



Updated Food Security Monitoring Survey Yemen

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Foreword

Food insecurity and malnutrition are currently among the biggest challenges facing Yemen. Chronic malnutrition in the country is unacceptably high – the second highest rate in the world. Most of Yemen’s governorates are at critical level according to classifications by the World Health Organization. While the ongoing social safety net support provided by the government’s Social Welfare Fund has prevented many poor households from sliding into total destitution, WFP’s continued humanitarian aid operations in collaboration with government and partners have helped more than 5 million severely food insecure people to manage through difficult times in 2012 and 2013. However, their level of vulnerability has remained high, as most of those food insecure people have been forced to purchase food on credit, become more indebted and to use other negative coping strategies - and their economic condition has worsened during the past two years. Currently, about 10.5 million people in Yemen are food insecure, of whom 4.5 million are severely food insecure and over 6 million moderately food insecure.

The major causes of the high levels of food insecurity and malnutrition include unemployment, a reduction in remittances, deterioration in economic growth, extreme poverty, high population growth, volatility of prices of food and other essential commodities, increasing cost of living including unaffordable health expenses, and insecurity. While the high level of negative coping strategies being used by food-insecure households continues, the food security outlook does not look better in 2014, as the major causes of current food insecurity are likely to persist in the coming months, and may also be aggravated by various factors such as uncertainties in the political process, declining purchasing power, and continued conflicts and the destruction of vital infrastructure including oil pipelines and electricity power lines.

To date, WFP has conducted two large-scale Comprehensive Food Security Surveys (CFSS) in 2009 and 2011. It has been monitoring market situations since 2011 and has published monthly market reports. The third CFSS is being planned for early next year and results are anticipated mid-2014. In the meantime, this updated FSMS has been conducted to inform the formulation of WFP’s PRRO document and also support a better understanding of the food cluster and the updating of the CAP process which will design food security interventions for three years from 2014.

The report offers a view of both the past and present. It provides updated information on the current food security and nutrition situation in Yemen and answers key food-security-related questions, such as how many people are food insecure, where they are, who they are, why they are food insecure, etc. It also reviews the socio-political and macro-economic situation in the country and summarizes the contextual issues considered as among the most important underlying causes of poverty and food security in Yemen. The report also contains the results of several trend analyses on food availability and market-dynamics-related indicators that also help to better understand the contributory factors to the continued high level of food insecurity situation in the country. We hope this report will generate discussion and spur further actions to continue fighting against the alarming levels of food insecurity and malnutrition in the country.



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This report can also serve as the second WFP Yemen FSMS Bulletin!

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Highlights of key findings

- About **43 percent** of the population in the country is still **food insecure in 2013**. Currently, **4.5 million** people are **severely** food insecure and over **6 million** are **moderately** food insecure. Food insecurity is still more widespread in **rural areas (49 percent)** than in **urban areas (36 percent)**. The **food security and nutrition** situation has **improved in governorates assisted** by humanitarian aid.
- Food **availability is not a big problem** though over **90 percent** of the staple food is **imported**. Food **insecurity** is mainly due to **lack of economic access to food and utilization** related problems.
- **Food security situation** has **improved** in Al Bayda, Mareb, Ad Daleh, Sana'a, Sana'a City, Amran, Hajja, Taiz, Dhamar, Rayma, and Al Mahra governorates; while it has **deteriorated** in Abyan, Lahej, Ibb, Shabwa, Aden, Hadramout, Al Mahweet.
- Food security situation in **Abyan and Shabwa** has significantly **deteriorated** since 2011. **Abyan** is now the **highest food insecure** governorate in Yemen (**82 percent of its population** is food insecure).
- The **most food insecure households** are those who are: the poorest of the poor, **headed by widowed women**, headed by an illiterate person, **dependent on support and daily wage labour**, **highly indebted**, **purchasing food on credits**, and spending most of their income on food.
- The **major underlying causes of the high level of food insecurity** include political instability, conflicts, insecurity, extreme poverty, volatility of food prices, high cost of living, and high unemployment rate.
- **Over half** of the households reported as **experiencing various shocks and deterioration in their economic situation** as well as **declining purchasing power** in 2013. Nationally, **60 percent** of the households **do not have enough food** in 2013 (**100 percent in Abyan**).
- **Over 60 percent** of the households (almost **100 percent in Abyan**) forced to continue using **destructive consumption-related coping strategies** such as **eating less preferred foods, smaller meals, and fewer meals per day**.
- **Use of destructive coping strategies** has **improved (decreased)** in Al Bayda, Mareb, Sana'a, Amran, Hajja, Al Mahweet, Rayma, Ibb, Dhamar; while it has **deteriorated (increased)** in Abyan, Lahej, Shabwa, Hadramout, Ad Daleh, Sana'a City, Taiz, Al Mahra.
- **Over a quarter** of the households in the country continued to **purchase a proportion of their food needs on credit**. Food **purchase on credit** has **improved (decreased)** in Al Bayda, Mareb, Sana'a, Sana'a City, Taiz, Ibb, Dhamar, Al Mahra, Shabwa; while it has **deteriorated (increased)** in Abyan, Lahej, Aden, Hadramout, Al Mahweet, Rayma, Ad Daleh, Al Hudieda, Amran.
- About **80 percent of the households** are **currently indebted** (100 percent in Abyan) – a significant increase compared with 2011. **Indebtedness** has **improved (decreased)** in Al Bayda, Al Mahweet, Rayma, Ibb, Dhamar; while it has **deteriorated (increased)** in Abyan, Lahej, Shabwa, Aden, Hadramout, Ad Daleh, Amran, Sana'a City, Sana'a, Hajja, Mareb, Taiz.
- **Acute malnutrition** – wasting – is also **very high** (GAM rate of 13.0) and rated as a **"serious level"**, according to WHO's classification. **Al Hudieda, Lahej, Aden, Hajja, Ibb and Abyan** are at **"critical" level of wasting**; while **Taiz, Ad Daleh, Al Mahweet, Rayma and Amran** are at **"serious" level**.
- The **high prevalence of acute malnutrition** is due to **both food insecurity and health problems** as a result of poor water and sanitation facilities and insufficient health services and unaffordable treatment.

