technically skilled labour force - Weak enforcement of legal and judicial systems - Weak governance and management of manufacturing and mining
Opportunities	**Threats**
- Accession to the WTO - Processing zones/industrial zones (with basic services and facilities) - High demand for minerals in the regional market - Strategic geographic location between Asia, Africa and Europe	- High competition from regional and international products - Uncontrolled informal importing of goods (smuggling) - Unstable domestic security and political situation

Industrial zones

Industrial zones constitute an opportunity for further developing manufacturing and mining industries in Yemen. UNIDO highly recommends industrial zones as a means to improve manufacturing and ensure its sustainability. In a least developed country (LDC) like Yemen, infrastructure and services are weak. In light of the challenges Yemen is facing, in order to accelerate improvement and bolster the economic contributions of this sector the GoY needs to focus on rehabilitating existing and establishing new industrial zones in strategic locations in each region. Some experts argue that the country's infrastructure needs to be improved to attract investors. While true, this will take a long time to accomplish given the spread-out nature of the country's population and the lack of development in some regions. It can also be argued that every attempt towards improving the country's overall infrastructure directly or indirectly contributes to the development of manufacturing and mining. Therefore, the rationale behind establishing industrial zones is that in a small, focused area, offering investors the best infrastructure and regulatory administration will be more feasible. It will be easier to clarify and guarantee the security of land titles, one of the main obstacles investors face, within a well-defined area such as an industrial zone. Also, it might be possible to apply reliable regulatory administration within such an area. This is assuming that the government and the administration of the zones are committed to the zones' success. To attract investors, the GoY should consider establishing industrial zones under the Free Zones Law. Under this law, goods would be able to enter free of duty and investors would enjoy a 15 year tax break, renewable for a further 10 years.

According to the MOIT, there is a plan to establish 13 industrial zones, economic zones and industrial clusters across Yemen in addition to Aden's free zone. The current free zone in Aden is confronted by many challenges, including undeveloped land, poorly functioning infrastructure, conflicts of roles and responsibilities between different stakeholders, weak promotion and poor management.[227] The planned industrial and economic zones will be distributed among the six new federal regions. Four industrial and economic zones are planned for Hadramout (Al-Mukalla, Belhaf, Wad'iah and Shahan), three in Aden (Aden, Laheg and Abyan), two in Azzal province (Amran and Dhamar to serve construction materials and light industries), one in Al-Janad, two in

Tihama (Al-Hodeidah and Haradh), and one in Sheba (Mareb). These industrial and economic zones will be tied directly to local authorities according to the Industrial Zones Law no. 79 (2005). The zones are positioned strategically in areas close to international ports and open stretches of land. The MOIT conducted a study on making use of existing clusters of industries in areas like Hiziaz (South Sana'a) and Bany Mater (East Sana'a) when building industrial service areas. This would help to create larger industrial clusters and generate associated spin-off benefits.

Currently, four of the proposed industrial zones in Aden, Al-Hodeidah, Laheg and Hadramout have been allocated land. In terms of infrastructure, there has been no development in any of the zones except for some road works conducted by the Ministry of Public Works and Highways. According to stakeholders, the total amount spent on developing the four industrial zones since the enactment and promulgation of the Industrial Zones Law in 2005 does not exceed US$ 3.5 million. Despite the lack of infrastructure in the industrial zones, there are currently four manufacturing facilities in Al-Hodeidah industrial zone and three in Laheg industrial zone. This demonstrates how important and attractive the land is for investors.

Industrial Zones Law no. 79 (2005), which governs and regulates the establishment of industrial zones, laid out the policies and regulations for industrial zones as well as the rights and responsibilities of investors. However, the terms of contract for private investment in the industrial zones are not yet clear. There is close collaboration between the Ministry of Planning and International Cooperation (MOPIC) and the MOIT to finalize some of the investment contract terms before final approval from the Cabinet.

Despite the law being promulgated in 2005, industrial zones have received little attention from the government. The GoY is obligated by law to establish the industrial zones with proper infrastructure and administration, yet no substantial progress has been made in the past 10 years. This proves the low level of commitment from decision makers and suggests that spending on manufacturing and mining is a low priority for the Ministry of Finance. To accelerate the establishment and progress of industrial zones the MOIT invited the private sector to invest in developing the industrial zones through build-operate-transfer (BOT) agreements. Recently the MOIT drafted contracts with two private sector companies. The draft contracts have been submitted to the Cabinet for approval. The goal of this partnership between the private sector and the government is to develop two processing zones in Aden and Al-Hodeidah with an estimated budget of US$ 67 million and US$ 300 million, respectively. Sound and reliable infrastructure in processing zones would alleviate many of the problems investors face and would provide a positive business enabling environment for manufacturers and miners to operate productively within. The planned processing zones will help to form clusters of value chains in regions and will create opportunities for direct and indirect investments as well as positive competition between regions.

According to stakeholders, investors themselves also present challenges to the development of industrial zones. Investors, in some cases, exaggerate in determining the total area of land required for their project. When an investor applies for an allotment of land in an industrial zone and submits a feasibility study, the application is sent to consultants in Egypt. There is a collaboration agreement between the industrial zones authority in Egypt and the MOIT in Yemen for the provision of technical services in evaluating investor requests. Based on the evaluation by the consultants in Egypt, a decision is made on the land allocation and the location is presented to the investor. In some cases, investors do not accept the allocated land or the location. Also, in some other cases, investors reserve land but no actual investments are made.

Table (46): SWOT analysis of industrial zones

Strengths	Weaknesses
- Availability of land - Appropriate positioning of industrial zones close to international ports - Law regulating industrial zones	- Weak governmental support - Very weak financial support from the government and donors - Understaffed industrial zone department - Lack of technical expertise - Conflict over jurisdiction of land - Very slow infrastructure development progress
Opportunities	**Threats**
- Employment creation - Industrial clustering encourages spin-off benefits - Enhanced market expansion and positive competition between regions - Fostering knowledge sharing - Public-private partnership (BOT)	- National security - Political instability - Regional industrial zones

National manufacturing and mining institutions

There are two main national manufacturing and mining institutions in Yemen: the MOIT, and the YGSMRB, which is part of the Ministry of Oil and Minerals.

Ministry of Industry and trade

The MOIT is responsible for manufacturing development and regulation in accordance with the national economic and social development policies and laws. The ministry is directed by a minister and four deputy ministers, who are responsible for four sectors: industry, internal trade, foreign trade and business services. The industrial sector of the ministry has four departments:

- Department of industrial development and investment
- Department of industrial zones
- Department of industrial control
- Department of small-sized industries

The ministry's industrial sector works closely with donors, government agencies and the private sector to improve manufacturing and attract domestic and international investment. The MOIT collaborated with the Government of Malaysia to develop a strategic plan, which was conducted by SIRIM Malaysia Berhad Company. The strategic plan was sponsored by the Government of Malaysia and was initiated following the signing of a memorandum of understanding between SIRIM Malaysia Berhad and the MOIT in Al-Mukalla in December 2008. Under this project, SIRIM's main objective was to assist Yemen in creating and developing its nationwide long-term Industrial Strategic Plan. The study was completed and the findings and recommendations were presented to the GoY in December 2010. The strategy has not yet been submitted to nor approved by the Cabinet.

The strategic plan focused on capitalizing on existing industries and creating new ones, taking into account other sectors such as agriculture and mining. The study stressed the importance of certain prerequisites for sustainable industrialization:[228]

- Hard infrastructure – roads, railways, airports and seaports and utilities like energy, water and telephone networks
- Soft infrastructure (infostructure) – information and communications facilities and access to broadband and wireless internet
- Education and skills – in the fields of: science, engineering and technology at undergraduate and post-graduate levels
- Technical skills and apprenticeships through vocational and other technical institutes
- Business management, entrepreneurship and marketing skills as well as legal knowledge and contract administration
- Government commitment through policies, budgets, incentives and education
- Private sector entrepreneurship, market access and private funds
- Governance
- National security – most vital for attracting investors
- Technical support services – standards, quality and innovation
- Market and trade facilitation – removing trade barriers
- Finance and banking – providing access to finance can catalyse investments
- Legal framework

The study concluded with seven main strategies for sustaining promising industries, established and new:

- Export-oriented (and domestic consumption)
- MSMEs and entrepreneurship
- Foreign direct investment (FDI) and domestic direct investment (DDI)
- Public-private partnership (PPP)
- Industry clustering
- Economic zones
- Innovation

A parallel effort by the MOIT and the German Agency for Technical Cooperation GmbH (GTZ) funded an industrial modernization study, under the Private Sector Development Programme. In 2010 the study was submitted to the MOIT. Despite the importance of improving the industrial sector in Yemen, the industrial modernization programme has not yet been submitted to or approved by the Cabinet. As a result of the study, a strategic plan was funded by the GTZ that focused on SMEs due to their large role in Yemen's industrial sector. In 2011, a strategic plan was presented to the MOIT with a programme designed to modernize MSMEs. The strategy compiled several existing strategies using the "consensus approach" into one enhanced strategy to develop

MSMEs and indirectly the industrial sector in general. The MSME strategy drew on the industrial modernization programme, the micro finance strategy by the social fund unit of the Small and Micro Enterprise Development Unit, the Medium Enterprise Finance Strategy by the Small Enterprises Development Fund, the SME support strategy by the Small and Micro Enterprise Promotion Service, the vocational training strategy by MTVET, and sector-specific strategies designed by the MOIT, Ministry of Fish Wealth, Ministry of Agriculture and Irrigation and Ministry of Tourism. The MSME strategy sought to transform Yemeni industry from a resource-based sector dominated by very small family businesses and focused on the domestic market, to a competitive sector associated with high added value, solid export orientation and driven by modern enterprises.[229] The MSME strategy was summarized into nine components:

- Development and co-ordination of an institutional framework for the delivery of the MSME strategy
- Improving financial assistance to MSMEs
- Improving MSME policy and regulatory reform
- Development of a culture of innovation and entrepreneurship
- Development of technical and management skills
- Top quality business support
- Start-up support
- Raising the rankings of business statistics
- Sector-specific strategies for the fisheries, agriculture, tourism and industry sectors (i.e. remaining industries and services)

The MSME strategy was approved by the Cabinet in 2012 but without budget allocation. Consequently, a team was formed from all the participating ministries and stakeholders with an implementing administration team at the MOIT. Currently, the strategy has been stalled after it became a burden on the MOIT and other participating ministries due to political instability and the lack of financial support.

The industrial sector of the MOIT has never received substantial donor support, particularly when compared to other line ministries. The bulk of the support the ministry has received, in terms of industry, has been in the form of studies conducted and basic training. In 2002 a study on economic growth in Yemen was conducted by the World Bank and included industrialization. Also in 2002 UNIDO conducted a study on manufacturing on Sustaining Competitiveness in Global Markets, funded by the UNDP. In 2006 the UNDP conducted a study on Macroeconomic Policies for Growth, in which a section was dedicated to obstacles to manufacturing. A 2010 study on industrial modernization was conducted and supported by the GTZ, followed by a strategy for MSMEs in 2011. Another project sponsored by the GTZ was a local survey for small businesses. There is ongoing support by the GTZ for the MOIT in the area of solar system implementation.

According to interviews with the MOIT and stakeholders, the ministry is confronted by the following administrative and management constraints:

- Weak support from the MOPIC in convincing donors of the importance of the industrial sector and its contribution to macroeconomics

- Low personnel capacity in industrial management, development activities and industrial monitoring and control
- Weak motivational programmes and incentives for employees
- Weak administration and coordination between the MOIT, the private sector and donors

Yemeni Geological Survey and Mineral Resources Board

The ministry predominantly responsible for the development and control of quarrying and mining activity is the Ministry of Oil and Minerals, in particular its quarrying and mining regulatory authority, the YGSMRB. The YGSMRB was established by Republican Decree no. 317 (1999). It has eight departments: minerals exploration, mapping/surveying, planning and monitoring, financial, human resources, assessment and promotions, technical services and information. The board is headed by a director and has a board of directors. YGSMRB manages a comprehensive database of geological and exploration data, specialized laboratories and other technical services to enhance field activities, which include:[230]

- Preparing geological and thematic maps
- Implementing geo-chemical and mineral studies
- Analyzing and interpreting aerial magnetic surveys and electro-magnetic maps and surveys
- Exploring mineral resources
- Studying and appraising the environmental impacts of natural disasters and mining projects
- Implementing geotechnical and hydrogeological studies
- Providing information related to earth sciences
- Introducing earth sciences and disseminating mining knowledge to students and researchers through the geology museum

The YGSMRB is the main authority responsible for issuing prospecting permits and exploitation licenses. Under the previous mining law investors applying for prospecting permits had to obtain an exploitation license once resources were located. According to the previous law, the prospecting permit did not guarantee the exploitation permit. Government support for investors in exploiting natural resources was very weak until the issuance of the reformed mining and quarrying law in 2010. In a 2005 study conducted by the Mitsubishi Research Institute Inc. entitled Enhancing Yemen's Export Competitiveness: Diagnostics and Policy Options a chapter was dedicated to the export potential of building stone. The study presented detailed analysis and suggestions for the quarrying and mining sector. The study argued that for the regulatory authority to be able to guarantee licensees' business activities, the authority must possess the power to regulate and control the local authorities' and communities' land possession and use, either on its own or in collaboration with the relevant authorities.[231] A more detailed study on the mining sector was conducted by the World Bank in 2009[232] that also supported the need for investor protection in terms of reforming the mining law and regulations. Based on the international studies and the board's effort, the mining law was reformed and a new mining law was enacted and promulgated in 2010: Law no. 22 (2010). According to interviews with stakeholders, this law is expected to attract investment because it was based on international standards. The newly enacted law laid out the rights and responsibilities of investors and clearly determines the government royalty on net smelter return (3-8 per cent of gross market value depending on the predetermined type of minerals) and income tax (35 per cent of income). Some industry observers still consider the income tax of 35 percent too high when compared to other industries. According to the new law, investors have exclusive exploitation rights.

Like other government agencies, the YGSMRB struggles to secure financial resources. The board currently employs 1,168 technical and administrative employees. This is far higher than the number of employees in the industrial sector of the MOIT.[233] According to a study conducted by the YGSMRB, there is a need to build the technical capacity of the board's engineers and to update the existing laboratories. Other issues include the low salaries and low motivational system for the board's employees.

The YGSMRB has received assistance from donors like the UNDP in mapping activities and studies. The board and the GoY in general benefitted from the World Bank's detailed 2009 study assessing the potential of Yemen's mineral sector.

There are other government agencies involved in the manufacturing and mining sectors directly or indirectly, such as the GIA, which was created to promote and facilitate investment in Yemen. The authority is led by the prime minister, who heads the board of directors. The GIA has an executive chairman who oversees the four main departments: the project sector, investment facilitation sector, investment policy and policy advocacy sector, and HR/finance and development sector. The GIA coordinates and manages collaborations between investment-related government agencies by providing a one stop shop system for investors to facilitate investment processes. The GIA is considered as a supporting entity for the MOIT and YGSMRB for attracting investors. The MOIT and YGSMRB work closely together. There are several other government agencies involved directly or indirectly in managing, promoting and facilitating manufacturing and mining investments in Yemen:

- Ministry of Planning and International Cooperation
- Yemen Standardization Metrology and Quality Control
- Ministry of Social Affairs and Labour
- General Authority of Environmental Protection
- Immigration Authority
- Ministry of Public Works and Highways
- Tax Authority
- Customs Authority

Table (47) below provides a summary of the roles and responsibilities of government agencies with regard to manufacturing and mining support, development and promotion.

Table (47): Government agencies' roles and responsibilities in the industrial sector

Government agency	Manufacturing and mining interests

Ministry of Industry and Trade	Responsible for: - Industrial strategies and development - Encouraging and attracting industrial investments - Improving national products' competiveness and quality - Creating industrial and processing zones - Approving the establishment of industrial investment projects - Establishing and registering investment companies on the trade register - Registering individual projects on the trade register - Modifying data on investment companies or individual projects on the trade register - Approving the establishment of branches of foreign companies in Yemen
Ministry of Planning and International Cooperation	Responsible for: - Preparing research and studies on economic and social development strategies - Preparing and implementing sector-specific and local policies - Prioritizing, monitoring and controlling government investments - Managing and coordinating economic, social, cultural, scientific and artistic programmes funded by various external donors
General Investment Authority	Responsible for: - Providing timely and accurate information on the local investment climate, laws and regulations, and specific venture opportunities - Supporting local and foreign projects and concept development - Arranging site visits, business development tours and introductions to key public and private sector contacts and decision makers - Assisting in the identification of local joint venture partners - Providing connections to local suppliers of inputs and services - Supporting investors in registering start-ups through the internal one stop shop - Providing guidance on relevant investment incentives - Assisting with the acquisition of land - Offering aftercare support to both local and foreign investors - Advocating on behalf of investors for the improvement of the business environment and investment procedures in Yemen
Yemen Standardization, Metrology and Quality Control Organization	Responsible for: - Establishing a national system for standardization and metrology based on modern scientific principles - Supporting the national economy by ensuring high quality of local goods and products through appropriate standard specifications, which in turn upgrades their competitiveness - Enhancing the capacities of exporters of industrial and agricultural products and other locally manufactured goods and products by the provision of data, information and specifications on client countries - Issuing compliance, calibration and quality certificates required for all imported, exported and locally manufactured products

	- Providing technical advice in the fields of metrology, standardization and quality control to manufacturers, importers and exporters
Yemeni Geological Survey and Mineral Resources Board	Responsible for: - Conducting geological surveys and preparing geological and thematic maps - Implementing minerals research and exploration activities and conducting research in relation to the earth sciences - Awarding prospecting, exploration and minerals exploitation licenses - Monitoring the activities of mining companies - Developing and executing promotional plans and programmes - Providing information and technical assistance related to earth sciences to government institutions and investors
Ministry of Social Affairs and Labour	Responsible for: - Implementing all legislation related to labour for Yemeni and non-Yemeni citizens - Issuing and renewing work permits for foreign workers in investment projects - Registering local employees in investment projects and aid projects to ensure that the number of foreigner staff does not outweigh the Yemeni employees - Resolving disputes between project owners and employees; unresolved cases are submitted to an arbitration committee - Periodically investigating enterprises to ensure the implementation of labour laws and regulations
General Authority of Environmental Protection	Responsible for: - Evaluating the suggested locations of projects and giving feedback on environmental requirements relevant to the size and nature of the project - Reviewing and evaluating projects' impacts on the environment, including the use of raw materials - Requesting information about related environmental impacts from project founders - Verifying registered investment projects are committed to the environmental protection standards
Immigration Authority	Responsible for: - Facilitating entry procedures for entrepreneurs and staff in investment projects into Yemeni territories - Allowing foreign labourers in investment projects to bring their families to Yemen and providing them with a valid renewable one year visa
Ministry of Public Works and Highways	Responsible for: - Examining studies and investment project proposals, granting approval as suits the geographic nature of the allocated land and making sure they fulfil technical standards - Supervising project implementation according to technical standards and the construction law - Providing licensing for construction investment projects in coordination with the ministry's regional offices
Tax Authority	Responsible for: - Processing requests from both industrial and service industries for project site visits and registering the starting date of projects' activity

	- Issuing certificates of tax exemptions and renewals as set by the investment law - Coordinating with regional tax offices to facilitate the procedures of issuing tax exemption certificates to investment projects - Coordinating with regional tax offices in collecting income tax from investment projects
Customs Authority	Responsible for: - Participating in the discussion on preliminary lists of fixed asset investment projects submitted by investors - Completing the customs procedures for the release of fixed assets - Coordinating with the Customs Department and its regional offices to implement provisions of the investment law
Yemen Industrialists Association	Responsible for: - Promoting local industry - Liaising with the government on behalf of private sector investors - Advocating on behalf of the manufacturing and mining sectors, raising concerns and issues with the government
Federation of Chambers of Commerce and Industry	Responsible for: - Representing private industrial sector - Advocating on behalf of the private sector and pursuing policy reforms in the interest of the national economy - Coordinating with Arab, regional and international chambers of commerce to exchange information

Source: GIA

Interviews with several national institutions revealed a series of issues and concerns relating to the management of the manufacturing and mining sectors:

- Weak regional authorities that are unable to enforce laws and legislation, leading to an unsafe environment for investors in some regions
- Weak support from local authorities for some emerging industries
- Conflicting roles and responsibilities among involved government agencies, which creates a hostile environment for investors
- Slow processes in some government agencies due to weak governance, understaffing, low salaries, low motivation and the limited capacity of employees
- Weak coordination and synergy between government agencies
- Weak coordination between the government and private sector and weak coordination among agencies representing the private sector
- Limited manufacturing and mining know-how and technical expertise

Conclusion and Recommendations

Manufacturing and mining could be key to diversifying Yemen’s economy, but the GoY has paid little attention to these promising sectors. For manufacturing and mining to progress and contribute to economic growth, serious commitment from the GoY and decision makers is needed. A number of studies and analyses have been conducted by the government and donors; it is now time for these to be translated into action. There is a clear consensus among all the studies that Yemen lacks the proper infrastructure for developing and sustaining manufacturing and mining. However, this is a major issue for all sectors and is among the obvious problems that confront Yemen, along with insecurity. The government has to take corrective actions to remedy these problems. The following recommendations for the improvement of manufacturing and mining will not focus on the prerequisites for sustainable industrialization, since these are understood and of concern to the GoY already. Recommendations will concentrate on what the GoY can do minimize the obstacles to manufacturing and mining activities.

Reactivate the approved MSME strategy

A great amount of work was put into developing the MSME strategy by the GTZ as well as the MOIT in order for it to be approved by the Cabinet. For it to be implemented, a budget has to be allocated by the GoY. The strategy focuses on MSMEs since the Yemeni economy is dominated by micro enterprises. This strategy, if implemented, is expected to increase job creation and create opportunities for linkages with other sectors.

Establish regional industrial support centres

To build entrepreneurs' investment capacity and levels of understanding, industrial support centres are needed. This idea complements the business incubators suggested by the MSME strategy. The industrial support centres should be located across the six new regions so as to create equal investment opportunities; they should be decentralized and tied directly to the regional authorities. The centres will inform industrial modernization and help regions to attract investors. The centres will facilitate the processes for establishing manufacturing and mining facilities for potential investors and will be instrumental in mitigating entrepreneurs' lack of experience. Also, they will serve as promotional and marketing entities for each region, helping to create competition between them. The centres will be catalysts in helping manufacturers and miners export their products regionally and globally by simplifying export procedures, removing administrative constraints and providing export guidance so that full advantage is taken of WTO accession. This will help attract investors to each region and increase employment directly and indirectly. It is very important to employ customer service-oriented staff and enhance good governance.

Accelerate the negotiation process of the management contracts for Al-Hodeidah and Aden's industrial zones

The GoY has to focus more attention on public-private sector partnership in industrial zones investment. The Cabinet should speed up the process of negotiation and finalize the terms of contract for the industrial zones in Al-Hodeidah and Aden. The GoY should encourage this type of investments and mitigate difficulties by facilitating the approval process and providing private investors with protection and security from defaulters and corruption. This is a critical national investment that will boost manufacturing and mining activities. If this investment is protected by the GoY and executed effectively and efficiently, it will attract more investors to other industrial and economic zones.

Secure a fund for rehabilitating existing and establishing new industrial and economic zones

One of the major obstacles to establishing the industrial and economic zones is funding. The GoY has to allocate sufficient financial resources or source funds from donors through the MOPIC to rehabilitate the existing industrial zones in Laheg and Hadramout, as well for the newly planned industrial clusters and economic zones in other regions. The industrial zones are instrumental to improving manufacturing and mining in Yemen due to the country's existing security and infrastructure problems. Industrial zones are expected to provide the necessary environment for manufacturing and mining enterprises to operate productively.

Conduct a capacity assessment of the MOIT

To ensure proper governance and the future development of industrial zones, and the manufacturing and mining sectors in general, a capacity assessment of the MOIT's industrial sector is needed. The capacity assessment should identify the gaps in technical expertise and proper governance in the industrial sector so that it can carry out its role in developing manufacturing in Yemen. Also, a capacity assessment of the MOIT has to result in a plan for specific activities to strengthen (institutional) capacities within the ministry's branch offices. Also, coordination must be strengthened between branch offices and the ministry's central office in Sana'a. The assessment will provide guidance for strengthening coordination between the YGSMRB and the MOIT to encourage and promote linkages between manufacturing and mining.

Update the YGSMRB laboratories and build institutional capacity

The existing studies conducted by the YGSMRB should be consulted when planning to upgrade its old, but well maintained, laboratories and acquire the required new equipment. The board's employs a total of 1,168 people, distributed between Sana'a, Aden and Hadramout. Board employees need to be trained in technical areas related to geological operations.

Strengthen the YSMO's capacity

The YSMO has already received ISO 9001 certification. However, the board needs to update its testing laboratories, especially in the area of electrical and mechanical product testing. The GoY must support the board in attaining ISO 17025 certification, the standard accreditation that testing and calibration laboratories must hold in order to be deemed technically competent. This certification would enable the board to issue internationally accepted test certificates for Yemeni products. In addition, the YSMO must collaborate with local universities, educational institutions and consumers to establish technical standards. The board has to expand its collaborations with enterprises and further educate them on international standards and requirements through seminars and workshops. This will help Yemeni products enter regional and international markets.

Conduct an updated study on technical skill needs in the labour market

To understand the existing gap in the supply of technically skilled labour in the market, a labour market study should be conducted. This study should identify the manufacturing and mining sectors' requirements in terms of skilled and qualified labour. This will help in the development of an industrial training strategy to enhance industrial skill acquisition. It will also help to reorient the education curriculum towards strengthening the employability of students. This can be done by establishing links between local industries and universities, community colleges and vocational and technical institutes. This will further the role of higher and technical education institutes in society and in the development of the economy. Educational institutions' role is critical in establishing industrial centres for excellence, mobilizing research and development, reorienting and building human resources capacity, and training in managing the value chain effectively and efficiently.

Strengthen coordination between the private sector and public sector

Public-private partnership is vital for developing manufacturing and mining. More dialogue and coordination between the private and public sectors needs to take place. The private sector, represented by the Yemeni Industrialist Association and the Federation of Chambers of Commerce and Industry, needs to be more active in reaching a wider base of local investors to strengthen their role in economic growth. Regular meetings, seminars and workshops should to be scheduled between the private sector and the GoY in order to discuss prospects for potential private sector investment and the required government facilitation and protection.

Services

Introduction

In the 1990s and the 2000s the services sector remained a core component of economic activity, despite the large increase in the productive sector's contribution to GDP due to the extraction of oil and gas (making it the highest contributor to GDP between 2001 and 2012, averaging 26.95 per cent). Wholesale and retail commerce was the second highest contributor to GDP, at an average of 15.27 per cent over the same period.

The services sector accounted for an average 43.64 per cent of GDP from 2001 to 2012. Financial services, however, were categorized separately in accordance with the national accounting system, which was updated in 2008.

Table (50) shows the percentage of the contribution of productive services to GDP from 2001 to 2012, demonstrating the sector's economic importance. Disregarding the average contribution of the government services sector, which was 8.94 per cent, the average contribution of the services sector was 34.7 per cent, making the services sector the highest contributor to GDP.

Contribution of the service sector to employment

The labour pool in employment in 2006 was estimated to number around 3.6 million workers, around 2 million of which were in informal industries. 707,000 workers were employed in the public sector while 878,000 workers were in the formalized private sector.[234] These figures are similar to those used in the Third Five-Year Development Plan 2006-2010, which estimated the number of workers in the informal industries at 2.4 million workers, with 1.17 million workers in the formalized industries. The data used in the plans was taken from comprehensive surveys of institutions during the 2004 census. The results of a 2010 national survey on labour showed that the number of self-employed labourers was 1,259,000, accounting for around 30 per cent of employment. The 2004 census, however, put the figure at 885,000 workers, constituting 24.9 per cent of the total number of employment.

When analyzing the capacity of the non-governmental services sector to absorb labour, it is hard to find clear and accurate figures of the number of workers due to the absence of official data, despite the Central Statistics Organization previously having undertaken yearly surveys of the services sector. These surveys were only carried out in urban areas, did not include all aspects of the services sector and relied on samples.

Using data from the 2006 Statistical Yearbook and the latest census (2004), the number of workers in the services sector, including education and health and excluding those in the general administration and defence sectors, reached 1.409 million workers, accounting for 39.6 per cent of the total labour force. According to the results of the 2012 surveys on the organized and unorganized transportation sector, communications, hotels and restaurants, personal services, education, health, real estate activities and construction, the number of workers in these service activities reached 942,754. Unorganized transportation accounted for the largest number, employing 633,952 workers, followed by restaurants with 52,039 workers and personal services with 29,334 workers. Adding the number of workers in retail in markets and stores, the number reaches 1,753,754, or 42.05 per cent of the total number of people employed and 34.58 per cent of the total labour force (according to data from the 2010 child labour survey).

The data demonstrates the importance of the services sector in providing job opportunities considered one of the most urgent concerns confronting Yemen. If the services sector were sufficiently supported it could further enhance its contribution to employment. Throughout the Arab region, the services sector is the largest employer, averaging around 50 per cent of employment, higher than the world average of 42 per cent. In petroleum producing countries average employment in the services sector is around 55 per cent.[235]

The services sector's performance varied from 2001 to 2012. Communications and travel industries, registered a yearly surplus of 12,719.4 million Yemeni rial and 71,053.55 million Yemeni rial, respectively. The travel sector recorded a deficit of 6,851.4 million Yemeni rial in 2001 due to security events (incidents of kidnapping and the attack on the US Destroyer, the USS Cole in Aden Harbour in October 2000), as well as the September 11 events.[236]

Other economic sectors recorded continuous deficits from 2001 to 2012. The transportation sector was the services sector that suffered the most, its deficit accounting for 78.3 per cent of the total deficit of the services budget. The deficit in this sector exceeded the net accounts of services for 2009, 2010 and 2012. The commercial sectors followed with an average deficit of 39.23 per cent, then the insurance and construction sectors with an average deficit of 11.15 per cent for the same period.[237]

Table (48): The percentage contribution of services to GDP, exports and imports (in commercial prices/billion Yemeni rial)

Years/Item	GDP	Contribution of services to GDP (excluding government services) per cent	Exported goods	Exported services	Imported goods	Imported services	Percent of exported goods from GDP	Percent of exported services from GDP	Percent of imported goods from GDP	Percent of imported services from GDP	Balance of services, surplus or deficit
2001	1,896	44.16	0.567	0.029	0.439	0.143	30.0	1.5	23.0	7.5	-0.114
2002	2,151	44.87	0.647	0.048	0.542	0.167	30.0	2.2	25.0	7.8	-0.119
2003	2,487	45.9	0.720	0.067	0.653	0.167	29.0	2.7	26.0	6.7	-0.100
2004	2,886	45.68	0.864	0.068	0.713	0.196	30.0	2.4	25.0	6.8	-0.128
2005	3,647	42.19	1.229	0.82	0.902	0.268	34.0	2.2	25.0	7.3	-0.186
2006	4,495	42.79	1.441	0.108	1.168	0.266	32.0	2.4	26.0	5.9	-0.158
2007	5,100	42.24	1.400	0.144	1.488	0.371	27.0	2.8	29.0	7.3	-0.227
2008	6,072	42.17	1.793	0.241	1.865	0.469	30.0	4.0	31.0	7.7	-0.228
2009	5,773	48.09	1.177	0.248	1.574	0.427	20.0	4.3	27.0	7.4	-0.179
2010*	6,844	45.77	1.678	0.366	1.860	0.473	24.0	5.3	27.0	6.9	-0.107
2011*	6,715	40.19	1.949	0.271	1.826	0.463	29.0	4.0	27.0	6.9	-0.192
2012**	7,037	39.67	1.623	0.252	2.434	0.510	23.0	3.6	35.0	7.2	-0.258
Average		43.64					28.0	3.1	27.0	7.1	-0.166

Source: Statistical Yearbook (2010, 2011 and 2012) and Financial and Monetary Developments, 9th issue and 7th issue
Percentages were calculated by the researcher; * Actual primary figures; ** Estimates

Table (49): Percentages of service imports and exports from the balance of trade from 2001 to 2012.

Years/Item	Product and service exports	Product and service imports	Product exports	Service exports	Product imports	Service imports	Percent of service exports from total exports	Percent of exported services from GDP	Percent of imported goods from GDP	Percent of imported services from GDP	Balance of services, surplus or deficit
2001	596,005	582,290	567,330	28,675	439,189	143,101	4.81	4.92	24.01	24.57	-0.114
2002	695,131	709,042	347,339	47,792	541,755	167,287	6.87	6.74	24.06	23.59	-0.119
2003	787,195	819,740	719,810	67,385	652,556	167,184	8.56	8.22	21.24	20.39	-0.100
2004	932,382	908,710	864,079	68,303	712,964	195,746	7.32	7.51	21.00	21.54	-0.128
2005	1,311,034	1,148,534	1,228,776	82,258	901,788	246,746	6.27	7.16	18.82	21.48	-0.186
2006	1,549,130	1,534,019	1,440,894	108,236	1,168,362	365,657	6.99	7.05	23.60	23.83	-0.158
2007	1,544,316	1,859,117	1,400,497	143,819	1,488,145	370,972	9.31	7.73	24.02	19.95	-0.227
2008	2,033,922	2,333,726	1,793,110	240,812	1,864,727	468,999	11.34	10.32	23.06	20.10	-0.228
2009	1,424,381	1,998,906	1,176,794	247,586	1,574,568	424,338	17.38	12.38	29.80	21.23	-0.179
2010*	2,034,046	2,333,491	1,677,824	356,222	1,860,230	473,261	17.51	15.26	23.26	20.28	-0.107
2011*	2,220,108	2,289,329	1,949,152	270,956	1,826,395	462,934	12.20	11.83	20.85	20.22	-0.192
2012**	1,874,924	2,944,618	1,622,687	252,237	2,434,393	510,225	13.45	8.56	27.21	17.33	-0.258
Average							10.18	9.00	23.41	21.24	-0.166

Source: Statistical Yearbook (2010, 2011 and 2012) and Financial and Monetary Developments, 9th issue and 7th issue
Percentages were calculated by the researcher/* Actual primary figures/ Estimates**

Table (50): GDP of Yemen, the Gulf Cooperation Council (GCC) countries, Jordan and Lebanon, *and percent contributed by services in 2012*

Country/Item	GDP	Percent contributed by the productive services sector				
		Construction and building	Trade, restaurants and hotels	Transportation, communications and storage	Financing, insurance and banks	Total contribution of services sector
Jordan	30,981	4.38	9.36	12.00	4.92	30.66
Emirates	383,799	8.91	12.56	8.01	1.86	31.34
Bahrain	30,777	5.95	6.42	6.28	24.31	42.96
Saudi Arabia	711,049	4.43	8.22	4.66	4.05	21.36
Oman	78,111	4.85	8.14	5.03	1.95	19.97
Qatar	192,402	4.42	5.63	3.34	2.76	16.15
Kuwait	183,238	1.58	3.29	4.72	2.42	12.01
Lebanon	42,900	13.50	30.98	6.81	14.59	65.88
Yemen	32,915	3.58	16.10	10.70	2.82	33.18

Source: Prepared by the researcher using Economic and Social Commission for Western Asia (ESCWA) (2013), Appendix 2/3 pg 333

Trade in services

Table (50) demonstrates the contributions of each country's services sector to its GDP. Services contribute 65.88 per cent of GDP in Lebanon, while the sector only accounts for 12.01 per cent in Kuwait. Regarding which industries make the greatest contributions to GDP, transportation, communications and storage take the top place in Jordan and Kuwait, with 12 per cent and 4.72 per cent, respectively, while in the Emirates, Saudi Arabia, Oman, Qatar, Lebanon and Yemen the trade, restaurants and hotels sector comes first with 12.56 per cent, 8.22 per cent, 8.14 per cent, 5.63 per cent, 30.98 per cent and 16.1 per cent, respectively. In Bahrain the top industries are financing, insurance and banks with 24.32 per cent.

Table (51) compares the relative performance of Yemen's foreign trade with that of the comparator countries.

Table (51): Percentage of service exports and imports from total exported goods and services for Yemen, the GCC countries, Jordan and Lebanon between 2008 and 2013

Country/Item	Percentage of service exports from total exports							Percentage of service imports from total exports						
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**Average**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Average**
Jordan	35.4	38.4	41.1	35.7	39.7	43.2	38.92	31.37	33.82	34.0	33.34	32.97	32.35	32.99
Emirates	3.6	4.7	4.9	4.1	4.5	4.1	4.32	17.14	18.2	18.47	16.71	19.75	17.7	17.99
Bahrain	17.6	23.8	22.6	13.2	17.9	9.2	17.38	9.5	10.95	10.74	7.94	6.77	4.86	8.46
Saudi Arabia	2.8	4.6	4.0	2.95	2.58	2.88	3.3	15.36	23.26	19.48	14.62	12.17	13.35	16.37
Oman	4.5	5.5	4.95	4.3	5.5	5.4	5.01	14.92	18.8	16.42	14.42	16.55	16.61	16.29
Qatar	3.1	3.9	3.4	4.7	7.1	7.0	4.87	9.72	11.8	9.42	12.96	17.73	14.24	12.65
Kuwait	11.6	16.7	11.3	8.4	6.6	4.4	9.83	15.04	1943	18.58	14.41	16.0	16.96	16.74
Lebanon	77.3	74.0	65.0	77.4	87.4	N/A	76.22	58.8	62.0	54.47	50.71	48.85	N/A	54.97
Yemen	9.8	6.4	16.2	11.1	11.88	14.02	11.57	22.59	11.7	24.84	22.2	25.92	22.43	21.61

Source: Prepared by the researcher using World Trade Organization (WTO) statistics database (2013)

Table (51) shows that the average percentage of services exports from total exports varies significantly between the comparator countries. It is very low in Saudi Arabia, the Emirates, Qatar and Oman, and very high in Lebanon where it accounts for three-quarters of total exports. This proves that Lebanon's international trade is predominantly dependant on the export of services. In Jordan it accounts for 38.92 per cent.