List of Acronyms

AQAP	Al Qaeda in the Arabian Peninsula
bbl/bbd	barrel/barrel per day (measurement for crude oil production)
CFSAM	Crop and Food Security Assessment Mission
CFSS	Comprehensive Food Security Survey
CIA	Central Intelligence Agency
CSI	Coping Strategy Index
CSO	Central Statistics Office
FAO	Food and Agriculture Organisation
FCS	Food Consumption Score
FDP	Food Distribution Point
FEWS NET	Famine Early Warning System Network
FSMS	Food Security Monitoring System
GAM	Global Acute Malnutrition
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GFD	General Food Distribution
GII	Gender Inequality Index
GoY	Government of Yemen
GPC	General People's Congress
HDI	Human Development Index
HDR	Human Development Report
HH	Household
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
Lt	Litre
Kcal	Kilocalories
Kg	Kilogram
MOA	Ministry of Agriculture
MENA	Middle East and North Africa
MUAC	Mid Upper Arm Circumference
NDC	National Dialogue Conference
NGO	Non-Government Organization
PRRO	Protracted Relief and Recovery Operation
SAM	Severe Acute Malnutrition
SMART	Standardized Monitoring and Assessment for Relief and Transition
SPSS	Statistical Software for Social Sciences
SWF	Social Welfare Fund
TOT	Terms of Trade
UFSMS	Updated Food Security Monitoring Survey
UN	United Nations
UNDP	United Nations Development Programme
UN OCHA	United Nations Office of the Coordination of Humanitarian Affairs
UNICEF	United Nations Children's Fund
USD	United States Dollars
VAM	Vulnerability Analysis and Mapping
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
YR	Yemen Riyal

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Executive Summary

Purpose, scope and methodology of the survey

Based on the findings of the 2011 CFSS, WFP and its partners have been providing humanitarian food security assistance for about 5 million people through various programmes designed to address the specific needs of different vulnerable groups in Yemen. While the ongoing assistance runs through the end of 2013, WFP is preparing a PRRO document for 2014/2015 for which updated food security information is required in the face of rapidly changing situation in the country. Therefore, in order to assess the current and anticipated food security situation in the country in 2014, this study was conducted between June and August 2013, covering 19 out of 21 governorates in the country.

The main purpose of the Updated FSMS (UFSMS) is to enhance the food security knowledge base to inform programme decision-making to combat the high level of food insecurity in Yemen. The specific objectives of the survey include: provide an updated percentage/number of food insecure population; identify the underlying causes of the current food insecurity and malnutrition; and make recommendations for relevant response options.

The survey used both secondary and primary sources of data were collected and analyzed. In order to better understand the context of the country, relevant literature, various policy documents of the government and previous studies and assessments were reviewed. Based on the information from secondary data sources, trend analysis was also conducted on key food security and nutrition as well as socio-economic indicators. Analysis on market related indicators was used based on the information from WFP Yemen Market Monitoring System. Primary data was collected through statistically representative household sample survey covering the key food security and nutrition related themes/indicators.

Overview of context of the country

Yemen, one of the poorest and tenth highest food-deficit countries in the world, and home of continued complex inter-locking socio-economic problems, is still struggling to recover from the impacts of the 2007/2008 high international food and fuel prices and the 2011 domestic political crisis. Amid the diminishing natural resources, mainly water and oil, the country is troubled by severe environmental degradation and facing serious weather calamities as a result of climate change.

In view of continued political instability and conflicts coupled with poor prospects of oil production (expected to dry up in the coming few years), economic situation of the country does not look promising. The population living below the national poverty line increased from 35 percent in 2006 to 54.4 percent in 2012¹ as a result of the combined impacts of the global food, fuel and financial crises with significant variation among the governorates of which rural Amran has the highest (over 70 percent). Population living below PPP \$1.25 per day is estimated at 17.5 percent.

The dire situation is further compounded by climate change, water scarcity, general insecurity, and limited access to basic services such as clean water and land. Studies show that Yemen will be the first country in the world to run out of water. In the current situation where families are trapped in extreme vulnerability, any new shock no matter how minor could easily push millions over the edge.

The country faces multi-dimensional challenges: High population growth associated with gender inequalities; poor access to social infrastructure; long-lasting effects of the triple F-crisis (food, fuel,

¹ WB, 2012. Joint Social and Economic Assessment: Republic of Yemen, World Bank.

financial) increasing the number of people affected by food insecurity and poverty. The country is characterized by high food insecurity and malnutrition with rates of child malnutrition and maternal mortality being amongst the highest in the world. There are several other factors and causes that deepen the vulnerability of millions of Yemenis for further increasing level of food insecurity and malnutrition that include: political instability, extreme poverty, high and volatile food and fuel prices, conflicts and insecurity, deterioration in economic growth, high population growth, increasing cost of living including health expenses, high indebtedness by poor households, high level of unemployment and a huge reduction in remittances, poor government capacity to provide social services, environmental degradation, climate change and water scarcity, frequent power interruption due to tribal sabotage, oil pipeline damages, and other infrastructure destruction due to conflicts.

Current food security situation

How many people are currently food insecure? Although the current level of food insecurity has slightly improved from what it was two years back, the situation is still unacceptably very high – 42.5 percent of the entire population is food insecure. From the total of 25.26 million people, about 4.5 million are severely food insecure and over 6 million are moderately food insecure. Level of both chronic and acute malnutrition is also extremely high. The diet of many Yemeni households is also poorly diversified and much worse in 2011 than it was in 2009², even worsened further in 2013³, which likely to lead affected population groups to serious micronutrient deficiencies. Although food is available in all markets at all times in sufficient quantities mainly through importation, the high level of food insecurity persisted for the majority of the population in the country due to lack of economic access to food and utilization related problems, such as lack of clean water and sanitation services as well as insufficient health facilities and unaffordable services.

Where are the food insecure people? The food security and nutrition situation has markedly improved in governorates that have been assisted by several humanitarian agencies. However, those which have not sufficiently supported, mainly Abyan and Shabwa governorates, showed extreme deterioration in all the key indicators. Food insecurity is still by far widespread in rural areas than in urban areas – about 49 percent in rural compared with 26 percent in urban areas. There are some shifts both geographically and severity of food insecurity in 2013 compared with 2011. Governorates that had the highest percentage of total food insecure population (over 60 percent) in 2011 were Albayda (77 percent), Mareb (76 percent), and Sana'a governorate (69 percent)⁴. In 2013, with total percentage of food insecure population of 82 percent, 67 percent and 61 percent, respectively, Abyan, Adhale and Hajjah governorates have taken over the highest levels. While Abyan and Shabwa have seen major deterioration in the last two years, Mareb, Sana'a, Sana'a City, Ibb, and Albayda have shown significantly improved food security situation during the same period.

Who are the food insecure? Across all the governorates, poor households, households headed by widowed women, those headed by an illiterate member of the family, households who are dependent on support and those whose livelihood is daily wage labour, as well as those households with highly indebted are the most food insecure. Moreover, households who purchase their food on credits, those who spend most of their income on food, those who have only one working family member with high dependents, and those who are highly indebted and the poorest households are also suffering from the severe food insecurity.