Comparing the percentage of service exports and imports from total imports for the comparator countries (Table (52), Lebanon has the highest average rate of service exports and imports from total imports and the Emirates has the lowest. In general, the high percentage of service exports and service imports relative to total imports in Lebanon, Jordan and Bahrain is a result of these countries having a surplus in their services trade balance. This is shown in Table (53). In Yemen and the remaining countries in the group service imports exceeded exports, albeit at a lower rate.

Table (52): Percentage of service imports and exports from total imported goods and services for Yemen, the GCC countries, Jordan and Lebanon from 2008 to 2013.

Country/Item	Percent of service exports from total imports							Percent of service imports from total imports						
	2008	2009	2010	2011	2012	2013	Average	2008	2009	2010	2011	2012	2013	Average
Jordan	22.86	25.48	28.46	22.03	21.43	22.85	23.85	20.25	22.45	23.53	20.62	17.56	17.11	20.25
Emirates	4.1	5.1	4.5	4.9	5.0	5.1	4.78	19.48	19.65	20.33	19.77	21.58	21.81	20.44
Bahrain	23.57	33.24	32.32	21.83	31.03	19.0	26.67	12.74	15.27	14.88	13.1	11.72	10.0	12.95
Saudi Arabia	5.15	5.8	5.97	5.6	5.2	5.1	5.47	28.1	29.0	29.28	27.77	24.28	23.5	26.99
Oman	6.77	7.43	7.79	7.42	7.77	7.13	7.39	22.2	25.53	25.82	25.1	23.32	22.1	24.01
Qatar	6.56	6.3	7.39	11.75	15.81	17.25	10.84	20.25	18.92	20.32	20.75	39.35	41.54	26.84
Kuwait	29.83	34.1	24.83	24.22	17.3	10.64	23.49	38.73	39.66	40.81	41.62	41.77	40.96	40.59
Lebanon	62.62	59.4	51.61	59.37	64.33	N/A	59.47	47.67	49.21	43.22	38.88	35.96	N/A	42.99
Yemen	8.56	11.0	13.86	10.13	8.05	10.07	10.29	19.69	20.0	21.25	20.25	17.57	16.11	19.15

Source: Prepared by the researcher using WTO statistics database (2013)

Table (53) demonstrates the net position of the services trade balance of each comparator country. Lebanon ranks first, achieving an average surplus in the services trade balance of 5.2 per cent from 2008 to 2012. The contribution of productive services to GDP and the relative weight of service trade show that Lebanon's economy predominantly depends on the services sector. Bahrain ranks second, achieving an average surplus of 1.71 per cent, then Jordan with an average surplus of 0.77 per cent from 2008 to 2013.

Yemen and the other GCC countries recorded a deficit from 2008 to 2013. Saudi Arabia had the largest deficit at -40.2 per cent, followed by the Emirates with -38.27 per cent. Yemen recorded the least deficit with -1.5 per cent for the same period. This demonstrates that the productive services in Yemen is a promising sector that, if reformed and developed, will become an invaluable contributor to GDP and foreign trade. It will lead to considerable employment opportunities for new entrants to the labour market and ease Yemen's high unemployment rates.

Table (53): Services trade balance for Yemen, the GCC countries, Jordan and Lebanon from 2008 to 2013

Country/Item	Services trade balance						
	2008	2009	2010	2011	2012	2013	Average
Jordan	0.5	0.5	0.9	0.3	0.9	1.51	0.77
Emirates	- 33.8	27.3 -	30.3 -	36.7 -	47.9 -	53.6 -	- 38.27
Bahrain	1.7	2.0	1.1	1.2	2.8	1.44	1.71
Saudi Arabia	- 40.5	36.6 -	40.6 -	43.9-	39.3 -	40.55-	- 40.24
Oman	- 4.1	3.9 -	4.4 -	5.0 -	5.8 -	6.7 -	- 4.98
Qatar	- 4.8	3.8 -	4.9 -	9.9 -	13.2 -	14.5 -	- 8.51
Kuwait	- 3.4	1.8 -	5.6 -	6.9 -	11.6 -	15.1 -	- 7.4
Lebanon	4.2	2.9	2.6	6.8	9.7	N/A	5.24
Yemen	- 1.3	0.9 -	0.8 -	1.1 -	1.3 -	0.9 -	- 1.05

Source: Prepared by the researcher using WTO statistics database (2013) and Tables (53) and (54)

Analyzing the performance and relative weight of services trade in Yemen shows the need for foreign trade strategies and policies that focus on development and diversifying non-petroleum related goods and services for export. The goal is not only to increase exports, but also to minimize dependence on crude petroleum as the main income source, diversifying the national income while creating more work opportunities to combat unemployment and poverty.

Strengths and weaknesses of the services sector

As mentioned above, Yemen's trade policies were designed predominantly for the export of goods with a heavy emphasis on petroleum, despite the existence of promising sectors that would support the diversifying of exports. A strategic plan is needed to augment these sectors so that they can make effective contributions to economic activity. These sectors include a number of service industries, the development of which would impact the trade balance in general and particularly the services trade balance. The services trade balance has recorded a net deficit in recent years, but Yemen's performance was better than that of some comparator countries. With some planning, Yemen's services trade balance could record a surplus and the services sector could become an engine for development in Yemen. Below are some of the strengths and weaknesses of the services sector:

Strengths

- Yemen's strategic location and its proximity to international shipping lanes is also very important, as international shipping companies consider Aden a useful port located between India and East Africa. It lies four nautical miles from the shipping lane that ties Europe and Asia. Yemen also overlooks the Bab Al-Mandeb strait, which is the main route for ships transporting petroleum. Given the large amount of shipping activity in the vicinity of Yemeni harbours, Yemen has the potential to become a hub for international commerce.

- Yemen has a youthful population that contributes to the large size of the labour force, which was estimated at 5,072,000 according to the 2010 child labour survey.
- Yemen hosts numerous tourist attractions (historical, cultural and natural).
- The Yemeni market is larger than that of comparator countries, which means an increase in demand if the purchasing power of consumers increases (an increase in the average income per capita).
- If developed, the transportation industry has the potential to improve trade between Yemen and the neighbouring countries. This is clear from the indicators, measurements and performance of the transit sector in comparison with Arab and other countries as follows:
  - Yemen ranked 63rd from 155 countries with regards to logistical performance indicators in 2012, scoring 2.89 out of 5. It tied with Oman, which ranked after it, and was 8th among Arab countries.[238]
  - In the ease of doing business indicators measuring the ease of trade across borders Yemen ranked 118th out of 183 countries and was 13th among the Arab countries.[239]
  - In indicators measuring the connection to organized ocean shipping Yemen ranked 77th out of 162 countries (dropping 39 places since the 2004 rankings) and 11th among the Arab countries.[240] The ranking depends on five points, as follows:
    - Number of ships
    - Total capacity of ships
    - Maximum size of ships
    - Number of ocean shipping services
    - Number of companies that organize shipping to and from the country

Despite some service industries enjoying relative success, there are a number of obstacles that stand in the way of the optimal performance of these sectors. Below is a list of challenges to industries with the potential to positively impact the services trade balance. Transportation, tourism, communications, wholesale and retail commerce, construction and building, and the financial sector will be focused on because of the linkages between them.

Weaknesses

Table (54): Summary of the obstacles to service industries

Obstacles relating to infrastructure	Obstacles relating to human resources	Administrative and institutional obstacles	Other obstacles
Transportation sector -Shortcomings in infrastructure and transportation methods and inadequate ships,	- Labour inflation - Decreasing level of labour skills	- The lack of legislation and laws for different modes of transportation that coincide with	- The lack of government financing or other financial resources needed to develop the sector and provide infrastructure,

airplanes, buses and other vehicles - Rising costs due to additional governmental and non-governmental fees on ships entering harbours - International airports require expansion and modernization - Air fleet is limited and needs modernization and new aircraft - There is no strategy to develop infrastructure or any studies to evaluate future demand for services - Resources are wasted; investments in airports are made without careful studies and equipment is purchased at high prices - There is a limited number of buses to transport passengers between governorates and to neighbouring countries - There are no goods vehicles that can transport goods to neighbouring countries	-Low number of qualified workers	relevant international laws	equipment and machinery; the average capital spending on the transportation sector was 1.1 per cent of the total capital spending on infrastructure (public works and highways, electricity, water and environment, transportation and communications) -The absence of financial institutions and private sector investment in the transportation sector - Strong competition from neighbouring countries, especially in harbours and shipping activities - The lack of data, surveys and studies to analyze the size of the sector and its development needs
Tourism sector - Airports do not have the facilities to accommodate a large number of tourists - Limited capacity of hotels in touristic areas and the inadequacy of many existent hotels - Shortcomings in internal transportation services - The small size of travel and tourism companies and agencies and the absence of international agencies - Campaigns to market and advertise tourism are weak - Flights from client countries are insufficient	- There is a lack of trained personnel competent to work in the tourism sector, especially guides, hosts in hotels and restaurants, administrative staff in hotels and tourist establishments and chefs - The lack of competence and quality in tourist services with the increase in prices compared to neighbouring countries, and the lack of necessary services in many touristic areas - Touristic areas are not well maintained, with no concern for general	- Preferential treatment whereby state-owned land is given to individuals who do not develop it - Weak enforcement of laws and legislation relating to investment and the ineffective judiciary and public prosecutor, as well as security agencies not fulfilling their roles in protecting the property of the state - Widespread corruption and burdensome government bureaucracy in investment activities - Delays in issuing visas and slow administrative procedures	- Lack of financing provided to tourism projects and exaggerated prerequisites and interest charged on the financing provided - Negative image of Yemen portrayed in the international media and authorities stating that Yemen is a dangerous destination, especially the US State Department - The low level of awareness among the population and some officials as to the importance of tourism and the need to preserve and develop the sector

for the market and air tickets are prohibitively expensive - The absence of a sea fleet to facilitate ocean trips between Yemen and neighbouring countries, and the lack of adequate welcoming areas and services in Yemeni harbours - Continuous electricity cuts for long periods and no electricity connection in some tourist locations - Insufficient communications services, roads, water and sewage networks in most governorates	cleanliness or presentation - Absence of specialized tourist police - The absence of cultural activities and entertainment	- Security issues have led to a spread of checkpoints in different areas, causing fear and discomfort to tourists - Land-ownership is sometimes claimed by more than one party and this has caused a number of conflicts which are not solved conclusively by the judiciary; the lack of punishments for such crimes deters potential investors	
Finance and insurance sector ***A) Finance*** - The lack of available financial resources in national banks, and their inability to finance long-term projects costing over US$ 5 million or accept deposits exceeding US$ 50 million - The deteriorating financial services offered and the small size of banks, most of which are family owned with some not separating ownership and management - The weak management and high risk, paired with the lack of infrastructure and technology mean the sector cannot gain customer confidence with regards to providing advanced financial services ***B) Insurance*** - Lack of capital in this sector - Most companies are family owned and closed, despite the small amount	- Uncollectable loans are accumulating (doubtful loans), and their percentage of total loans provided by the finance sector is increasing (this caused Citi Bank and the British Bank to close) - The lack of transparency and absence of information and data-sharing between banks to flag issues or unreliable customers	- The lack of controls and methods to prevent crime and the absence of punishments for those who do not repay loans - The judiciary does not fulfil its tasks and its rulings against defrauders are usually not implemented - The financial policy of treasury bills and incentives for banks to purchase bills; they account for a large portion of financial agencies' investments because they are safe and have a high interest rate	- The reputation of Yemen's economy as a weak performer, the weakness of the infrastructure and the incomplete institutional framework for financial activities - The lack of financial awareness of the population, particularly regarding the importance of financial activity -The lack of expansion of banks and their limited coverage of certain areas of the country

of companies in the sector - Small size of the market - Losses in the market - Lack of qualified personnel			
Communications and information systems sector - Communications companies lack infrastructure and are burdened with having to source generators, build roads and sign mutual benefit agreements	- The Government of Yemen (GoY) does not make sufficient use technology in carrying out its operations and ranked last out of 142 countries in government use of information technology and communications and in improving the services provided in 2011 and 2012[241] - The GoY's dismissal of technology results in a lack of awareness about the importance of this sector and also means that the necessary support for its development is not provided	- The GoY's monopoly on international calls and internet services through the Ministry of Communications and Information Technology - The legal obstacle of profit taxes that are set at 50 per cent for mobile phone companies (Law no. 17 (2010))	

Services sector commitments and the WTO

Yemen signed secondary agreements on services with China, the European Union (EU), Australia, Korea, Japan, Canada and the United States (US). Talks for services are held at the same time as secondary talks for trade in goods, and are usually completed and signed at the same time. Yemen made commitments in 11 main sectors and 78 sub-sectors, to varying levels.

Horizontal commitments:

- Yemen is committed to setting the minimum foreign investment at 50 million Yemeni rial, with the exception of certain business services.
- With regards to land, Yemen's commitments have limited the rights of foreigners to renting land and real estate for commercial purposes only.
- Yemeni service providers and services can receive preferential treatment in support and financing, tax incentives and tax exemptions with regards to commercial presence (mode III) and the movement of natural persons (mode IV).
- Regarding the transfer of natural persons, Yemen established a specific body and organized its income and mandate. Foreign workers in any organization cannot account for more than 20 per cent of the total number of workers, exempting the executive

managers and upper management. However, a minimum of three persons will be allowed.

Business services

- Legal services

Yemen made commitments in the legal services sector (legal consultation in foreign and international law only) and placed limitations on lawyers. Foreigners are not permitted to raise suits in courts. Foreigners are also not permitted to practice law except through a law firm licensed to a Yemeni citizen and with permission from the minister of justice, provided that the lawyer's country of origin provides the same treatment to Yemeni nationals.

- Accounting services

Yemen's commitments in the accounting sector allow the commercial presence of accounting firms, in accordance with the law. Foreign accounting companies are required to set a limit on foreign employees at 49 per cent in the framework of a partnership with licensed Yemeni accountants.

- Construction, engineering, comprehensive engineering, urban planning and natural landscape engineering services

Yemen's commitments allow for firms' commercial presence. The Ministry of Industry and Trade (MOIT) organizes these licenses.

- Specialized medical services

Trade across borders and consumption overseas, as well as commercial presence, were permitted. A limitation was placed on national treatment that gives preferential treatment to Yemenis regarding grants to those in need of medical care where access to government facilities is limited.

Computer services and other related services

Trade across borders and consumption overseas, as well as commercial presence, were allowed. There is no law regulating trade in computer services and no targeted strategy for this sector, despite its importance.

Advertising and marketing, administrative consultation and services relating to administrative consultation

Trade across borders, consumption overseas and commercial presence were permitted.

Communications sector

- Postal services

Trade across borders, consumption overseas and commercial presence in the field of transporting messages were allowed. Additional commitments were put in place to ensure that service providers in the private sector receive the same treatment as the Yemeni post in providing quick mail services. Yemen made commitments regarding the "Special Memo Categorizing the Service Commitments of Basic Communication" (S/GBT/W/2/Rev.1) and the "Enforced Limitations on Reaching Markets Regarding the Provision of a Spectrum" (S/GBT/W/3).

- Wireless and wired communication

Trade across borders, consumption overseas and commercial presence in the sector are permitted from 1 January 2015 in certain sub-sectors, with an additional commitment regarding the commitments included in the reference paper attached to the service commitments table (S/GBT/W/2/Rev.1). The most important of these is the establishment of an independent organizational entity for the communications sector.

- Visual and audio services

Trade across borders and consumption overseas were allowed, with a framework of commitments. There are no requirements among these commitments that oblige Yemen to provide a method to showcase or broadcast services that are not provided by the GoY to the people.

Construction and engineering services

Trade across borders and consumption overseas were permitted.

Distribution services

Trade across borders, consumption overseas and the commercial presence of foreigners in the wholesale trade sector were allowed. Retail activities are reserved for Yemenis only. Trade across borders and consumption overseas were allowed in the retail industry.

Educational services

Trade across borders and consumption overseas were allowed for the adult education sector and higher education with special treatment for Yemenis, where government grants or scholarships are only given to students in public education institutions. Trade across borders, consumption overseas and commercial presence were also permitted in other educational services sub-sectors, with the same limitations as above.

A number of foreign universities have a presence in Yemen such as the Lebanese International University. The Ministry of Education organizes primary and secondary education, while the Ministry of Higher Education and Scientific Research is responsible for organizing the higher education sector. These sectors are regulated by Law no. 45 (1992) regarding general education, Law no. 13 (2010) regarding higher education and Law no. 28 (1998) regarding literacy programmes and adult education.

Environmental services

Trade across borders and consumption overseas were allowed for sewage, gas, waste treatment, water treatment and similar services, as well as preserving natural landscapes and limiting noise pollution. Yemen was given a transitional period to establish a commercial presence (mode (III)) when laws and legislations are drafted or three years from the date it joined the WTO.

Financial services

- Insurance and related services

There is a transitional period of three years to allow trade across borders, consumption overseas, and limited commercial presence for life insurance and other types of insurance after commercial presence is allowed for foreign companies. Yemenis can receive preferential treatment. Yemen is not responsible for providing national treatment of trade across borders and consumption overseas. Trade across borders and commercial presence were allowed for re-insurers.

- Banks and other financial services

Certain commercial policies in this field were preserved, as the maximum foreign shares permitted in solidarity banks is 60 per cent while there are also banks in Yemen that are fully foreign owned. A transitional period of five years was set from the WTO accession date to establish branches for licensed international banks and an office to represent foreign banks and perform tasks including taking deposits and other financial transactions.

Social and health services

Trade across borders, consumption overseas and the commercial presence of hospitals with more than 100 beds were allowed with no limits on their markets and employment.

Tourism and travel services

Trade across borders, consumption overseas and the commercial presence of restaurants and hotels with four or five stars were allowed without limitations in the markets and national treatment. Trade across borders, consumption overseas and the commercial presence of travel agencies and services for flight operators were also allowed, as long as national operations were not presented as trade across borders.

Cultural and sports services and entertainment

Trade across borders, consumption overseas and the commercial presence of the services of news agencies were allowed with limitations in the markets and national treatment.

Transportation services

Trade across borders, consumption overseas and the commercial presence of ocean shipping services and railroads were allowed without limitations with regards to markets and national treatment. Trade across borders, consumption overseas and the commercial presence of additional services relating to ocean transportation were also allowed, while limiting the foreign share to 51 per cent.

Effects of WTO accession on services

The possible positive and negative effects of Yemen's WTO accession on the services sector must be assessed from multiple perspectives:

Employment: Labour Law no. 5 (1995), which was amended by Article 21 of Law no. 25 (1997), stated that the amount of foreign employment per company cannot exceed 10 per cent. The law granted the minister of labour the power to increase or decrease this rate as necessary. According to the commitments Yemen made, foreign employees can account for 20 per cent of the total number of employees, excluding executive managers and upper management, with the minimum being three employees. WTO accession is therefore not expected to have an effect on Yemeni employment rates, especially as Yemeni labour is relatively low cost. Yemeni employees are in need of training so that they can keep up to date with technical and technological development, thus enabling companies to compete in foreign markets.

Foreign investment: If political stability and security are attained, foreign and domestic investment in the services sector is expected to increase, especially in light of Yemen's WTO accession. Membership also entails trade advantages as preferences are given to developing countries in accordance with the regulations and agreements of the WTO.