Why are those people are food insecure? The major causes and driving factors for the high level of food insecurity include: Political instability, deterioration in economic growth, extreme poverty, high population growth, volatility of prices of food and other essential commodities, increasing cost

² WFP CFSS, 2011.

³ WFP UFSMS, 2013.

⁴ WFP CFSS, 2011.

of living including unaffordable health expenses, high level of debt, unemployment and a reduction in remittances. There are also several shocks that are affecting the precarious food security situation of the poor households in Yemen. Nationally, an average of about 56 percent of the households has experienced different types of shocks in 2013. The major shocks that have affected almost all the governorates include high food prices (20 percent), high level of indebtedness (9 percent), expensive health services (8 percent) and insecurity/violence (5 percent). Furthermore, over 50 percent of the households have perceived their economic situation as having been deteriorated while close to 40 percent of the surveyed households saw their situation unchanged and led them to live with severe food insecurity. For those households who reported that their economic situation has worsened now compared to their condition 6 months ago, the main reasons include declining income level, high food prices and increasing cost of living, as reported by 33 percent, 25 percent and 27 percent of the households, respectively. The reasons vary across the governorates.

How do the food insecure people cope with? About 58 percent of the households nationally did not have enough food or money to buy food to sustain their minimum consumption requirements. The magnitude of the problem ranges from 40 percent in Sana'a City to as high as 100 percent in Abyan governorate. Consequently, vulnerable households forced to continue using destructive consumption-related coping strategies that include: eating less preferred or less expensive foods (66 percent), limiting portion size at meal times (56 percent), reducing the number of meals eaten per day (47 percent), and limiting adult intake in favor of children (65 percent). Borrowing food/money from friends and relatives and buying food on credit are also among the common coping mechanisms practiced by the majority of the food insecure population in the country which drain their capacity to manage through future shocks and make them more vulnerable

Current nutritional situation

What is the level of malnutrition? About half of Yemen's children are chronically malnourished and one out of ten does not live to reach the age of five⁵. Proportion of stunted children was 55.7 percent in 2005/06⁶, and shot up to 58 percent in 2010⁷ and improved by 2011/12 and reached to 47 percent⁸ – which has been at critical level throughout all these years, according to WHO's cut-off points⁹. Such emergency levels of chronic malnutrition – or stunting – are second globally next to Afghanistan. The proportion of underweight children is the third highest in the world after India and Bangladesh. On the other hand, the national level global acute malnutrition (GAM) was 13.2 percent in 2005/06¹⁰, and went up to 15.7 percent in 2010¹¹, and gone down to 13.0 percent in 2012¹² which are classified as “serious” level, according to WHO's standard cut-off points for acute malnutrition (wasting).

Where are malnutrition levels at serious/critical stage? Sub-national details on stunting show that Aden, Al Mahra, and Hadramout governorates have “poor” level of stunting; Abyan, Shabwa and Sana'a City have “serious” level of stunting; while all the other governorates have “critical” level of stunting in 2012. UNICEF's SMART survey results and the 2011 CFSS data on GAM rates by governorate indicate that Al Hudieda, Lahej, Aden, Abyan, Hajja, and Ibb are at “critical” level; Taiz, Ad Daleh, Al Mahweet, and Amran are at “serious” level; while all the remaining governorates are at “poor” level of wasting.

What are the main reasons for high malnutrition rates? Moderate and severe acute child malnutrition (wasting) is highly prevalent, especially in rural areas, thus threatening Yemen's future

⁵ WFP CFSS, 2011.

⁶ CSO Household Budget Survey, 2005/2006.

⁷ IFPRI, 2010.

⁸ WFP CFSS, 2011.

⁹ WHO (2006, 2009) Child Growth Standards. (Stunting levels of: Below 20%=Acceptable; 20-30%=Poor; 30-40%=Serous; Over 40%=Critical).

¹⁰ CSO Household Budget Survey, 2005/2006.

¹¹ IFPRI, 2010.

¹² WFP CFSS, 2011.

social and economic development. The high prevalence of acute malnutrition is due to both food insecurity and health problems as a resulting from poor water and sanitation facilities and insufficient health services as well as lack of money to get treatment.

Food security prospect in 2014

Despite the relatively stable food prices and other factors in 2012, the humanitarian response operations designed to address the urgent needs of the severely food insecure population (about 5 million people) on top of the assistance provided through the government SWF was only able to stop further deterioration in the level of food insecurity and helped some governorates to have minor improvement. In some governorates, slight improvement in food security was achieved at the expense of remarkably increased use of credits by the vulnerable households which could potentially lead them to further destitution and deepens their poverty and vulnerability. While the high level of negative coping strategies being employed by the food insecure households continues, the food security outlook is anticipated to be even worse in 2014, as the major causes of current food insecurity will likely to persist in the coming months, and are also likely to be aggravated by:

- lower crop production prospect in 2013 compared to last year,
- uncertainty on the political transition process,
- the impact of huge reduction in remittances due to the imminent deportation of over quarter a million Yemeni working migrants from Saudi Arabia,
- increasing inflation and declining purchasing power, and
- worsening indebtedness among the poor households.

Suggested response options (Immediate/short term)

- Life-saving emergency food security assistance need to be provided to the 4.5 million severely food insecure population living in different governorates of Yemen. Considering the support being provided through the SWF, the suggested assistance need to sufficiently fill the food/cash gap to meet the minimum requirement of those households who are severely food insecure.
- While continuing the current food security and nutrition assistance covering those governorates that have been supported since 2012, the newly emerged highly food insecure governorates, such as Abyan and Shabwa, need to be targeted for similar humanitarian aid.
- Provide targeted therapeutic and supplementary feeding for children aged 6—59 months and pregnant and lactating women in order to reduce and prevent acute malnutrition in children under 5 in targeted governorates identified as being at “serious” and “critical” level of acute malnutrition, thereby improve nutritional status of targeted children under 5.
- Blanket supplementary feeding for children aged 6—23 months to prevent acute malnutrition in children under 2 in targeted governorates identified as being at “serious” and “critical” level of acute malnutrition and improve nutritional status of targeted children under 2.
- Those households whose situation has marginally improved and moved from severe to moderate food insecurity need to be targeted for resilience building support through feasible food/cash for asset programmes in order to enhance their capacity to withstand future difficulties and protect them from returning back to their previous condition.
- Sector specific agencies such as UNICEF and WHO and other relevant NGOs and government organizations through the various Clusters need to align and coordinate their activities with WFP’s food security and nutrition related assistance in order to reduce the huge problems related to water, sanitation and health so that the impact of the food security and nutrition interventions that WFP and other partners are implementing could be maximized.

I. Introduction and General Background

Yemen, one of the poorest and tenth highest food-deficit countries in the world, and home of continued complex inter-locking socio-economic problems, is still struggling to recover from the impacts of the 2007/2008 high international food and fuel prices and the 2011 domestic political crisis. Amid the diminishing natural resources, mainly water and oil, the country is troubled by severe environmental degradation and facing serious weather calamities as a result of climate change.

With HDI of 0.458 in 2012¹³, Yemen ranked 160th out of 187 countries and well below the average HDI for Arab States. The country's HDI had further deteriorated in 2012 compared with 2010 and 2011 when the Index was 0.466 and 0.459, respectively. The country is now ranked as the least in the Arab world measured by all indicators of socio-economic and political development. The country suffers from rising unemployment and high poverty rates. Low education levels have led to illiteracy rates at 66 percent for women and 27 percent for men. The situation of women is of particular concern, as the gender gap in Yemen is consistently ranked as the highest in the world with Gender Inequality Index (GII) of 0.747 in 2012¹⁴. Maternal mortality rate stood at 200 per 100,000 live births which is high compared with the average for Arab States (176)¹⁵.

Inhabited by about 25.24¹⁶ million people in 2013 and with 66 years of life expectancy at birth¹⁷, Yemen has a rapidly growing population – increasing at the rate of 3 percent per annum, which is growing much faster than the economic growth and expected to double in 25 years. Urban population constitutes about 29 percent while rural population estimated at 71 percent. In view of continued political instability and conflicts coupled with poor prospects of oil production (expected to dry up in the coming few years), the economic situation of the country does not look promising.

The population living below the national poverty line increased from 35 percent in 2006 to 54.4 percent in 2012¹⁸ as a result of the combined impacts of the global food, fuel and financial crises with significant variation among the governorates of which rural Amran has the highest (over 70 percent). The population living below PPP \$1.25 per day is estimated at 17.5 percent¹⁹. Only one person in a family of seven members earns some income and supports the household²⁰.

Yemen is one of the most water-scarce countries in the world, lacking rainfall and surface water. High population growth and water scarcity result in a chronic imbalance between water needs and availability. Already one of the driest regions in the world, Yemen's per capita water resources stand at 125 cubic meters which is ten times lower compared to the average in the MENA region (1,250 cubic meters for MENA regional average)²¹. The country has limited freshwater and overall water withdrawals exceed recharge rates by 123 percent of renewable water resources²². Agriculture is by far the dominant water user, with 96 percent of water use²³, while "qat" alone accounts for around 40 percent²⁴.