Yemeni service providers: Competition creates innovation and renewal, and the liberalization of the services sector will force Yemeni service providers to improve the quality of their services so that they can keep their share of the market. Many service industries are very competitive. The finance sector, for example, has five branches of foreign-owned banks. In the communications, accounting and auditing and tourism services sectors there are foreign companies that work in partnership with local ones. The impact of WTO membership on medium and large companies is expected to be positive. Small companies and establishments, which, according to numerous reports, generate considerable employment opportunities, must be developed through specific legislation that gives them incentives to expand. Joining the WTO will provide Yemeni service providers with new opportunities to access foreign markets and enjoy preferential treatment from WTO member states.

Analysis of policies

Policies have been put in place to develop certain government services, while no strategies have been devised that target the development of the business sector or commercial environment of service industries. Most strategies do not incorporate a programme or projects with specific goals. There is an evident need to create a programme and projects with clear, achievable activities. After the plans and strategies have been thoroughly prepared they can be included in investment programmes or financed by sponsors. Below are some strategies that would improve the services sector and narrow the gap between what has been planned and what has been implemented.

Communications and information systems

Despite 13 years having passed since the establishment of the first mobile phone company in Yemen, no strategies for the communications and information systems sector have been devised. Yemen ranks 11th out of 12 Arab countries in economic knowledge indicators, according to the knowledge database for development issued by the World Bank.[242]

Transportation

The National Strategy for Transportation 2008-2010, devised by the Ministry of Transportation, and the sector's policies revolve around the Third Five-Year Development Plan and the following goals:

- Preparing, developing and updating legislation and policies that regulate the transportation sector
- Completing the projects to restructure and update the Ministry of Transportation and the institutions and agencies under it
- Establishing a statistical database for the transportation sector
- Improving the capacity and quality of the overland transportation of goods
- Coordinating and cooperating with other countries and organizations in the field of transportation
- Developing the structure and organization of land ports
- Establishing railroads to link cities and connect Yemen to neighbouring countries
- Improving passenger transport by developing and updating the methods of transportation and infrastructure
- Developing and enacting an international agreement for multiple transportation methods
- Incentivizing the private sector to establish shipping agencies and develop the sector

- Enhancing competition in ocean shipping by increasing the participation of the private sector and strengthening Yemen’s role in the area in order to attract commerce
- Marketing Yemen as a regional training destination

Health Sector

Challenges in the health sector are largely related to outdated administrative systems and a lack of financial resources. The solutions that have been proposed did not involve increasing spending in the sector. Yemen's Strategic Vision 2002-2025 propounded the importance of public and private investment in healthcare and the need for policies to increase the amount of spending in the healthcare sector, especially in light of economic reforms. The budget allocation for the healthcare sector in the general state budget was 3.58 per cent of total public spending.[243] Most of this small budget goes towards operational expenses and salaries, and resultantly 50 per cent of the population does not have access to healthcare.

Education

The target of education sector policies has been to establish general principles for the schooling system, including setting the statutory school age and devising mechanisms for determining students education path (secondary education or technical education) and their access to college or university according to their grades.

The development strategy for primary education focuses mainly on increasing female education rates and narrowing the gap between male and female enrolment figures in schools. The aims are to reach a 95 per cent female enrolment rate by 2025 and to narrow the gap between rural and urban enrolment figures. The strategy failed to recognize the commercial aspects of this sector and how to develop them. There is a need to increase \ spending in education in correlation with the increasing number of students and the goal to eliminate illiteracy.

The 2004 national human development report highlighted the lack of policies and clear plans on university education. Some goals for higher education are evident in the college programmes, laws and legislation, including the laws that established Sana’a University and Aden University, which were issued despite the lack of clear policies for higher education. This is in stark contrast to other Arab countries, which developed policies for free higher education after independence. The laws in Yemen were issued in a bid to compensate the population for the lack of available education and training, but this policy contributed to the deteriorating quality of higher education and the increasing number of unqualified graduates who are unprepared for the labour market. This led to widespread unemployment and highlighted the need for a suitable education policy for graduates. The private universities that spread unrestrictedly further contributed to the issues because the outputs of these institutions are not of high quality due to their focus on profit. Scientific research is still absent from all educational plans and programmes, and most public and private universities work without quality standards and academic approval. Those that have attained academic approval received it not for the quality of their educational programmes but rather because they have the required infrastructure and administrative quality.

Legal and accounting services

There is no strategy to develop legal services and no goals to improve them. The Ministry of Justice is responsible this sector in accordance with Law no. 31 (1999), which regulates the organization of the judiciary.

There is also no strategy to improve accounting services. The MOIT is responsible for organizing this sector in accordance with the Auditing Law no. 26 (1999). The Yemeni Association for Internal Auditors works in partnership with the MOIT, particularly in choosing applicants for auditing certification.

It is clear that there is an imbalance between the plans and strategies for certain sectors and the general state budget, whereby the GoY does not allocate the necessary funds for the implementation of strategies. Political agendas override the planning of the budget, especially in investment activities and the allocation of funds. The majority of the budget is spent on running costs. The budget of the ministries overseeing the services sector is predominantly spent on salaries, which means very limited resources are available for the implementation of programmes or activities. For example, the budget of the Ministry of Tourism in 2014 was 264,624,000 Yemeni rial, of which 146,202,000 Yemeni rial was spent on salaries and compensation for employees. No funds were allocated for investment in the sector.

The 2003 DTIS shows that the communications and transportation sectors, which are considered infrastructure sectors and vital to production given their direct links to all business activities, were not given adequate consideration. Strategies for these sectors are included under general development and no policies have been designed that target the development of the private sector or long-term investment programmes to update and improve infrastructure. Most plans or strategies focus on predictions and lack any clear agenda for achieving goals.

The tourism industry, despite the comprehensiveness and clarity of its strategies, is in need of support, as shown in the respective chapter.

Yemen's Strategic Vision 2002-2025 covered the education, health and tourism sectors, either due to their importance or their potential as promising sectors. The strategy recommended infrastructure projects to develop the tourism sector and predicted increasing private sector investment in tourism projects like hotels, restaurants and tourism complexes but did not clarify what the current obstacles to executing these projects are. The relevant obstacles include, for example, land access issues and the weakness of the law. These issues deter most investors, who fear that their rights will not be protected. The government initiative to complete the basic infrastructure services in touristic areas and prepare the investment environment for Yemeni and foreign investors should also be taken into consideration.

The Strategic Vision 2002-2025 failed to include the communications sector as vital to the development of other sectors and in increasing economic activity. According to a 2012 World Bank study, every 10 per cent increase in the number of internet subscribers creates 1.38 per cent growth in GDP.[244] This sector has not been adequately developed in terms of service provision, the number of subscribers or opportunities for competition. The number of internet users in the country is around 3,691,000, making Yemen one of the least connected countries in the world.[245]

The Strategic Vision 2002-2025 did not incorporate solutions for the problems of financing for small and medium-sized projects, the high interest rates on loans, the complex registration procedures businesses must follow and the difficulties in establishing an enterprise. The latter issues led to Yemen’s rank dropping in the ease of starting a business indicators since 2011, after noticeable improvement from 2007 to 2010. Yemen ranked 114th in 2014. Yemen’s ranking in ease of conducting business indicators also fell, placing it 133rd in 2014.

Regulatory framework for Services

The Investment Law no. 22 (2002) granted tax and customs exemptions (Articles 18, 20, 21, 23 and 26), allowing all industries covered by the law to benefit from tax exemptions as long as the capital of the project exceeded 50 million Yemeni rial. Agricultural projects and small projects with 10 employees or less were excluded.

Incentives were offered to tourism and housing projects, provided that hotels are no less than three stars and that the number of residential units of housing projects are not less than 50. Exemption requests must be submitted with supporting documents (project registration certificate and documents that prove the commercial registration and start of production) within 90 days from the start of operations. The General Investment Authority (GIA) investigates project proposals and issues a certificate for tax exemption within 60 days of receiving the request and supporting documents.

Customs and tax exemptions are given for stable capital, including investment projects and income from fishing, animal production and agriculture. Projects in other sectors are given a customs reduction of 50 per cent for production factors.

Spare parts are exempted from customs taxes for no more than 10 per cent of the capital. Vehicles are exempted from customs fees if they are an inseparable part of the investment (such as buses for tourism purposes).

The duration of the exemptions from real estate taxes and fees, stock dividend taxes, profit taxes, fees and taxes on exports, etc. vary between seven and 16 years depending on the location of the project and the percentage of Yemeni ownership and capital. In order to encourage investment in remote areas, two additional years are given to projects that are established outside areas over 20-25km from Aden, Al-Hodeida, Al-Mukalla, Sana'a and Taiz. Two more years of tax exemption are granted to investments where Yemeni ownership exceeds 25 per cent. Another two years are granted to investments where the local component of the capital is not less than 25 per cent (Article 21 C). The GIA can reject requests for tax and customs exemptions if similar capital can be procured locally (Article 18 E). Tax exemptions for a maximum of three years can be given to projects that have suffered losses. The tax exemptions can be implemented in a proportional manner if the project is expanded. Profit taxes are not collected for exports until after the exemption period is over (Article 26).

Investment Law no. 15 (2010) superseded Investment Law no. 22 (2002) and regulates foreign and local investment in Yemen. Article 4 of Law no. 15 (2010) states that all sectors are open for investment, with the exception of weapons and explosives manufacturing. Investment in the oil and gas sectors, minerals, banks and financing, exports and imports and wholesale and retail were outside the rulings of the previous law and were regulated by separate legislation. The previous investment law also prohibited activities that were against Sharia law and banned in Yemen such as investments in casinos, nightclubs, pork meat products, alcoholic drinks and industries that harm the environment and public health.

Investments in the communications industry are regulated by the Wired and Wireless Communications Law no. 38 (1991); investments in free zones are regulated by the Free Zones Law no. 4 (1993); mineral mining and exploration are regulated by the Mines and Minerals Law no. 24 (2002); investments in banks, exchange shops and the finance sector are ruled by the Banking Law no. 38 (1998), the Islamic Bank Law no. 21 (1996), and the Central Bank Law no. 14 (2000) as well as Law no. 19 (1995) for the exchange of money, which was amended by Law no. 15 (1996). Investments in insurance are regulated by Law no. 37 (1992), regarding the oversight and monitoring of insurance companies and agencies, and its amendments in Law no. 9 (1997). Wholesale and retail investments are regulated by Commerce Law no. 32 (1991) and its amendments in Law no. 6 (1998).

Local and foreign investors are subject to the same requirements and registration procedures, and their requests are dealt with within 15 days. Guarantees and other benefits are given to investors in accordance with Investment Law no. 15 (2010) whereby:

There shall be no preferential treatment and Yemeni and foreign investors will have equal rights and responsibilities and are subject to the same principles and procedures (Article 5).

Guarantees are in place against nationalizing or taking investment projects under any decree not from the judiciary.

All investors are permitted to own 100 per cent of investment projects, including the real estate related to it.

Complete freedom without any limits is granted in managing projects and exporting goods or related services.

Investors are permitted to insure their investments against any non-commercial dangers in any international institutions that Yemen is a member of.

Foreign employees have the freedom to transfer funds to and from Yemen or re-export the capital of the investors in kind or in cash in the case of the liquidation or end of a project. In the case of confiscation, the foreign investors receive the same compensation that is given to Yemeni investors.

Investors are permitted to employ foreigners in accordance with the submitted table of requirements for the project and non-Yemeni employees can be given work and residence permits renewable for three years on the recommendation of the GIA. [246]

Tax policies for services

Services produced locally and exported are subject to general sales taxes in accordance with Law no. 19 (2001), which was amended by Law no. 42 (2005). The tax is 5 per cent for most goods and services, with some exceptions and deviations. The following table clarifies the type of services and taxes. Exported goods and services do not have a tax system and Yemen has not established a system for value added taxes.

Table (55): List of services taxes.

No.	Description	Tax
Services that are subject to a different tax rate where the general rate is 5 per cent		
1	Mobile phone service	10
2	International calling service	10
Services exempt from general sales taxes by law (Article 40)		
1	Financial and banking services	
2	Insurance services	

3	Health services
4	Different types of educational services
5	All not for profit services that are performed by non-governmental agencies, foundations and organizations that are recognized by the specialized entities
6	Land transport services, specifically goods transportation services (other than quick transportation services), passenger transportation services and highway maintenance services
7	Land rental or operational services for private housing
8	Water services (other than mineral water), sewage and electricity
9	House cleaning and street cleaning services, environmental services, combating pollution and garbage collection
10	Historical site renovation services
11	Hajj services (Hajj and Omrah agencies)
12	Hotels with one star or less

Source: Working group for Yemen's WTO accession

Registration and licensing policies

Work permits are issued to foreigners based on a request from their employers and visas are granted at a later stage, in accordance with the work permits. Work permits are valid for one year and can be renewed yearly for a period of five years for a fee of 12,000 Yemeni rial, in accordance with Cabinet Decree and Work Law no. 5 (1995). In addition to the fees for the work permit, 5,000 Yemeni rial is paid into a vocational training fund to train workers in the private sector.

Different laws govern the procedures and standards for work permits for foreigners providing employment services. These include Professional Lawyers Law no. 31 (1999), Law no. 26 (2002) regarding medical professions and assistant medical professions, and Auditing Law no. 26 (1999). These laws regulate the participation of foreign professionals in Yemeni sectors and the standards by which foreigners are granted work permits. They are the same standards as those for Yemenis and are published in the official newspapers. Documents and fees must be supplied and sufficient time allowed for visa processing. The requirements are different for each profession.

With regards to **legal services**, Arab and foreign lawyers can practice law in accordance with the civil code through licensed law firms as long as they receive permission from the minister of Justice and if Yemenis receive reciprocal treatment from the home country of the foreign lawyer. Lawyers cannot plead more than two cases per year. Foreign lawyers and those providing legal services can provide legal consultation, outside of pleading cases in Yemeni courts, if they work in partnership with Yemenis or through licensed Yemeni law firms.

All limitations regarding markets and national treatment for legal consultation in foreign and international law were removed, except for the general limitations on mode 4, the movement of natural persons.

Yemeni **accounting and auditing firms** are given licenses to carry out their work in accordance with Accounting Law no. 26 (1999), if the following requirements are met:

- There is a general partnership and the main office is in Yemen.

- All partners must be auditors and hold licenses to carry out their profession. Auditors cannot carry out their work alone or be a partner in more than one firm. Foreigners (natural or legal) must meet certain additional requirements to be granted a license to carry out accounting work and auditing services, including:
- A partnership must be entered into with one or more Yemeni auditors.
- All partners must be registered.
- The partnership agreement must be given to the concerned entity and it must be in Arabic.
- The foreign partner(s) must have licenses to carry out accounting or auditing work from their countries.
- At least one of the firm's managers must be a Yemeni partner and at least two-thirds of the technical personnel must be Yemeni citizens. The MOIT issues licenses based on recommendations from the Auditors Committee and the procedures on average take three weeks. This process also applies to those providing engineering, civil engineering, comprehensive engineering, urban planning and natural view engineering services.

With regards to **administrative consultations** relating to services, foreign consulting companies in the field of administration can establish branches in Yemen in accordance with Law no. 23 (1997) regarding the representation of foreign companies and houses.

With regards to **communications services**, the monopoly contract between Albarq and Wireless and the GoY ended in 2003. Currently, the GoY is the only service provider for international calls, through TeleYemen. The Ministry of Communications and Information Technology signed a five-year administrative agreement with France Telecom. The national communications service network is exclusively managed by the Public Telecommunications Corporation. TeleYemen and the Public Telecommunications Corporation both provide national and international calls through satellites. Mobile phone services are open for foreign partnership. It was agreed that all limitations for wired and wireless telecommunications be removed on 1 January 2015, according to the service table. This allows satellite dishes to receive television and radio broadcasts and give internet service providers licenses, in accordance with Cabinet Decree no. 4 (2001), to establish and provide internet services competitively. Internet service providers will rent the wires from the Public Telecommunications Corporation. Yemen does not have legislation regulating e-commerce, but it will not enforce the limitations in effect on the markets and national treatment on buying goods on the internet.

Yemen has no plans to review its policies regarding **foreign investors' rights to own land**. The investment law allows foreigners to own projects completely, including real estate, while at the same time Yemen has not committed to providing the right to own land and it limits the rights of foreigners to rent land.

Wholesale commerce was opened to foreigners, although they are not allowed to go into retail through commercial presence (mode 3). This sector is reserved for Yemenis or Yemeni legal entities, including partnerships.

Banking activities are regulated by Regulation no. 14 (2000) regarding the Central Bank of Yemen, Law no. 38 (1998) regarding banking, Law no. 21 (1996) regarding Islamic Banks and Regulation no. 2 (1997) regarding the rulings and procedures to license banking activities. The foreign share in commercial banks must not exceed 60 per cent. In accordance with the Yemeni Company Law, investors that own 60 per cent of the voting shares in a company can practice complete administrative oversight. The purpose of placing a limit in this sector was to encourage Yemenis to participate in banking.[247] In reality, the banking sector experiences more freedom than the commitments allow because there are branches of foreign banks that are completely foreign owned. Banks owned by foreigners are treated in the same way as domestic banks and they do not have any limitations on their operations, whether they are Islamic or commercial. Foreign banks receive their licenses to provide banking services from the central bank after presenting a request to the central bank governor. The request to open a branch of a foreign bank in Yemen is reviewed and, based on technical recommendations, a temporary license is issued and then the board of directors of the central bank grants a final license based on the minimum capital (for foreign and locally owned banks) after 6 billion Yemeni rial is transferred. The work plan, including the estimated budget, must cover the first three years from the suggested start of the project. The central bank evaluates the work plan and assesses the suitability of the branch of the foreign bank or office depending on its location, premises, equipment and capacity to protect the money and documents.

Securities trading, brokerage, asset management, or clearing and settlement services are not currently regulated, but Yemen will allow foreign companies to enter the market on a non-preferential basis when these industries are organized.

The rate of shares owned by foreigners in **insurance and reinsurance companies** is set at 25 per cent, in accordance with Law no. 37 (1992) regarding the supervision and oversight of insurance brokers and Law no. 9 (1997). No benefits are given to insurance companies owned by the state.

Approval from the minister of industry and trade is required when allowing Yemeni citizens to purchase foreign insurance when local insurance companies cannot offer the required coverage, and no more than 50 per cent of the coverage can be bought from outside Yemen. All limitations on the market and national treatment have been removed for insurance and reinsurance services and related services. Yemen will be permitted, after three years of WTO membership, to branch into direct insurance and enter markets across borders for marine, air and transport insurance. Yemen reiterated that there will be no limitations on national treatment in these fields.[248]

Conclusions and Recommendations

A survey of the services sector must be conducted in order to provide a database that can illustrate the real contribution of each sector to GDP, employment generation and foreign trade. The current methods for estimating the contribution of service industries do not accurately estimate the size of each sector. For example, the debt of the construction and building sector is calculated as a percentage of the loans and grants (20 per cent). The calculation presumes that all tenders in this sector are awarded to foreign companies without acknowledging that some tasks are performed by local companies. Also, the transportation sector is estimated to contribute 10 per cent of revenue.[249]

A Strategic Action for Sustainable Tourism Development Plan 2011-2015 was prepared as a result of the economic diversification project adopted by the MOIT and the United Nations Development Programme (UNDP). A mechanism and timeframe must be put in place for the implementation of this important plan.