¹³ UNDP HDR, 2013

¹⁴ UNDP HDR, 2013.

¹⁵ UNDP HDR, 2013.

¹⁶ Yemen CSO projection for 2013

¹⁷ UNDP HDR, 2013

¹⁸ WB, 2012. Joint Social and Economic Assessment: Republic of Yemen, World Bank.

¹⁹ UNDP Yemen, 2011.

²⁰ WFP CFSS, 2012

²¹ WFP (2008). Regional Market Survey for the Middle East. Food Markets and Food Security in Lebanon, Syria, Jordan, Iran, Yemen and Palestine.

²² World Resources Institute (2003). Earth Trends. Yemen Country Profile. Washington D.C.

²³ Shetty, S. (2006). Water, Food Security and Agricultural Policy in the Middle East and North Africa Region. World Bank. Washington D.C.

²⁴ Yemen Ministry of Agriculture and Irrigation, 2012.

One disturbing consequence of the continued high poverty level has been the emergence of an al Qaeda presence in Yemen. Al Qaeda in the Arabian Peninsula (AQAP) is considered the most active of the various branches of al Qaeda that emerged after the death of Osama bin Laden (whose father was born in Yemen). It is not hard to understand that high unemployment, persistent poverty levels, external shocks, and government instability can readily combine to catalyse forms of resistance, of which AQAP is one, particularly in a country with a very high proportion of youth unemployment (40 percent²⁵). The repeated sabotaging of the pipelines in the Mareb and Ras Issa areas and continued road insecurity led to a sharp decrease in crude oil production by about 25 percent in 2011²⁶. The continued frequent blow up on the electricity power lines in Mareb is also becoming another big obstacle for the transitional government's effort towards recovery.

The country faces multi-dimensional challenges: High population growth associated with gender inequalities; poor access to social infrastructure; long-lasting effects of the triple F-crisis (food, fuel, financial) increasing the number of people affected by food insecurity and poverty. The country is characterized by high food insecurity and malnutrition with rates of child malnutrition and maternal mortality being amongst the highest in the world. There are several other factors and causes that deepen the vulnerability of millions of Yemenis for further increasing level of food insecurity and malnutrition that include: political instability, extreme poverty, high and volatile food and fuel prices, conflicts and insecurity, deterioration in economic growth, high population growth, increasing cost of living including health expenses, high indebtedness by poor households, high level of unemployment and a huge reduction in remittances, poor government capacity to provide social services, environmental degradation, climate change and water scarcity, frequent power interruption due to tribal sabotage, oil pipeline damages, and other infrastructure destruction due to conflicts.

All these factors continued through 2013 in Yemen have led about 10.5 million people to be food-insecure, 13 million people to have no/limited access to safe water and sanitation, 431,000 to be displaced, and 90,000 children to have no access to education. The continued socio-economic and political crisis in the Horn of Africa has resulted for the country to host over a quarter of a million refugees. Of particular concern are also the increasing returnee flows in the south: over 80,000 have returned and need assistance. Almost 1 million Yemeni girls and boys under 5 are suffering from acute malnutrition, of whom more than 250,000 have life-threatening severe acute malnutrition. Even those whose acute malnutrition is moderate, if left untreated, will not grow to their full potential.

Despite the relatively stable food prices and other factors in 2012, the humanitarian response operations designed to address the urgent needs of the severely food insecure population (about 5 million people) on top of the assistance provided through the government SWF was only able to stop further deterioration in the level of food insecurity. In some governorates, slight improvement was achieved but it was at the expense of increased use of credits by the vulnerable households which could potentially lead them to further destitution and deepens their poverty and vulnerability – this justifies the need for designing resilience-oriented programmes with appropriate assistance modalities/tools that address the specific needs of the vulnerable groups in the country. Currently WFP is working in partnership with other sector-specific agencies to intensify the humanitarian interventions in the most affected governorates of Yemen where food insecurity and malnutrition levels are high and have deteriorated.

Based on the findings of the 2011 CFSS, WFP provides humanitarian food assistance for about 5 million people through various programmes designed to address the specific needs of different

²⁵ World Bank, 2013: <http://www.worldbank.org/en/news/press-release/2013/04/02/world-bank-grant-supports-employment-creation-yemens-neediest-youth-women>.