Work is needed to reposition economic diversification as a priority for the government and donor partners, especially given the decreasing global price of petroleum and the dwindling production in Yemen. Production has been further curtailed by attacks on infrastructure by armed groups, which has led to the decrease of petroleum products and damage to the economy.

A detailed strategy must be put in place for each service industry, and it must include the following:

- Analysis of the current situation for each sector with focus on bolstering the strengths and addressing the weaknesses
- Determining priorities
- A clear and structured vision
- Determining the strategic goals to be accomplished
- Policies and procedures that are suitable and achievable
- The following requirements must be met in all service industry strategies:

The legislation and laws regulating the relationship between the relevant ministries and agencies must be completed and issued, and must correlate with international developments in the various service industries.

An accurate database and comprehensive information network are needed to enable planning, analysis and study.

Ministries, agencies and institutions should be restructured in order to enhance their capacities. Personnel need training so as to keep up with developments and meet commitments.

Infrastructure must be developed, updated and adequately financed, especially the transportation sector, through the development of relevant policies.

When drafting strategies for any sector, the relationship between it and other sectors must be taken into account and strengthened.

The private sector should be encouraged to invest through the provision of incentives and benefits. A relationship between the government and the private sector based on partnership and social responsibility must be established and nurtured.

Endnotes

1. This draft follows comments from UNDP and national stakeholders.
2. Ministry of Finance (2009) “The Finance”, issues 133-134
3. Private sector businesses in most sectors have followed the same trends as their government counterparts.
4. Ministry of Planning and International Cooperation (MOPIC) (2013) “Annual Economic Report”
5. MOPIC “Third Five-Year Development Plan”, ch 2
6. D. Rima Alturk Al-Aries (2001 -2006) “Mobilizing domestic resources to finance development, the role of tax in government revenues in selected countries” Economic and Social Commission for Western Asia (ESCWA)
7. Cabinet, General Secretariat (July 2009) “Performance Report 2008”, pg 36-38
8. Mohammed Al-Hamadi “Aden Free Zone, Reality and Aspiration” Republic of Yemen website
9. Al-Estithmarnet, (1 January 2008) “Aden Free Zone, Information and Laws”, Wikipedia
10. Al-Estithmarnet, (1 January 2008) “Aden Free Zone, Information and Laws”, Wikipedia
11. 14 October newspaper, Sahafanet issue 15473 (22 May 2012) “Aden Free Zone, International Investment and Geographic Advantages”
12. Mohammed Al-Hamadi “Investor’s Guide” GAFZ, Wikipedia ”Aden Free Zone, Reality and Aspiration” Sahafanet
13. Adnan Al-Gifri (12 July 2013) “Investigating the full story of destructing Aden port and the role of Dubai Ports”, Aden Al-Ghad www.adenalghad.net/
14. Aden Gulf News “Seven Years of Systematic Destruction under Dubai Port Management” http://m.adengulfnews.com/
15. Al-Wahdawi (20 September 2012) “Dubai Ports Stopped Managing the ACT”
16. Private-Public Dialogue Conference, Investment & Investment Environment Group
17. WTO E -Learning (2012) "Introduction to Trade and Development", http://ecampus.wto.org/admin/files/Course_520/CourseContents/TD-R2-E-Print.pdf
18. Cabinet approved the fourth Five-Year Development Plan for Poverty Reduction in 2010 and it was then submitted to both chambers of Parliament. The 2011 popular revolt diverted attention and a transitional programme was prepared, supported by the World Bank, for 2012-2014.
19. MOPIC (2001) "The Second Five-Year Economic and Social Development Plan 2001-2005", Sana'a
20. MOPIC (2006) " The Third Five-Year Economic and Social Development Plan for Poverty Reduction 2006-2010", Sana'a
21. MOPIC (2010), "Draft of the Fourth Five-Year Plan for Economic and Social Development", Sana'a
22. MRI (2005) “Enhancing Yemen Export Competitiveness: Diagnostics and Policy Options” with support from the World Bank
23. Analysis for Economic Decision and Lambard Management Consultants Ltd ADE-LMC (2013) "Preliminary Draft National Export Strategy", Sana'a
24. EIF website http://enhancedif.org/en/country-profile/yemen
25. EIF TFM Review (2014) “Country Case Studies – Yemen” http://enhancedif.org/pt/system/files/uploads/eif_tfm_review_appendix_1_country_case_studies.pdf
26. “Yemen Annual Progress Report 2013” http://enhancedif.org/en/results/evaluation
27. “Yemen Annual Progress Report 2013” http://enhancedif.org/en/results/evaluation
28. Republican Decree no. 284 (2009) on the bylaw regulation of MOIT
29. Republican Decree no. 284 (2009) on the bylaw regulation of MOIT

30. Barakat, Lutf (8-9 April 2013) "Paper on Trade Facilitation", Dubai
31. Republican Decree no.16 (2008) on the bylaw regulation of the Customs Authority
32. Barakat, Lutf (8-9 April 2013) "Paper on Trade Facilitation", Dubai
33. Law no. 28 (2003) on CCI and the FCCI
34. Bylaw on job descriptions and departments and divisions in the FCCI
35. Law no. 28 (2003) on CCI and the FCCI
36. Law no. 28 (2003) on CCI and the FCCI
37. Bylaw on job descriptions and departments and divisions in the FCCI
38. WTO (2013)
39. Hamim, Nagib (2014) "Booklet on the Accession of Yemen to WTO", Sana'a
40. The previous reference.
41. Hamim, Nagib (2014) "Booklet on the Accession of Yemen to WTO", Sana'a
42. WTO (2013) “Accession of Yemen - Legislative action plan” (WT/ACC/YEM/9/Rev.10), Geneva
43. The Economic and Social Council (1981), Decision No. 848 D30 on "Agreement for Facilitation and promotion of Trade among Member Countries", Arab League, Cairo
44. The Economic and Social Council (1997), Decision No. 1317 D59 on "The Executive Programme for Agreement for Facilitation and Promotion of Trade among Member Countries", Arab League, Cairo
45. Not all Arab league members are in GAFTA.
46. The GCC countries are the Kingdom of Saudi Arabia, the Kingdom of Bahrain, the State of Kuwait, the Sultanate of Oman, the State of Qatar and the United Arab Emirates.
47. GCC & Yemen Integration strategy/Road map (2006)
48. MOIT (2014) "Report on trade development with GCC", Sana'a
49. MOIT (2006) "Report on trade development with Saudi", Sana'a
50. MOIT (2006) "Report on trade development with Iraq", Sana'a
51. MOIT (2014) "Report on trade development with EU, China, South Korea", Sana'a
52. MOIT (2014) "Report on trade development with EU, China, South Korea", Sana'a
53. MOIT (2014) "Report on trade development with EU, China, South Korea", Sana'a
54. UN (2011), “Common Country Assessment: Republic of Yemen” pg 6, Sana’a
55. United Nations Development Programme (UNDP) (2006) “Macroeconomic Policies for Growth, Employment and Poverty Reduction in Yemen” pg 140, UNDP, Beirut
56. UN Department for Social and Economic Affairs (UNDESA) (2011) “Assessing Development Strategies to Achieve the MDGs in the Republic of Yemen”, UNDESA, New York
57. http://data.uis.unesco.org/index.aspx?queryid=145&lang=en
58. UN (2011), “Common Country Assessment: Republic of Yemen” pg 29, Sana’a
59. UN (2011), “Common Country Assessment: Republic of Yemen”, Sana’a
60. UNCTAD (2013) “222 World Investment Report “
61. UNCTAD (2013) “223 World Investment Report “
62. The FIAS advised Yemen to replace the tax holidays in the investment law of 2002 with more efficient forms of tax incentives such as an accelerated depreciation for investment expenses. FIAS (2007) 13, FIAS (2008) 57. Another investment incentive in Yemen is the depreciation of fixed assets.
63. That means the main tasks of the GIA are undertaken in the investment promotion office not the regulatory institution.
64. Article 28 of the Yemeni Commercial Law was amended to eliminate the requirement that foreigners hold no more than 49 per cent of the capital of a trading enterprise, allowing foreigners to establish trading companies without a Yemeni partner.
65. Althawara newspaper (15 June 2013)
66. FIAS (2008) 11-12
67. The MOIT's offices were damaged in the 2011 crisis and the GIA relocated to another building.

68. The IT Infrastructure project was intended to support both the MOIT and GIA. The GIA now operates the information technology infrastructure, which is supported and financed by the Government of the Netherlands. This project provided the GIA with an automated customer relations management (CRM) system. This system enables the GIA to register investment projects automatically and connects its branches electronically to a virtual platform that supports the one stop shop services. Yemen Investment (Apr-June 2014: 3,12) issue 3
69. World Bank (2014, 59), Doing Business 2015, Economy Profile 2015, Yemen
70. The GoY began economic and financial reforms under International Monetary Fund (IMF) and World Bank programmes. Reforms included the privatization programme and law, liberalizing the economy, the opening of different sectors and moving sectors like education and health to the private sector.
71. Many government cooperation committees, especially with Arab countries, are formed between related government agencies during the official visits of the president or prime minister to other countries.
72. Ecorys "Public Private Partnerships in Yemen, Yemen PPP Main Report 3rd Draft", and MOPIC Public Private Partnership Central Unit "The Legal and Institutional Framework for Partnership with Private Sector",, Arabic version
73. World Bank (2009), 68, 71 and 91
74. World Bank "Yemen Investment Climate Assessment Update 2011", iv and 18-20
75. MOPIC (2014) Annual Economic Report (2013), 122-123, 136-139
76. World Bank (2009) "From Privilege to Competition for Business Environment"
77. MOPIC," Third Five-Year Development Plan for Agricultural Development and Poverty Reduction (DPPR) 2006-2010"
78. MOPIC "Strategic Vision 2002-2025"
79. MAI (2012) "National Agriculture Sector Strategy (NASS)"
80. MAI (2012) "NASS"
81. EOF-IFAD
82. USAID (2005)
83. Schlund, M. et al. (2013) "Working Paper Number" http://www.yemenwater.org/wp - content/uploads/2013/03/
84. FAO (2005)
85. USAID (2005) 15
86. USAID (2005)
87. EU, MOIT (2013) "National Export Strategy".
88. EU, (MOIT 2013) "National Export Strategy"
89. GoY, MOPIC-CSO (2005)
90. Poverty Reduction Strategy Papers (2002)
91. UNIDO (2002)
92. UNIDO (2002)
93. EU, MOIT (2013) NAES
94. Oxfam (June 2014) "Policy Paper", http:// policy- practice.oxfam.org.uk./publications/yemen-in-crisis-how-yemen-can-survive-the fuel-crisis-and-secure-its-future-322186?W
95. EU, MOIT (2013)
96. Resolutions still being drafted or waiting to be approved by the authorities
97. UNDP, MFW (2010) "Fisheries Comprehensive Assessment"
98. Approved by Cabinet Decree no. 71
99. Data from MFW, Planning Sector
100. A 3 per cent government levy on the value of the catch which was introduced in 2004 as part of a deal between the MFW and the fishers under which the MFW agreed to cease granting licenses allowing foreign fishing vessels to fish in Yemeni waters and the fishers agreed to pay

3 per cent of the value of landed catch to replace the lost revenue. The levy is included in Law no. 2 (2006) Article 39a and applies only to artisanal vessels.

101. Law no 2 (2006) on the regulation of fishing and exploitation and protection of marine species entered into force on 21 January 2006.
102. World Bank Management and Restructuring Team (SMART)
103. MFW (2012) "Fisheries Sector Strategy 2012-2025"
104. *Huri* are long narrow open decked boats (7-16 m, 3-7 crew, 40-75 hp outboard engine) based on a traditional design. *Sambuk* are larger wooden vessels with far greater storage capacity (10-20 m, 6-10 crew, 40-75 hp outboard engine or diesel inboard engine). *Abri* are even larger vessels (20-25 m) used as mother-ships, transport boats and for fishing.
105. MFW Planning and Statistics Data
106. Bonfiglioli and Hariri presented an insightful analysis of the Yemen artisanal fisheries in their Social Assessment and Development Prospects study for the MFW supported by the FAO and World Bank.
107. UNDP, WB (2012) "Joint Social and Economic Assessment for the Republic of Yemen"
108. UNDP, WB (2012) "Joint Social and Economic Assessment for the Republic of Yemen"
109. Source: IFAD (2010)
110. Source: IFAD (2010) Adapted from IFAD for calculations of total revenue only
111. Source: MFW, Central Statistics Organization (CSO) and sectoral reports of EU, UNDP, IFAD and World Bank
112. The electricity corporation charges commercial establishments almost twice as much as domestic users.
113. Currie, D.J. (2010) "Draft Aquaculture, Fish Feed and SME's Development Strategy" UNDP Economic Diversification Support Programme (EDSP)-Fisheries
114. Currie, D.J. (2010) "Draft Aquaculture, Fish Feed and SME's Development Strategy" UNDP EDSP -Fisheries
115. WTO (2005) "Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products" Tariff Download Facility (TDF) Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products (STDF 69)
116. Hariri et al (2010) "Fisheries Sector Study" EU, Yemen
117. FVO (2004/2006)
118. WTO (2005) "Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products"TDF, STDF 69
119. Obadi, S. M. (2005) "The external trade between Yemen and the European Union and United States of America"
120. YSEA reports
121. WTO (2005) "Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products"TDF, STDF 69
122. UNDP, MFW (2010) "Fisheries Comprehensive Assessment"
123. WTO (2005) "Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products"TDF, STDF 69
124. WTO (2005) "Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products"TDF, STDF 69
125. MOT (2008) Statistics Report
126. 2003 DTIS (2003) pg 17
127. UNWTO Barometer (2013)
128. NWTO announcement
129. National Export Strategy (2013) pg 10-11
130. National Export Strategy (2013) pg 47
131. Joint Social and Economic Assessment for the Republic of Yemen pg 8

132. Joint Social and Economic Assessment for the Republic of Yemen pg 144
133. Joint Social and Economic Assessment for the Republic of Yemen pg 174
134. United Nations Statistics Division http://unstats.un.org/unsd/cr/registry/regcs.asp?Cl=9&Lg=1&Co=64110
135. United Nations Statistics Division http://unstats.un.org/unsd/cr/registry/regcs.asp?Cl=9&Lg=1&Co=6421.
136. World Bank (19 December 2014) World Development Indicators
137. http://data.worldbank.org/data-catalog/world-development-indicators,
138. MOPIC (2013) "Youth Employment Action Plan (YEAP)" internal draft, 2013
139. Triandafyllidou, A. (2011) "Circular Migration and Integration, A Short Guide for Policy Makers" European University http://www.eui.eu/Projects/METOIKOS/Documents/GuidePolicyMakers/METOIKOSGuideforPolicyMakers.pdf
140. Economic Observatory for Studies & Consultancy (EOSC) - Economic and Social Commission for Western Asia (ESCWA) (August 2014) "The Financial Infrastructure of Remittance in Yemen"
141. IOM (2013) "World Migration Report 2013: Migrants Well-being and Development"
142. The countries of the South are those the World Bank classifies as low- and middle-income countries; the countries of the North are the high-income countries. These definitions are narrower than those that the United Nations and other organizations use. http://www.migrationpolicy.org/article/south-south-migration-and-remittances.
143. IOM (2014) "Yemeni migrants returned from Saudi Arabia through the border crossing point of Al Twal, Hajjah" October 2014 Update
144. http://www.iom.int/files/live/sites/iom/files/Country/docs/2014-11-01-Yemeni-Migrant-Snapshot.pdf
145. Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2011) "Migration and Remittances Factbook 2011", Yemen, Migration and Remittances Unit, World Bank http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/Yemen.pdf
146. Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2011) "Migration and Remittances Factbook 2011", MENA http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/MENA.pdf
147. Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2011) "Migration and Remittances Factbook 2011", MENA http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/MENA.pdf
148. Beine, M., Docquier, F. and Rapoport, H. (2006) "Measuring international skilled migration: new estimates controlling for age of entry" Policy Research Discussion Paper, World Bank
149. Angenendt, Steffen (2009) "Labour Migration Management In Times Of Recession: Is Circular migration a Solution?" Transatlantic Academy
150. UNESCO (2014) "Learning to Live Together: Skilled Migration and Brain Drain" http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/projects/skilled-migration-and-brain-drain/
151. Ratha, Dilip, Supriyo De, Ervin Derviservic and Seyed Reza Yousefi (2014) "Migration and Remittances: Recent Developments and Outlook" World Bank http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-12889
152. IMI and RMMS (2012) "Global migration futures using scenarios to explore future migration in the Horn of Africa and Yemen"
153. Alwan, Mohamad Y. (2010) "High-Skilled Migration to and from Jordan", Yarmouk University, Jordan http://www.carim.org/HighlySkilledMigration.

154. Security concerns of have undoubtedly affected the perception of Yemeni migrants and their admission into Western countries' labour markets.
155. Ratha, Dilip, Supriyo De, Ervin Derviservic and Seyed Reza Yousefi (2014) "Migration and Remittances: Recent Developments and Outlook" World Bank http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-12889
156. IOM (2014) "Yemeni migrants returned from Saudi Arabia through the border crossing point of Al-Twal, Hajja", October 2014 update
157. http://www.iom.int/files/live/sites/iom/files/Country/docs/2014-11-01-Yemeni-Migrant-Snapshot.pdf
158. Foreign Policy (2013) "Yemen and the GCC benefits of the labour market integration" http://foreignpolicy.com/2013/11/08/yemen-and-the-gcc-benefits-of-labor-market-integration/
159. forsythe, Jessica (2011) "Opportunities and Obstacles for Yemeni Workers in GCC Labour Markets" http://www.chathamhouse.org/sites/files/chathamhouse/0911pp_gcc_0.pdf
160. Forsythe, Jessica (2011) "Opportunities and Obstacles for Yemeni Workers in GCC Labour Markets" http://www.chathamhouse.org/sites/files/chathamhouse/0911pp_gcc_0.pdf
161. Foreign Policy (2013) "Yemen and the GCC benefits of the labour market integration" http://foreignpolicy.com/2013/11/08/yemen-and-the-gcc-benefits-of-labor-market-integration/
162. MOPIC (2010) "Accessing GCC Labour Markets"
163. MENA (2011) "Middle East and North Africa Programme Paper", mEnapp, 2011/01
164. RMMS (2014) "The Letter of the Law: regular and irregular migration in Saudi Arabia in a context of rapid change"
165. Asharq Al-Awsat news paper (4 January 2014)
166. Available data for each country date to different years between 2008 and 2013. Data come from different Official Websites of relevant agencies in GCC countries.
167. Girgis, Maurice (2002) "The GCC Factor in Future Arab Labour Migration", Draft submitted to the Fourth Mediterranean Development Forum, Amman, Jordan, October 2002
168. IMI and RMMS (2012) "Global Migration Futures using scenarios to explore future migration to the Horn of Africa and Yemen", Project report, November 2012
169. USAID (2013) "USAID Yemen Workforce Development Appraisal", final report, implemented by Chemonics International Inc., Asia and the Middle East Economic Growth Best Practices Project 21 February 2013. The list of issues was obtained from this report.
170. Forsythe, Jessica (2011) "Opportunities and Obstacles for Yemeni Workers in GCC Labour Markets" http://www.chathamhouse.org/sites/files/chathamhouse/0911pp_gcc_0.pdf
171. Louise Cainkar (2013) "Global Arab World Migrations and Diasporas", Marquette University, e-publications@Marquette
172. http://epublications.marquette.edu/cgi/viewcontent.cgi?article=h1070&context=socs_fac&sei-redir=1&referer
173. Shaima Saif "The Yemeni Revolution and the British Yemeni Diaspora", Muftah
174. http://muftah.org/the-yemeni-revolution-the-british-yemeni-diaspora/#.VBXUtBzt5YU
175. Shaima Saif "The Yemeni Revolution and the British Yemeni Diaspora", Muftah
176. http://muftah.org/the-yemeni-revolution-the-british-yemeni-diaspora/#.VBXUtBzt5YU
177. Talib, Ameen Ali (1995) "Hadramis in Singapore", The British-Yemeni Society, November 1995 http://www.al-bab.com/bys/articles/talib95.htm
178. Talib, Ameen Ali (1995) "Hadramis in Singapore", The British-Yemeni Society, November 1995 http://www.al-bab.com/bys/articles/talib95.htm
179. Shaima Saif "The Yemeni Revolution and the British Yemeni Diaspora", Muftah
180. http://muftah.org/the-yemeni-revolution-the-british-yemeni-diaspora/#.VBXUtBzt5YU

181. Louise Cainkar (2013) "Global Arab World Migrations and Diasporas", Marquette University, e-publications@Marquette
182. http://epublications.marquette.edu/cgi/viewcontent.cgi?article=h1070&context=socs_fac&sei-redir=1&referer
183. Lundborg, Per (2010) "Immigration Policy for Circular Migration," Report no. 4, September 2010 www.sieps.se
184. Newland, Kathleen and Tanaka, Hiroyuki (2010) "Mobilizing Diaspora Entrepreneurship for Development", Diasporas & Development Policy Project, Migration Policy Institute (MPI) and USAID, http://www.migrationpolicy.org/research/mobilizing-Diaspora-entrepreneurship-development
185. Information was gathered from interviews with expatriates.
186. Agunias, Dovelyn Rannveig (2006) "Remittances and Development, Trends, Impacts, and Policy Options, A Review of the Literature", MPI
187. http://www.migrationpolicy.org/research/remittances-and-development-trends-impacts-and-policy-options-review-literature
188. Foreign Policy (2013) "Yemen and the GCC benefits of the labour market integration" http://foreignpolicy.com/2013/11/08/yemen-and-the-gcc-benefits-of-labor-market-integration/
189. Calculation based on the data of remittance flows, net FDI and net ODA obtained "World Development Indicators", World Bank
190. Ratha, Dilip et al. (2014) "Migration and Remittances: Recent Developments and Outlook" http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-12889
191. Bimal, Ghosh (2006) "Migrants' Remittances and Development: Myths, Rhetoric and Realities" http://www.ssrc.org/workspace/images/crm/new_publication_3/%7Bd2915556-f851-de11-afac-001cc477ec70%7D.pdf
192. Puentes, Ruben, Alejandro Canales, Héctor Rodríguez, Raúl Delgado-Wise and Stephen Castles (2010) "Towards An Assessment Of Migration, Development And Human Rights Links: Conceptual Framework And New Strategic Indicators", Peoples' Global Action on Migration, Development, and Human Rights, IV Global Forum, November 2010, Mexico City.
193. EOSC-ESCWA (2014("The Financial Infrastructure of Remittance in Yemen", EOSC-ESCWA, August 2014, Sana'a
194. Al-Eqtisadia news paper
195. http://www.aleqt.com/2014/07/15/article_867392.html
196. http://www.okaz.com.sa/okaz/osf/20080202/Con20080202170287.htm
197. Brogan, Katherine, Elizabeth McGuinness and Erwin Alvarez (2013) "Assessment of Remittance in Honduras", Field Report no. 19
198. http://www.alkuraimi.com/e_agents.aspx
199. EOSC-ESCWA (2014("The Financial Infrastructure of Remittance in Yemen", EOSC-ESCWA, August 2014, Sana'a
200. Central Bank of Yemen (2012) "Annual report" pg 160
201. EOSC-ESCWA (2014("The Financial Infrastructure of Remittance in Yemen", EOSC-ESCWA, August 2014, Sana'a
202. Agunias, Dovelyn Rannveig (2006) "Remittances and Development, Trends, Impacts, and Policy Options, A Review of the Literature", MPI
203. Mohapatra, Sanket, Dilip Ratha and Zhimei Xu (2006) "Remittance Trends 2006", World Bank www.worldbank.org/prospects
204. Calculation based on Ratha et al. (2009, 2013 and 2014) and on Mohapatra et al. (2006)
205. Ratha, Dilip et al. (2014) "Migration and Remittances: Recent Developments and Outlook" http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-12889
206. http://enjaz.bankalbilad.com/ar/Pages/default.aspx

207. EOSC-ESCWA (2014("The Financial Infrastructure of Remittance in Yemen", EOSC-ESCWA, August 2014, Sana'a
208. MOPIC (2000) Yemen's Strategic Vision 2002-2025
209. MIA (2014) By-law to regulate employment offices
210. Heckmann, Friedrich (2009) "Guest Worker Programmes and Circular Migration: What Works?", Immigration Paper Series 09, European Forum for Migration Studies
211. http://www.iom.cz/files/Guest_Worker_Paper_20_2_1.pdf
212. Ratha, Dilip et al. (2014) "Migration and Remittances: Recent Developments and Outlook" http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-12889
213. World Bank (2002) "Economic Growth in The Republic of Yemen, Sources, Constraints and Potential", World Bank, Sana'a
214. CSO (2013) "Statistical report for the industrial survey of the year 2011", CSO, Sana'a
215. GoY (2002) "Poverty Reduction Strategy Paper", Sana'a
216. UNDP (2003) "Diagnostic Trade Integration Study – Overview"
217. Central Bank (2013) "Annual report of 2012", Sana'a
218. GIZ/PSDP (2010) "Programme Design for the Industrial Modernization and Upgrading Programme of Yemen", Sana'a
219. World Bank (2002) "Economic Growth in The Republic of Yemen, Sources, Constraints and Potential", World Bank, Sana'a
220. CSO (2013) "Statistical report for the industrial survey of the year 2011", CSO, Sana'a
221. World Bank (2009) "Yemen - Mineral Sector Review", Sana'a
222. CSO (2013) "Statistical report for the industrial survey of the year 2011", CSO, Sana'a
223. Mitsubishi Research Institute Inc. (2005) "Enhancing Yemen Export Competitiveness: Diagnostics and Policy Options"
224. World Bank (2009) "Yemen - Mineral Sector Review", Sana'a
225. MOPIC "Transitional Programme for Stabilization and Development 2012-2014"
226. http://www.ye.undp.org/content/yemen/en/home/library/democratic_governance/transitional-program-for-stabilization-and-development--tpsd--20/
227. www.transparency.org
228. World Bank (2002) "Economic Growth in The Republic of Yemen, Sources, Constraints and Potential", World Bank, Sana'a
229. www.transparency.org/country#YEM
230. World Bank (2002) "Economic Growth in The Republic of Yemen, Sources, Constraints and Potential", World Bank, Sana'a
231. www.transparency.org/country#YEM
232. UNIDO (2013) "Industrial Development Report 2013, Sustaining Employment Growth: The Role of Manufacturing and Structural Change", UNIDO, Vienna
233. World Bank (2002) "Economic Growth in The Republic of Yemen, Sources, Constraints and Potential", World Bank, Sana'a
234. The researcher conducted interviews at local steel cookware, pharmaceutical, cement, food processing, and quarrying establishments.
235. World Bank (2002) "Economic Growth in The Republic of Yemen, Sources, Constraints and Potential", World Bank, Sana'a
236. World Bank (2009) "Yemen - Mineral Sector Review", Sana'a
237. World Bank Lending interest rate (%)
238. http://data.worldbank.org
239. UNIDO (2002) "Sustaining Competitiveness in Global Markets - Preparing Yemen for WTO Accession", UNDP, Sana'a
240. EU (2013)
241. World Bank "Decentralization and Subnational Regional Economics"

242.http://data.worldbank.org
243.Hirschman, Albert O. (1969) "The Strategy of Economic Development"
244.SIRIM Malaysia Berhad Company (2010) "The Industrial Development Strategy Framework, for sustainable Industrial Development in Yemen", SIRIM, Malaysia
245.UNDP (2006)

SIRIM Malaysia Berhad Company (2010) "The Industrial Development Strategy Framework for Sustainable Industrial Development in Yemen"

246.GIZ (2011) "National Micro, Small & Medium Sized Enterprise Development Strategy for Yemen – 2011-2021", GIZ, Sana'a
247.Alsabri, Amer (2014) "Analytical Study of the YGSMRB: reality and ambition", YGSMRB, Sana'a
248.Mitsubishi Research Institute Inc. (2005) "Enhancing Yemen Export Competitiveness: Diagnostics and Policy Options"
249.World Bank (2009) "Yemen - Mineral Sector Review", Sana'a
250.Alsabri, Amer (2014) "Analytical Study of the YGSMRB: reality and ambition", YGSMRB, Sana'a
251.Khateeb (2006) 6
252.Ghunaim (2014) 1
253.The calculations on the production of the service industries depend on estimates and not on actual data. There are also the figures for the number of tourists and tourism receipts from the Ministry of Tourism, which show that the number of tourists coming to Yemen in 2012 was 459,329 tourists, 348,939 Arabs and 110,339 from non-Arab countries. There were 387,498 tourists in 2011, 301,631 Arabs and 104,334 from non-Arab countries. The spending of Yemenis on health tourism is not known precisely, and unofficial estimates put the total Yemeni spending on health outside the country to be around US$ 250 million every year.
254.The Central Bank of Yemen (2009) "Financial and Monetary Developments" 9th issue and Book 10, (2013) Table 23, pg 37
255.Fattah (2012) Table (1) pg 13,14
256.Fattah (2012) Table (2) pg 15,16
257.Fattah (2012) Table (3) pg 16, 17
258.World Economic Forum report on information technology (2010, 2011, 2012)
259.World Bank (2007)
260.Yearly Report (2011)
261.International Telecommunication Union (2012) "The Impact of Broadband on the Economy: Research to Date and Policy Issues"
262.International Telecommunication Union
263.The report of the working group responsible for Yemen's WTO accession, WT/ACC/YEM/42 can be found at http://wto.org/english/thewto_e/acc_e/completeacc_e.htm#yem

ANNEXE (1): Agricultural holders, total cultivable area and area under crops

ANNEX (1): Table (1): Number of agricultural holders, total cultivable area and area under crops ***(estimated by source of irrigation) 2013 (Area in hectares)***

Governorate	Cultivated area by source of irrigation							Area under crops	Cultivable area	Total area
	Other	Water obtained by cars	Dams and reservoirs	Springs	Floods	Wells	Rainfall			
Ibb	102	1,222	3,054	2,749	16,288	27,486	50,901	101,802	53,224	56,445
Abyan	45	530	1,326	1,193	7,070	11,931	22,095	44,190	60,757	65,071
Sana'a City	7	87	217	195	1,157	1,952	3,615	7,230	8,725	9,317
Al-Baida	36	438	1,096	986	5,844	9,861	18,262	36,523	69,520	74,956
Taiz	86	1,044	2,610	2,349	13,920	23,489	43,499	86,997	58,117	64,067
A-Jawf	50	609	1,523	1,371	8,122	13,706	25,381	50,762	90,972	109,245
Hajja	136	1,633	4,082	3,674	21,773	36,741	68,039	136,078	136,815	147,076
Al-Hodeidah	355	4,251	10,627	9,565	56,680	95,647	177,125	354,250	314,777	327,107
Hadramout	48	581	1,454	1,308	7,753	13,083	24,227	48,454	51,715	54,422
Dhamar	125	1,504	3,759	3,383	20,049	33,832	62,652	125,304	103,296	113,734
Shabwah	26	306	766	690	4,087	6,896	12,771	25,542	49,373	58,524
Sa'adah	44	530	1,324	1,192	7,062	11,918	22,070	44,140	40,721	50,726
Sana'a	175	2,096	5,239	4,715	27,942	47,153	87,320	174,640	136,596	144,900
Aden	2	17	43	38	227	384	710	1,421	2,834	3,013
Laheg	37	447	1,117	1,006	5,960	10,058	18,625	37,250	26,390	31,804
Mareb	42	520	1,300	1,170	6,931	11,696	21,659	43,318	88,886	116,592
Al-Mahweet	31	379	947	852	5,049	8,520	15,778	31,556	21,726	27,443
Al-Mahrah	2	35	87	79	466	786	1,456	2,911	3,368	3,973
Amran	106	1,249	3,123	2,811	16,659	28,112	52,059	104,119	107,098	121,487
Al-Daleh	16	190	474	426	2,527	4,265	7,898	15,796	14,009	15,089
Reymah	28	325	814	732	4,339	7,323	13,560	27,121	13,519	14,493
Total	1,499	17,993	44,982	40,484	239,905	404,839	749,702	1,499,404	1,452,438	1,609,484

Source: General Directorate of Agriculture Statistics in the Ministry of Agriculture and Irrigation (MAI) (2013)

ANNEX (1): Table *(2): Production of agricultural crops (tonnes) 2010-2013*

Year / Crop	2009	2010	2011	2012	2013
Total cereals	674,490	1,012,945	816,548	909,741	863,934
Total legumes	81,137	98,161	89,820	96,013	96,765
Total vegetables	1,100,299	1,165,014	988,463	1,132,852	1,032,414
Tomatoes			220,180	258,654	160,641
Onions	215,500	223,860	204,041	216,739	226,734
Potatoes	278,022		264,676	294,686	281,794
Okra	22,599	24,277	17,664	21,342	
Sweet-melons			29,620	34,077	34,144
Watermelons	178,148	188,792	149,153	182,214	181,234
Other vegetables			120,793	146,482	147,867
Total fodder	2,119,908	2,175,801	1,970,546	1,954,710	1,933,474
Total cash crops	92,366	94,679	87,911	90,199	87,960
Cotton			21,738	20,562	18,120
Coffee			19,275	19,828	19,984
Total fruit	988,679	1,036,862	991,091	1,001,411	999,256
Bananas			129,337	127,468	126,332
Grapes			149,068	154,869	155,622
Oranges (including mandarins)	134,718		143,134	143,547	143,716
Papayas	25,117		25,583	26,064	25,752
Mangoes		400,978	377,664	383,107	381,783
Pomegranates	404,573	26,784	27,179	27,402	
Qat total production	173,856	176,435	180,630	190,856	193,394
Grand total			5,125,009	5,375,782	5,207,197

Source: Agricultural Statistical Yearbook, General Directorate of Agriculture Statistics, MAI (2011-2013)

ANNEX (1): Table *(3): Area under agricultural crops in Yemen (hectares) 2009-2013*

Year / Crop	2009	2010	2011	2012	2013
Cereals	677,716	927,303	784,844	854,689	857,024
Vegetables	89,090	92,581	80,795	89,773	87,138
Fruit	92,988	94,049	93,989	94,123	94,380
Legumes	41,289	49,552	45,684	47,966	48,011
Cash crops	89,370	90,665	88,785	88,194	85,692
Qat	153,512	159,671	162,584	167,682	168,772
Fodder	163,002	166,034	155,248	158,546	158,387
Total	1,306,967	1,579,855	1,411,929	1,500,973	1,499,404
	51.85	58.70	55.59	56.94	57.16

Source: Agricultural Statistical Yearbook, General Directorate of Agriculture Statistics MAI (2011-2013)

ANNEX (1): Table *(4): Area (hectares) and production (tonnes) of agricultural crops in 2005 and 2009*

Crops	2005		2009		Domestic production statistics (percent of demand)
	Area	Production	Area	Production	
Fruit	82,796	764,790	92,888	988,679	100%
Grapes	12,424	107,753	13,488	129,385	50%
Dates	13,773	29,990	14,764	56,760	71%
Bananas	9,075	89,905	10,264	132,418	100%
Papayas	1,340	20,588	1,512	25,117	100%
Mangoes	23,240	341,838	25,818	404,573	100%
Oranges	6,579	83,979	8,268	112,502	65%
Lemons	1,799	14,082	2,154	23,039	82%
Mandarins	1,063	13,258	1,486	22,216	100%
Peaches	2,366	11,049	2,568	12,838	100%
Pomegranates	2,438	22,191	2,699	26,200	100%

Apples	1,940	11,275	2,306	20,074	45%
Almonds	4,746	8,547	5,285	9,986	25%
Others	2,022	10,335	2,276	14,541	100%
Vegetables	73,480	877,820	88990	1,090,479	
Potatoes	17,155	217,759	21,497	278,022	100%
Tomatoes	15,059	204,446	18,071	251,269	100%
Watermelon	11,468	144,212	13,364	172,148	100%
Onions	12,284	173,112	14,072	215,500	100%
Sweet-melons	2,763	27,502	3,102	31,598	100%
Okra	3,067	17,904	3,718	22,579	100%
Capsicums	2,997	16,810	3,577	20,777	100%
Others	744	7,194	1,059	9,443	100%
Cash crops	197,270	190,360	240,455	264,537	
Coffee	28,821	11,331	34,497	18,924	99.7%
Sesame	18,794	19,363	22,613	24,285	95%
Cotton	17,609	20,573	19,664	24,895	32%
Tobacco	8,116	17,694	10,169	22,577	54.6%
Qat	123,933	121,399	153,512	173,856	100%

Source: Agricultural Statistical Yearbook 2005 and 2009, MAI (May 2006 and May 2010)

ANNEX (1): Table *(5): Production (tonnes) of coffee by governorate from 2009-2013*

Year / Crop	2009	2010	2011	2012	2013
Al-Hodeidah	593	618	642	674	676
Sana'a	6,751	6,882	6,963	7,050	7,112
Dhamar	428	454	489	501	507
Ibb	633	645	666	691	713
Taiz	259	267	263	314	316
Mareb	23	21	23	26	26

Hajja	1,520	1,550	1,569	1,609	1,619
Sa'adah	1,725	1,652	1,681	1,735	1,752
Al-Mahweet	1,525	1,536	1,538	1,651	1,667
Laheg	286	294	299	336	340
Abyan	459	461	481	496	486
Hadramout	26	23	25	27	24
Amran	543	466	478	517	539
Al-Daleh	29	26	26	35	36
Reymah	4,103	4,113	4,108	4,135	4,139
Total	18,924	19,029	19,275	19,828	19,984
Average	1,261.6	1,268.6	1,285	1,321.9	1,332.3

Source: Agricultural Statistical Yearbook (2010 – 2014) MAI

ANNEX (1): Table *(6): Production and potential for livestock and livestock products*

Animals and animal products	2005 Products	2009 Products	Imported 2009	Domestic production statistics (percent of demand)
Animals (head) Cattle	1,447,240	1,567,295	164,025	
Sheep	7,723,973	9,087,216	1,493,046	
Goat	7,695,661	8,883,315		
Camel	357,010	383,533		
Bee hives	1,197,281	1,230,692		
Livestock products (tonnes)				42.6per cent
Sheep milk	30,334	42,122		
Goat milk	39,425	52,278		
Cow milk	144,680	194,016	51,002*[250]	
Camel milk	2,169	2,671		