²⁶ UNDP Yemen, 2011.

vulnerable groups in Yemen. While the ongoing assistance runs through the end of 2013, WFP is preparing a new project document for its operations in 2014 for which updated information is required in the face of rapidly changing situation in the country. Therefore, in order to assess the current and anticipated food security situation in the country in 2014, this study was found to be crucial and conducted between June and August, 2013, covering 19 out of 21 governorates in the country.

The report is organized into six sections including this first section which provides general background about the study. The second section highlights the purpose, objectives and methodology of the study. Section three deals with the current food security and nutrition situation in Yemen and answers key food security related questions like how many people are food insecure, where they are, who the food insecure are, why they are food insecure, etc. Moreover, the section also covers some issues related to malnutrition based on some secondary information from WFP's 2012 CFSS and UNICEF's 2012/2013 SMART surveys. Section four presents the socio-political and macro-economic situation of the country and summarizes the contextual issues that are considered as among the most important underlying causes of poverty and food security in Yemen. Section five provides results of several trend analyses on food availability and market dynamics related indicators that also help to further understand the factors worsening the continued high level of food insecurity situation in the country. The last section, gives some indicative/relevant response options based on the overall findings of the study.

II. Objectives and Methodology of the Survey

2.1. Objectives of the survey

The main purpose of the Updated FSMS (UFSMS) is to enhance the food security knowledge base to inform programme decision-making to combat transitory and chronic food insecurity in Yemen. The specific objectives of the survey include:

- Provide an updated percentage/number of food insecure households at national and sub-national level;
- Identify the underlying causes of the current food insecurity and malnutrition;
- Make recommendations for relevant response mechanisms, modalities and targeting options for WFP humanitarian programme in 2014;
- Produce baseline data for monitoring and evaluation of food security intervention outcomes; and
- Contribute to the overall humanitarian response plan as well as national development initiatives in the country.

2.2. Overall approach and methodology of the survey

Considering the objectives of the survey, the following methodological approach²⁷ was used:

- Desk review of relevant literature/studies and secondary data analysis;
- Household sample survey;
- Triangulation and validation of information; and
- Analysis of all the relevant information using WFP's standard analytical framework and tools/procedures.

For the purpose of the survey, information from both secondary and primary sources were collected and analyzed. In order to better understand the context of the country, relevant literature, various policy documents of the government and previous studies and assessments were reviewed. Based on the information from secondary data sources, trend analysis was also conducted on key food security and nutrition as well as socio-economic indicators. Analysis on market related indicators was conducted based on the information from WFP Yemen Market Monitoring System. UNICEF's SMART Surveys were also among the important sources of secondary data for analysis of nutrition related issues.

Primary data was collected through statistically representative household sample survey. The household level data was collected through a structured household questionnaire which was designed to cover the following key food security and nutrition related themes/indicators:

- Household demographics;
- Housing and access to services
- Possession of assets;
- Livelihood and income sources;
- Expenditure pattern and debt;
- Food sources and consumption levels; and
- Exposure to shocks and coping mechanisms.

²⁷ More methodological details are presented as an annex in a separate document.

The household sample survey has covered 19 out of 21 governorates of Yemen; Al Jawuf and Sa'ada were excluded due to security reasons. Whenever possible/required, secondary data analysis has been used to estimate/extrapolate some indicators for these governorates.

Sample size and sampling technique/procedures:

Appropriate sample size was drawn in order to ensure statistical representativeness of the key indicators at governorate level, national and urban/rural levels as well as comparability of findings with the 2009 and 2011 CFSS. A two-stage cluster sampling method was used to calculate sample size.

The formula used for calculating the sample size for assessments with key indicators expressed as percentages is:

$$n = (D)(Z^2 * p * q)/d^2$$

Where: n = The required minimum sample size

D = Design effect (varies by type of sampling – 2 for two stage cluster sampling)

Z = The Z-score corresponding to the degree of confidence

p = Estimated proportion of key indicator expressed as a decimal (e.g. 20% = .20)

q = 1 – p

d = Minimum desired precision or maximum tolerable error expressed in decimal form (e.g. +/- 10 percentage points = .10).

As the survey was designed to apply two stage cluster sampling, the following parameters were used and the above formula was used:

D=2 (required for a **two stage cluster sampling**)

Z=1.96 (for 95% degree of confidence)

p=percentage of food insecure households for each governorate based on the 2012 CFSS

q = 1-p

d=0.1 (10 percentage points of maximum tolerable error or 90 percent level of precision)

The two stage cluster sampling method was employed in such a way that Enumeration Areas (EAs) were randomly selected at the first stage and then 10 households within the selected EAs were randomly chosen. Once the minimum sample size was determined for each governorate, the total sample of was divided by 10 to determine the number of EAs to be drawn from each governorate.