Sheep meat	23,670	30,648	1,646	63.66per cent
Goat meat	22,675	31,649		
Beef	23,985	31,957	4,805	
Camel meat	2,297	2,482		
White meat	113,195	139,635	108,089	56.4per cent
Eggs (million)	930	1,128		100per cent
Honey	1,960,611	2,485,688	927	99.96per cent
Skins/leather	9,715	12,102		
Wool	3,573	4,176		

Source: Agricultural Statistics Yearbook (2009), MAI (March 2010)

ANNEX (1): Table *(7): Production and potential for livestock and livestock products from 2009-2013*

Head\Year	2009	2010	2011	2012	2013
Sheep	9,087,216	9,206,416	9,357,605	9,419,212	9,551,311
Goats	8,883,315	9,016,476	9,105,811	9,158,464	9,255,373
Cows	1,567,295	1,605,166	1,653,672	1,684,367	1,721,906
Camels	383,533	402,683	435,567	443,358	454,410
Total	19,921,359	20,230,741	20,552,655	20,705,401	20,983,000

Source: Agricultural Statistics Yearbook (2009), MIA (March 2014)

ANNEX (1): Table *(8): Production of milk and meat by animal from 2009-2013*

Year Item	2009		2010		2011		2012		2013	
	Milk	Meat	Milk	Meat	Milk	Meat	Milk	Meat	Milk	Meat
Sheep	42,122	30,648	44,514	34,326	50,121	41,377	56,637	47,812	61,368	55,139
Goats	52,278	31,649	55,460	35,004	56,130	43,651	60,371	49,851	67,633	61,383
Cows	194,016	31,956	203,939	35,631	208,191	42,398	215,321	51,623	224,436	66,420

Camels	2,671	2,482	2,713	2,551	2,816	2,633	2,856	2,775	2,886	2,810
Total	291,087	96,735	306,626	107,512	317,258	130,059	335,185	152,061	356,323	185,752

Source: Agricultural Statistics Yearbook (2009), MIA (March 2014)

ANNEX (1): Table *(9): Production of poultry products, skins, wool and honey from 2009-2013*

Item/Year	2009	2010	2011	2012	2013
White meat	139,635	144,103	153,621	156,329	166,131
Eggs (million)	1,128	1,166	1,195	1,222	1,296
Skins	12,102	12,586	12,939	13,390	15,016
Wool	4,176	4,231	4,366	4,423	4,436
Honey	2,486	2,546	2,561	2,572	2,614

Source: Agricultural Statistics Yearbook (2009), MIA (March 2014)

ANNEX (1): Table *(10): Value of livestock in Yemeni rial and US$ (millions) from 2003-2012*

Years	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Yemeni rial	60,500	75,618	110,559	133,105	198,212	239,788	321,192	380,234	468,671	561,027	220,716.6
US$	330	409	578	675	996	1,200	1,583	1,732	2,192	2,617	1,074.3

Source: Agricultural Statistics Yearbook (2009), MIA (2004-2013)

ANNEX *(1): Table (11): Produced, exportable, exported, exported quantities as percent of production, value (Yemeni rial) and seasonal availability of agricultural products in 2012*

Commodity / Product	Type	Produced (000 tonnes)	Exportable (000 tonnes)	Exported (000 tonnes)	Exported percent of production	Value (000 Yemeni rial)	Availability period / season
Fruit	Mangoes	383	100-150	43,456	11	4,215,870	March-August
	Bananas	127	70-90	92,122	72	3,378,945	All year
	Grapes	155	8-10	824	0.5	92,433	August-September
	Raisins	12	2-4	1,148	10	308,752	All year

	Pomegranates	27	6-8	18,644	68	2,374,472	June-December
	Ficus carice (Indian fig)	5.479	3-5	5.42	0.10	222	February-October
	Oranges (fresh)	120	20-25	1	0.00	144	October-February
	Mandarins	23		80	0.34	13,540	October-February
	Papayas	26	7-9	59	0.23	3,476	All year
Vegetables	Onions	217	100-140	112,018	52	3,246,265	February-November
	Potatoes	295	70-90	57	0.02	3,512	March-November
	Tomatoes	259	20-25	286	0.1	30,844	All year
	Okra	21	7-9	-	-	-	All year
	Garlic	4		110	3	16,356	March-June
	Capsicum	20	7-10	141	0.7	6,971	All year
	Watermelon		30-40	6,161	3	721	January-October
	Sweet-melon	34	10-15	6,236	18	337,088	January-October
Animal products	Natural honey	2.6	1-1.5	775	30.12	1,302,775	All year
	Sheep & Goats	98	10-15	-	-	-	All year
	Skins and wool	13	8-10	3,053	23	3,139,529	All year
Cash crops	Coffee and Husks	20	7-10	4,456	22	3,540,986	All year
	Coffee			3,302		3,111,446	All year
	Husks			1,154		429,540	All year
	Cotton	21	7-9	816	4	187,916	All year
	Tobacco	23.251	6-8	50	0.22	31,219	All year
	Henna	15	7-10	8	0.06	1,516	All year
	Sesame seeds	25	3-5	386	1.5	26,978	All year

Source: General Directorate of Agricultural Marketing and Trade, MAI (2013)

ANNEX (2): The matrix of objectives of the Ministry of Agriculture and Irrigation

Directives	Strategies	Targeted activities	Indicative Achievement	Agency responsible
Natural catastrophe management	Guarantee compensation for farmers	Providing farmers with compensation in cases when their products are damaged due to natural disasters	Create an emergency fund for natural disasters management from the proceeds of the sale of diesel	Agricultural and Fisheries Production Promotion Fund (AFPPF)
Reducing depletion of groundwater	Ensure optimal use of water resources	Increasingly harvesting water using modern irrigation methods	Double the number of users of modern irrigation methods and offer them tax exemptions	National Programme for Irrigation
		Raising awareness of the water problem	Enhance programmes and awareness campaigns with the participation of water users associations	National Programme for Irrigation
		Combating desertification	Implement the national plan to combat desertification	GDDRDC
Reviving agricultural extension services	Upgrade agricultural extension services	Involving beneficiaries in provision of extension services	Activate the role of cooperatives in extension service delivery	ACP
		Strengthening agricultural information system	Provide applied research information and prices used by farmers	Agricultural Extension and Marketing
Agricultural growth	Enable producers to contribute to the growth of agriculture	Supporting trade and agro-industry	Establish industrial enterprises that rely on Yemeni agricultural raw materials	Ministry of Agriculture and Irrigation (MAI) and Ministry of Industry and Trade (MOIT)
		Developing marketing channels and the export of agricultural products	Establish a mechanism to regulate markets and exports	General Directorate of Agricultural Marketing and Trade (GDMAT)
		Providing inputs to agricultural production-seed, fertilizer-pesticides-at reasonable prices	Control and regulate the sale of farm inputs	General Administration of Quality Control and Production Inputs

ANNEX (3): SWOT analysis for honey and coffee

HONEY	
Strengths	**Weaknesses**
Abundance of natural flora and fauna Appropriate climatic conditions Unique flavour due to climatic conditions and flora Availability of natural nutrition for the bees (most notably Cedar trees) Success in terms of growth Integrity of Yemeni honey and consumer confidence Very positive socioeconomic impact, especially income to landless farmers Contribution to poverty alleviation and employment opportunities Considerable groundwork has already been done by different programmes and organizations in the past Involvement of a large number of entrepreneurs in the processing and marketing of honey High quality production Good relation between beekeepers and stakeholders Very high demand and prices in regional and international markets	Lack of facilities and equipment for good export quality honey Limited access to modern beehives Near saturation of domestic market and entrepreneurs' inability to find new markets other than Pakistan Non-inclusion of Yemen in the list of countries authorized to export honey to EU Absence of proper equipment and laboratory facilities to test for residue presence; a bottleneck for EU market and others Weak road/transportation access to pasture areas Lack of pasture management Small quantities of production
Opportunities	**Threats**
Sale through beekeepers, wholesalers and traders Organic and fair trade honey Support needed for obtaining internationally recognized certification for existing factories Relations with international buyers Possible access to modern beehives Growing consumption and good prices in domestic markets Growing number of commercial beekeepers Very high demand inside and outside market	Competition from Pakistan, China and Ethiopia in major markets Instability and volatile political situation Use of pesticides in bee pasture areas Loss of credibility with major buyers due to poor performance of exporters, including failure to meet requirements of delivery samples
COFFE	
Strengths	**Weaknesses**
Very favourable climatic and geographical conditions for developing better quality specialty products and environmentally friendly products Private traders are involved in coffee exports	Low yield of cultivated areas and trade competitiveness Poor quality chemicals (insecticides and pesticides), overused and incorrectly used Lack of technical knowledge and skills, weak research facilities,

Farmers cooperatives are willing to work together and deal with traders/exporters Code of conduct drawn up to achieve fair trade practices Contribution to poverty alleviation and employment opportunities Growing demand in regional and global markets Institutions are in place to support the sector Private sector driven, with donor support Government subsidies on inputs and plant materials, tools and machinery, loans at attractive interest rates Low labour cost Consumption of coffee peel/husk (qesher) with high domestic demand	Shortage of coffee processing capacity with proper standards (some factories and packing plants are unsuitable for coffee processing and pose health hazards) Lack of skilled personnel and expertise Inconsistent quality of products Lack of facilities and standardized quantities to prepare medium/large consignments for export Lack of well-equipped and accredited laboratories Lack of a national organic certification system Financing difficulties Inadequate market information High transportation costs and irregular supply of electricity, No central auctioning system in Yemen and inaccessibility of regional auction markets
Opportunities	**Threats**
New and rapidly expanding global market for organic green (fresh cherries) coffee Small areas with young coffee trees and potential for expansion and new planting Existence of new organically certified growing areas for organic coffee Good brand image could be established, especially in view of the publicity of Mokha coffee Support available for obtaining internationally recognized certification for new and existing factories World market prices are expected to rise	Coffee grown by many small farmers with small plots and low productivity Loss of credibility with major buyers due to poor performance by exporters, including failure to meet requirements of delivery samples Yemeni exporters/traders mixing other imported coffee of low quality with Yemeni coffee, contributing to loss of credibility Lack of human resources, especially in quality control and export marketing contributing to loss of credibility Absence of infrastructure Limited water availability for irrigation and washing negatively impacts product quality

Annex (4): Examples of common minerals available in Yemen

Industrial minerals	Industrial use	Sites (by governorate)	Total geological reserves	Extent of domestic exploitation
Limestone and dolomite	Cement, glass, dyes, iron, ceramics, caustic soda and construction	Abyan, Amran, Bajel Hadramout, Al-Hodeidah, Mareb, Sana'a, Taiz and Shabwah	13.5 billion m3	Limited to cement, gypsum industries and building stone
Rock salt	Table salt, glass, soap and caustic soda	Al-Hodeidah, Mareb and Shabwah	365 million m3	Limited to table salt and tannage
Gypsum	Cement, glass, medical uses, heat insulation, adornment and decoration	Abyan, Hadramout, Al-Hodeidah, Mareb, Shabwah and Taiz	391 million tonnes	Limited to cement industry and adornment
Marble and granite	Construction, adornment and decorative stone, medical and adhesives products	Abyan, Hajja, Mareb, Sana'a and Taiz	Over 1 billion m3	Extensive exploitation (construction and ornamental stones)
Feldspar	Insulation, glass, ceramics, plastic, rubber, soap and paint products	Abyan and Hajja	Over 32 million m3	Unexploited
Silica sand (glass sand)	Insulation, glass, ceramics (polishing), plastic, rubber, soap and paint products	Rada, Sa'adah, Sana'a, Shabwah and Taiz	157 million m3	Exploitation limited to building and cement works
Quartz	Optical, electrical, solar cells, linen, rubber and medical products	Hajja and Sa'adah	13 million m3	Unexploited
Mineral clay	Ceramics, cement, paper, rubber, paint and bricks	Aden, Al-Hodeidah, Ibb, Laheg, Sa'adah and Sana'a	Over 6 billion m3	Unexploited except in cement, thermal bricks and pottery industries

Source: EU (2013) "National Export Strategy" Preliminary Draft August 2013, Technical Assistance coordinated by ADE in association with Lambard Management Consultants Ltd

Annex (5): List of active mining companies

Company	Licenses	Notes
Jabal Salab Company (Yemen) Ltd.	Jabali Zinc-Lead-Silver	Project is at development stage and was expected to enter production in 2009. (JV between ZincOx Resources plc and Ansan Wikfs)
Cantex Mine Development Corporation	Al Hariqah (Au) Suwar (Ni, Cu, Co) W. Qutabah (Ni, Cu, Co, PGE) Al Masna'a (Ni, PGE) Al Fayad (Au)	Cantex carried out an extensive geochemical programme in the north of Yemen and has now spent some US$ 17 million on exploration. Option Agreement was signed with Vale in November 2008, on the Suwar, Wadi Qutabah nickel, copper, cobalt and PGE projects.
Thani Dubai Mining	Exploration of gold and associated minerals at the Wadi Maddan area in Hadramout and Wadi Sharis area in Hajja	Exploration and drilling
Ansan Wikfs (Hadramawt) Ltd.	(i) A working interest in Jabali zinc mine project; (ii) Exploration permits in three areas for gold, copper and nickel and tantalum and associated metals	Exploration underway on the exploration permits
Yemen Iron Steel Limited	Exploration license to carry out exploration for iron ore and associated minerals at the Al-Thanyyah area in Mareb	Mapping, sampling and drilling
ENMAR (Yemen)	Exploration license for Industrial Minerals in Taiz	Prospecting
Almar Co. (Yemen)	Prospecting for gold in Moore Valley- Hajja	Prospecting
Refinery Co. for Minerals (Kuwait)	Exploration license to carry out exploration for iron at Jabal Al-Sa'di area of Sana'a	Prospecting
Alhada Incorporation for General Trade	Exploitation of minerals in Jabal Ras in Al-Hodeidah	Prospecting

Source: YGSMRB

Annex (6): Current industrial zones

Industrial Zone and Area	Location	Actual works implemented	Relevant studies prepared	Division plans for the land	Projectprojecti on on sites	Investment opportunities set out for the private sector		
						Title	Works required	Estimated cost
Aden Industrial Zone, total area 196 hectares	Al-Alam area, located 14 km from Aden Airport, 18.9 km from Aden Port, and 28 km from the Free Zone	- Received the zone's land - Set signs laying out the dimensions and the zone area - Build guardroom in the zone - Implemented Phase I of the road works (excavation, filling and levelling)	Economic feasibility study underway Infrastructure and services study underway Environmental impact assessment underway	Prepare the zoning plans for the internal division of the entire area	32 spaces have been allocated for the licensed industrial space as part of the area that was added to the zone	An invitation advertisement was put up for investment and development of the industrial zone on the basis of BOT	Roads	US$ 7.2 million
							Water	US$ 11.8 million
							Sanitation	US$ 4.7 million
							Electricity	US$ 11.2 million
							Telephone	US $ 2 million
Al-Hodeida Industrial Zone, total area 4,200 hectares	Located on the northern side of Al-Hodeida City, bordering Al-Salif Road to the	- Received the zone's land	Economic feasibility study underway	Prepare the zoning plans for the internal	8 spaces were allocated to licensed	An invitation advertisement was put up for investment and development	Roads	US$ 11.1 million

	North, crossed by the Eastern Al-Hodeida – Jizan Road, to the west is the Red Sea coast with an area of 42 km2; it represents a nucleus for a zone with 315 hectares	- Set signs laying out the dimensions and the zone area - Build guardroom in the zone - Implemented Phase I of the road works (excavation, filling and levelling)	Infrastructure and services study underway Environmental impact assessment underway	division of the entire area	industrial projects	of the industrial zone on the basis of BOT	Water	US$ 17.9 million
							Sanitation	US$ 7.9 million
							Electricity	US$ 22.7 million
							Telephone	US$ 4 million
Laheg Industrial Zone, total area 2,800 hectares	Al-Rija'a area, project is 20 km from Al-Houta, the capital of the governorate, and 27 km from Aden Port	- Received the zone's land - Set signs laying out the dimensions and the zone area - Build guardroom in the zone - Implemented Phase I of the road works (excavation, filling and levelling)	Economic feasibility study underway Infrastructure and services study underway Environmental impact assessment underway	Prepare the zoning plans for the internal division of the entire area	4 spaces were allocated to licensed industrial projects	An invitation advertisement was put up for investment and development of the industrial zone on the basis of BOT	Road	US$ 13.1 million
							Water	US$ 17 million
							Sanitation	US$ 7 million
							Electricity	US$ 29 million

							Telephone	US$ 2 million
Hadramout Industrial Zone, total area 800 hectares	Located in Miryar site, at the crossroad of Bawazeer Stream, Al-Shihr Road, and the Coastal Road, Al-Shihr – Al-Mukalla near the Refinery and Fisheries Industrial Complex and the proposed site for the governorate's port	- Received the zone's land - Set signs laying out the dimensions and the zone area - Build guardroom in the zone	Economic feasibility study underway Infrastructure and services study underway Environmental impact assessment underway	Prepare the zoning plans for the internal sectioning of the entire area	Not completed	An invitation advertisement was put up for investment and development of the industrial zone on the basis of BOT	Roads	US$ 13.1 million
							Water	US$ 9.7 million
							Sanitation	US$ 6.3 million
							Electricity	US$ 17 million
							Telephone	US$ 2 million

Source: GIA and MOIT

BIBLIOGRAPHY

Abdulla Salem (2003) 'Project for Developing the Aden Aquaculture Research Centre' Ministry of Fish Health, Sana'a.

Agunias, Dovelyn Rannveig (2006) Remittances and Development, Trends, Impacts, and Policy Options, A Review of the Literature, Migration Policy Institute: http://www.migrationpolicy.org/research/remittances-and-development-trends-impacts-and-policy-options-review-literature

Ahmed Farouk Ghoneim (2006).' Yemen's Integration in the World Economy', Paper submitted to ERF 13th Annual Conference

Alsabri, Amer (2014) "Analytical Study of the YGSMRB: reality and ambition", YGSMRB, Sana'a

Alwan, Mohamad Y. (2010) High-Skilled Migration to and from Jordan, Yarmouk University, Jordan. Available at: http://www.carim.org/HighlySkilledMigration.

Angenendt, Steffen (2009) Labour Migration Management In Times Of Recession: Is Circular Migration a Solution?, Transatlantic Academy Paper Series: http://www.gmfus.org/doc/Steffan%20Angenendt_Final.pdf

Beine, Michel, Frédéric Docquier and Hillel Rapoport (2006) Measuring international skilled migration: new estimates controlling for age of entry, Policy Research Discussion Paper, World Bank.

Bertoli, Simone and Francesca MARCHETTA (2012) Bringing It All Back Home Return migration and fertility choices, CERDI, Etudes et Documents, E 2012.01, http://www.cerdi.org/ed

Bonfiglioli, A and K.I. Hariri (2004). 'Small-scale fisheries in Yemen: Social Assessment and Development Prospects'. FAO and the World Bank.

Brogan, Katherine, Elizabeth McGuinness and Erwin Alvarez (2013) Assessment of Remittances In Honduras, Field Report No. 19, Produced in collaboration with the Field-Support Law

Cainkar, Louise (2013) Global Arab World Migrations and Diasporas, Marquette University, e-Publications@Marquette, http://epublications.marquette.edu/cgi/viewcontent.cgi?article=h1070&context=socs_fac&sei-redir=1&referrer

Central Bank (2013) "Annual report of 2012", Central Bank, Sana'a

Central Statistical Organization (2013) "statistical report for the industrial survey of the year 2011", CSO, Sana'a

Chan Kim, W. & Mauborgne, Renée, 2005, Blue Ocean Strategy.

Cikara . Lioka (2003). 'Present Status and Management Direction for Aquaculture Research Center I Republic of Yemen, JICA.

David J Currie (2010).'Draft Aquaculture, Fish Feed and SME's Development Strategy'.

Docquier, Frédéric, Hillel Rapoport and Sara Salomone (2011) Remittances, Migrants' Education and Immigration Policy: Theory and Evidence from Bilateral Data, Discussion Paper Series, CDP No 19/11, Centre for Research and Analysis of Migration, University College London, October 2011, http://www.cream-migration.org/publ_uploads/CDP_19_11.pdf

Drechsler, Denis (2008) International Labour Mobility Opportunity or Risk for Developing Countries? Policy Insights No. 69, OECD Development Centre, June 2008, www.oecd.org/dev/insights.

EFW (2009). 'Solomon Islands Diagnostic Trade Integration Study Report

EOSC-ESCWA (2014) The Financial Infrastructure of Remittance in Yemen, EOSC-ESCWA, August 2014. Sana'a. البنية التحتية المالية للتحويلات في اليمن, اغسطس 2014، صنعاء.

EU (2013) "National Export Strategy", Preliminary Draft National Export Strategy, Technical Assistance coordinated by ADE in association with Lambard Management Consultants Ltd., EU, Sana'a

EU and MOIT (2013) "National Export Strategy" Sana'a.

European Aid, 2013, National Export Strategy, March 2013.

FAO (2005a). 'Third Five Year Plan for Fish Wealth Development and Poverty Reductions based on the Millennium Development Goals 2006 – 2010'. FAO Yemen. FAO (2005b). 'Long-term Plan for Sustainable Fish Wealth Development and Poverty Reductions based on the Millennium Development Goals 2006 – 2015'. FAO Yemen.

FAO and MAI (2008) 'Qat Production in Yemen: Water Use, Competitiveness, and Possible Policy Options for Change'; Ministry of Agriculture and Irrigation/Food and Agriculture Organization, Rome, Sana'.

FAO. (2005). ' Aquaculture production, 2003. Year book of Fishery Statistics Vol.96/2. Food and Agriculture organization of the United Nations, Rome, Italy.

Forsythe, Jessica (2011) Opportunities and Obstacles for Yemeni Workers in GCC Labour Markets, http://www.chathamhouse.org/sites/files/chathamhouse/0911pp_gcc_0.pdf

General Investment Authority, 2013, Investment Journals of 2009.

Ghosh, Bimal (2006) Migrants' Remittances and Development, Myths, Rhetoric And Realities http://www.ssrc.org/workspace/images/crm/new_publication_3/%7Bd2915556-f851-de11-afac-001cc477ec70%7D.pdf

Girgis, Maurice (2002) The GCC Factor in Future Arab Labour Migration, Draft Submitted to the Fourth Mediterranean Development Forum, Amman, Jordan, October 2002.

GIZ (2011) 'National Micro, Small & Medium Sized Enterprise Development Strategy for Yemen – 2011-2021', Yemen

GIZ (2011) "National Micro, Small & Medium Sized Enterprise Development Strategy for Yemen – 2011-2021", GIZ, Sana'a

GIZ/PSDP (2010) "Programme Design for the Industrial Modernization & Upgrading Programme of Yemen", GIZ, Sana'a

GIZ/PSDP (2012) "Local Business Environment Survey", Apex Consulting, Sana'a

GOPA. (2006). 'Report Socio-Economic Survey of Artisanal Fisheries, Republic of Yemen. Fisheries Monitoring and Surveillance.

GOY (2002) ' Yemen's Strategic Vision 2025. Sana'a.

GoY and World Bank (2010) Republic of Yemen Education Status Report, Challenges and Opportunities, 2010.

GOY, World Bank, United Nations Development Program. (2007). ' Yemen Poverty Assessment. Vol. I-IV. Sana'a.

GoY/MoPIC (2000) Yemen Vision 2025.

GoY/MoPIC (2010) Yemen Vision on Accessing GCC Labour Markets, February 2010.

GoY/MOPIC (2013) "Youth Employment Action Plan (YEAP)", internal draft, 2013.

Grant Thornton .Y (2014). 'Fisheries Cooperatives Assessment', Supported by EOF.

Heckmann, Friedrich (2009) Guest Worker Programs And Circular Migration: What Works?, Immigration Paper Series 09, European Forum for Migration Studies, Elmar hönekopp Institut für Arbeitsmarkt- und Berufsforschung, http://www.iom.cz/files/Guest_Worker_Paper_20_2_1.pdf

Hirschman, Albert O. (1969) "The Strategy of Economic Development,", London Oxford Press

Huddleston, Thomas, Jan Niessen Eadaoin Ni Chaoimh and Emilie White (2010) Migrant Integration Policy Index Iii, WWW.MIPEX.EU, mipex_questionnaire_comments_2007-2010

IDOM: International Dialogue on Migration (2005) Mainstreaming Migration into Development Policy Agendas, N°8, IOM - Migration Policy, Research and Communications, 2005.

IFAD (2007) Sending Money Home: Worldwide remittance flows to developing countries, http://www.ifad.org/remittances/maps/brochure.pdf

IFAD (2010). 'Fisheries Investment Project (FIP).

IFAD (2011) Enabling Poor Rural People to Overcome Poverty in Yemen, December 2011,

IFAD, (2009) Economic Opportunity Fund (EOP) (2010-20160) PAD.

ILO (2010) Yemen, Child Labour National Survey, 2010.

IMF, (May 2014). "Middle East and Central Asia Department". REO Update.

IMI and RMMS (2012) Global Migration Futures Using scenarios to explore future migration in the Horn of Africa & Yemen, Project report. November 2012.

IMO (2014a) Yemen Country Profile: http://www.iom.int/cms/en/sites/iom/home/where-we-work/africa-and-the-middle-east/middle-east-and-north-africa/yemen/yemen-country-profile.default.html?displayTab=facts-and-figures

IMO (2014b) Yemeni migrants returned from Saudi Arabia through the Border Crossing Point of Al Tuwal, Hajjah –October 2014 Update: http://www.iom.int/files/live/sites/iom/files/Country/docs/2014-11-01-Yemeni-Migrant-Snapshot.pdf

Jean-Marie Paugam and Anne-Sophie Novel (2006). 'Reviving the Special and Differential Treatment of Developing Countries in International Trade.

Khaled I. Al Hariri (2009). 'Artisanal Fisheries Cooperatives in Yemen', NCFCCD FRMCP.

Lundborg, Per (2010) Immigration Policy for Circular Migration, Report No. 4, September 2010, The report is available at www.sieps.se

M0SAL (2009) Yemen, National Employment Agenda, Towards an Employment Strategy Framework (Preliminary Draft) February 2009.

MAI (2008) 'Update of the National Water Sector Strategy and Investment Programme; The NWSSIP Update, Inter-ministerial Steering Committee for the Water Sector', Sana'a

MAI, (2004) ‘Aden Agenda: Framework of the Structural Adjustments for Reform of the Agriculture and Irrigation Sector, Sana’a

MAI, (2004) ‘Agriculture policies and strategies for the Republic of Yemen, MAI, Sana’a.

MAI, (2006) ‘Agriculture Sector Strategy Matrix 2006-2010 and Plan of Work to Implement Strategy for Two Years 2006-2007, MAI, Sana’a.

MAI, (2012) ‘National Agriculture Sector Strategy’ 2012 - 2016, A Promising Sector for Diversification Economy. in Yemen Sana’a.

Matthias Schlund e.t al. (2013) “Working Paper Number I, Basic Facts - Economics of Crop Production in Yemen”, available on http://www.yemenwater.org/wp -content/uploads/2013/03/ Agricultural Policy Review. Working Paper Number, (the DRC figures are based on the competitiveness of priority crops analysed in a joint effort of the General Directorate of Planning and Monitoring in the Ministry of Agriculture and Irrigation (MAI) and the World Bank in April/May and June 1998).

MENA (2011) Middle East and North Africa Program Paper, mEna, 2011/01.

Ministry of Finance/Ministry of Agriculture and Irrigation, (2/2011) ‘Proposal for an Agriculture Technology Project for Yemen’s Efforts Towards Achieving Food Security under Global Agriculture and Food Security Program (GAFSP) Sana’a, Yemen.

Ministry of Tourism, 2010, National Tourism Development Strategy Plan 2009-2025.

Ministry of Tourism, 2010, Tourism Law, book (1).

Ministry of Tourism, 2010, Tourism Legislation, Executive Regulations Book # 3.

Ministry of Tourism, 2013, Annual Meeting for Tourism Sectors of 2013.

Ministry of Tourism, 2013, Tourism Statistics Report of 2013.

Ministry of Tourism, 2014, The Annual Tourism Meeting Report.

MIPEX 2010 INDICATORS, http://www.mipex.eu/sites/default/files/downloads/mipex_indicators_2010.pdf

Mitsubishi Research Institute Inc. (2005) “Enhancing Yemen Export Competitiveness: Diagnostics and Policy Options”

MMA (2014) By-law to regulate employment offices in Yemen, 2014.

MMA (2014) Emergency Plan to receive, shlelter and rehabilitate the Yemeni enforced returnees from KSA, 2014.

MOFW (2004). 'Proposal for the modification of the republican resolution bylaw No. (42) 1991 with the republican resolution bylaw No (43) 1997, regarding management, exploitation and protection of aquatic organisms. Sana'a, p. 3 – 4'.

MOFW (2012). 'Fisheries Statistics’ Mimeo, Yemen.

MOFW (2012).'National Fisheries Sector Strategy 2012-2025'.

Mohapatra, Sanket, Dilip Ratha, and Zhimei Xu (2006) Remittance Trends 2006, World Bank : www.worldbank.org/prospects

MOPIC (2010). 'National Food Security Strategy Paper (NFSSP) PART I. Patterns and Causes of Food Insecurity in Yemen.

MPG: Migration Policy Group (2013) ARMENIA: A Migrant Integration Policy Index assessment, MPG, October 2013, Office for Democratic Inistitutions and Human Rights (ODIHR). http://www.osce.org/odihr/107297?download=true

MPIC (2012) "Transitional Program for Stabilization and Development (TPSD) 2012-2014" MPIC, Sana'a

MPIC and IFPRI, (2010) 'National Food Security Strategy: Summary', MPIC and IFPRI, Sana'a

Newland, Kathleen and Tanaka, Hiroyuki (2010) Mobilizing Diaspora Entrepreneurship for Development, Diasporas & Development Policy Project, MPI&USAID, http://www.migrationpolicy.org/research/mobilizing-Diaspora-entrepreneurship-development

Nicholas Burger, Audra Grant, Sarah Kups, Yashodhara Rana and Quentin Wodon Ju (2014) Focus Countries for the Study on Climate Change and Migration in the MENA Region, Munich Personal RePEc Archive, June 2014. World Bank. http://mpra.ub.uni-muenchen.de/56928/1/MPRA_paper_56928.pdf

Nurun Nabi. Talokdar (2014) ' Fisheries Value Chain Study' , EOF Yemen.

O'Neil, Kevin (2003) SUMMARY REPORT: Discussion on Migration and Development: Using Remittances and Circular Migration as Drivers for Development, MPI Research Assistant, April 2003, http://www.migrationpolicy.org/research/discussion-migration-and-development-using-remittances-and-circular-migration-drivers.

Ojeda, Raul Hinojosa and Takash, Paule Cruz (2011) Imigrant Remittance Corridors, North American Integration and Development Center, University of California, Los Angeles, March 10, 2011.

Oxfam (2014) 'Policy Paper: http:// policy-practice.oxfam.org.uk./publications/yemen-in-crisis-how-yemen-can-survive-the fuel-crisis-and-secure-its-future-322186?W PandP BAU&utm content=buffer0943&utm medium=social&utm source=twitter.com&utm campaign=buffer. snapshot report .

Martens, P. (2007).'EU initiatives to strengthen trade policy formulation and implementation in LDCs: Exploring the Need for an Institutional Approach.

Ladd, P. (2003). 'Too hot to handle? The absence of trade policy from PRSPs'.

Philippe, Hein. (2004). 'The Integrated Framework for Trade-related Assistance to the Least Developed Countries: A Promising Initiative'.

PRSP (2002) "Poverty Reduction Strategy Paper", GoY, Sana'a

Puentes, Ruben, Alejandro Canales, Héctor Rodríguez, Raúl Delgado-Wise and Stephen Castles (2010) Towards An Assessment Of Migration, Development And Human Rights Links: Conceptual Framework And New Strategic Indicators, Peoples' Global Action on Migration, Development, and Human Rights, IV Global Forum, November 2010, Mexico City.

Ratha, Dilip (2013) The Impact of Remittances on Economic Growth and Poverty Reduction, MPI, Policy Brief. http://www.migrationpolicy.org/research/mobilizing-Diaspora-entrepreneurship-development.

Ratha, Dilip, Christian Eigen-Zucchi, Sonia Plaza, Hanspeter Wyss, and Soonhwa Yi (2013) Migration and Remittance Flows: Recent Trends and Outlook, 2013-2016, http://siteresources.worldbank.org/INTPROSPECTS

Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2011) Migration and Remittances Factbook 2011: Yemen, Republic of, Migration and Remittances Unit, World Bank.

http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/Yemen.pdf

Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2011b) Migration and Remittances Factbook 2011, Middle East and North Africa, http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/MENA.pdf

RMMS: The Regional Mixed Migration Secretariat (2014) The Letter of the Law: regular and irregular migration in Saudi Arabia in a context of rapid change,

Saeed, Abduljabar, 2013, Tourism Regional Arab Obstacles and Solutions book.

Sana'a University, WEC, (2000) 'Impact of Climate Change on Water Resources in Yemen, Sana'a.

Sanders M. & Morgan, G. (1989). 'Review of the Red Sea and Gulf of Aden fisheries assessment and management project, FAO, Rome technical report.

Shediac, Richard and Samman, Hatem (2010) Meeting the Employment Challenge in the GCC, The Need for a Holistic Strategy, Ideation Center, Dubai. Booz & Company Inc. 2010.

SIRIM Malaysia Berhad Company (2010) "The Industrial Development Strategy Framework (IDS) for Sustainable Industrial Development in Yemen" SIRIM, Malaysia

Talib, Ameen Ali (1995) "Hadramis in Singapore", Thee British-Yemeni Society, November 1995: http://www.al-bab.com/bys/articles/talib95.htm.

Teresa Amador (2014)' Review and Update Fisheries Legislations', Fisheries Investment Project (FIP) EOF.

Trade Capacity-Building Programme for Ghana.

Triandafyllidou, Anna (2011) Circular Migration and Integration, A Short Guide for Policy Makers, European University Institute, http://www.eui.eu/Projects/METOIKOS/Documents/GuidePolicyMakers/METOIKOSGuideforPolicyMakers.pdf

UN Department for Social and Economic Affairs (2011) 'Assessing Development Strategies to Achieve the MDGs in the Republic of Yemen' UNDESA, New York

UNCTAD (2007).'Export Competitiveness and Development in LDCs; Policies Issues and Priorities for Least Developed Countries for action during beyond UNCTAD XII'.

UNDP (2003) "Diagnostic Trade Integration Study –Overview" UNDP, Sana'a

UNDP (2006) "Macroeconomic Policies for Growth, Employment and Poverty Reduction in Yemen", UNDP, Beirut

UNDP (2012) 'Proposal Integrated Community Livelihood', UNDP-EDSP-FC, Yemen.

UNDP (2014) Human Development Report 2014

UNDP (2014) Yemen - Multi-dimensional Assessment Report 2014,

UNDP (2006) Macroeconomic Policies for Growth, Employment and Poverty Reduction in Yemen.

UNDP, EDSP/Yemen, (November 2010) 'Economic Diversification in Sa'ada', UNDP, Yemen

UNDP, World Bank (2012) ' Joint Social and Economic Assessment for the Republic of Yemen'.

UNESCO (2014) "Learning to Live Together: Skilled Migration and Brain Drain", Consulted on November 3, 2014. United Nations Educational, Scientific and Cultural Organization, http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/projects/skilled-migration-and-brain-drain/

UNIDO (2002) “Sustaining Competitiveness in Global Markets — preparing Yemen for WTO Accession”, UNDP, Sana’a

UNIDO (2013) “Industrial Development Report 2013, Sustaining Employment Growth: The Role of Manufacturing and Structural Change”, UNIDO, Vienna

United Nations (2011) “Common Country Assessment: Republic of Yemen”, UNDP?, Sana’a

USAID (2013) “USAID Yemen Workforce Development Appraisal”, final report, implemented by Chemonics International Inc., Asia and the Middle East Economic Growth Best Practices Project February 21, 2013.

USAID. December, (2005) ‘Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen; to Sustainable Improve Incomes and Expand Trade. USAID, Sana’a

World Bank (2002) “Economic Growth in The Republic of Yemen, Sources, Constraints, and Potential”, World Bank, Sana’a

World Bank (2006) ‘Yemen Economic Update’, Spring

World Bank (2009) “Yemen Mineral Sector Review”, World Bank, Sana’a

World Bank, 2009 “Yemen Mineral Sector Review”. Oil, Gas, Mining Policy Division, Oil, Gas, Mining and Chemicals Department Middle East and North Africa Region. Report No. 47985-YE.

WFP (2010) 'Yemen Comprehensive Food Security Survey: Overview of food security situation and response analysis’, WFP Vulnerability Assessment and Mapping, Rome.

Widmaier, S. and J-C. Dumont (2011) “Are recent immigrants different? A new profile of immigrants in the OECD based on DIOC 2005/06”, OECD Social, Employment and Migration, Working Papers No. 126, Directorate for Employment, Labour and Social Affairs, OECD Publishing at: http://dx.doi.org/10.1787/5kg3ml17nps4-en

World Bank (2014) Remittance Prices Worldwide, Issue No. 10 – June 2014, World Bank, http://remittanceprices.worldbank.org

World Bank (1999) ‘Republic of Yemen Agricultural Strategy Note’, Sana’a

World Bank, UNDP, European Union & Islamic Development Bank, Dec. 2011, Joint Social and Economic Assessment for the Republic of Yemen.

World Bank/HR Wallingford, (2009) ‘Climate Change Impact Assessment on the Agriculture and Water Sectors, Draft Report, ROY, Sana’a

World Organization for Animal Health (OIE) (3/2007) ‘Evaluation of Veterinary Services’

WTO & TDF (2005).'Improved Capacity for Ensuring the Quality and Safety of Yemeni Seafood Products" (STDF 69).

Integrated Framework/ Government of the Republic of Yemen (2003). 'Diagnostic Trade Integration Study ‘, Sana’a

WTO (2013). 'WTO Agreement on Trade Facilitation'.

Yadav S.S. (2007) “Fruits and Vegetables Export Promotion and Quality Control”, Final Report, UNDP Sana’a

Yemen Donor Conference, Riyadh Sept., 2012, Transitional program for Stabilization and Development (TPSD) 2012-2014.