Based on the sampling calculation which also took a 10 percent allowance for non-responses, the total sample size was over 3,300 households for all the 19 governorates – sample sizes vary by governorate. The survey utilized the sampling frame constructed by Yemen CSO for the 2004 census.

The primary data collection took place between 15 and 30 June 2013. In total, over 330 randomly selected rural and urban EAs were visited in which ten households were randomly sampled for interviews. A total of 3,300 households were interviewed by deploying 80 well trained enumerators grouped in 20 teams. The data was interactively entered into PDAs by the enumerators while they were in the field. Data cleaning was done through a pre-designed program that was developed using MS Access. Data processing and statistical analysis was conducted using SPSS.

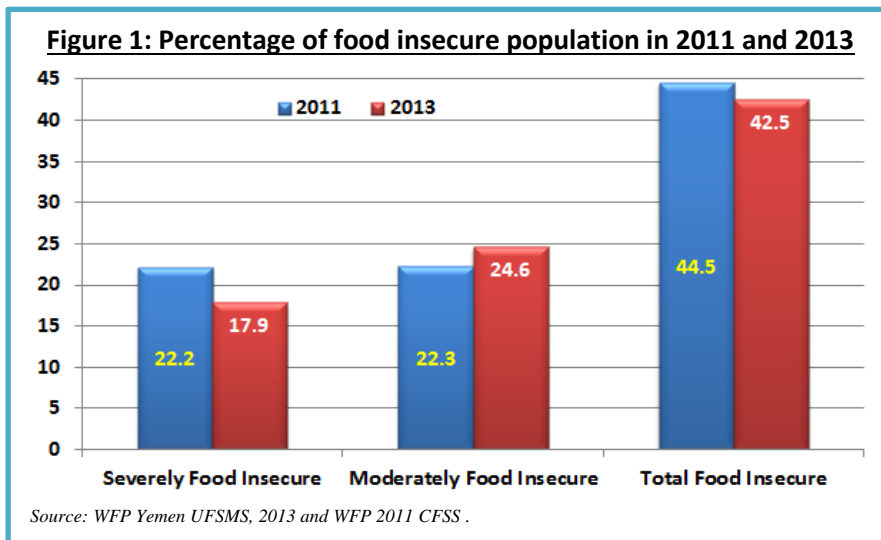
III. Current food security and nutrition situation in Yemen

3.1. How many people are currently food insecure?

Yemen is ranked as the 10th most food-insecure country globally with one in four Yemenis suffering from acute hunger²⁸. Yemen's macro-level food security has deteriorated dramatically in recent years, mainly due to declining oil exports and increasing food imports. Proportion of food insecure population was about 22 percent in 2003 and doubled to 44 percent in 2008 due to the impact of the triple-F (high food and fuel prices and financial crisis) in 2007/2008 which has resulted in an estimated 44 percent increase in national poverty²⁹. However, the food security situation in 2009 remarkably improved and led to significant decline in the percentage of food insecure population to as low as 32 percent.

The improved consumption in 2009 was partly as a result of quick recovery by those households with strong coping capacity while for the poor households it was at the expense of further depletion of their assets and increased debt. The 2011 civil unrest and political crisis in the country, which happened before full recovery of the population from previous shocks, resulted in the worst food insecurity in decades – resulting in 45 percent of the population to be food insecure (which was 40 percent higher than it was in 2009).

The critical food security situation in the country has attracted international attention and followed by massive humanitarian operations since 2012. However, the food insecurity situation persisted through 2013 with little decline as the food insecure population are now estimated at about 43 percent³⁰ which is down by only 2 percentage points from 2011 (Figure 1).



However, the absolute number remained almost unchanged – **about 10.5 million people are still food insecure of whom about 4.5 million are currently suffering from severe food insecurity while the remaining 6 million are moderately food insecure**³¹. Evidently, food insecurity in Yemen becomes a chronic problem as over one third of the population has been food insecure since 2008.

➤ 43 percent of Yemen population are still food insecure in 2013, only 2 percent lower than 2011.

➤ 4.5 million people are severely food insecure and over 6 million moderately food insecure.

Food security situation in WFP assisted governorates has improved.

²⁸ IFPRI Global Hunger Index, 2012.

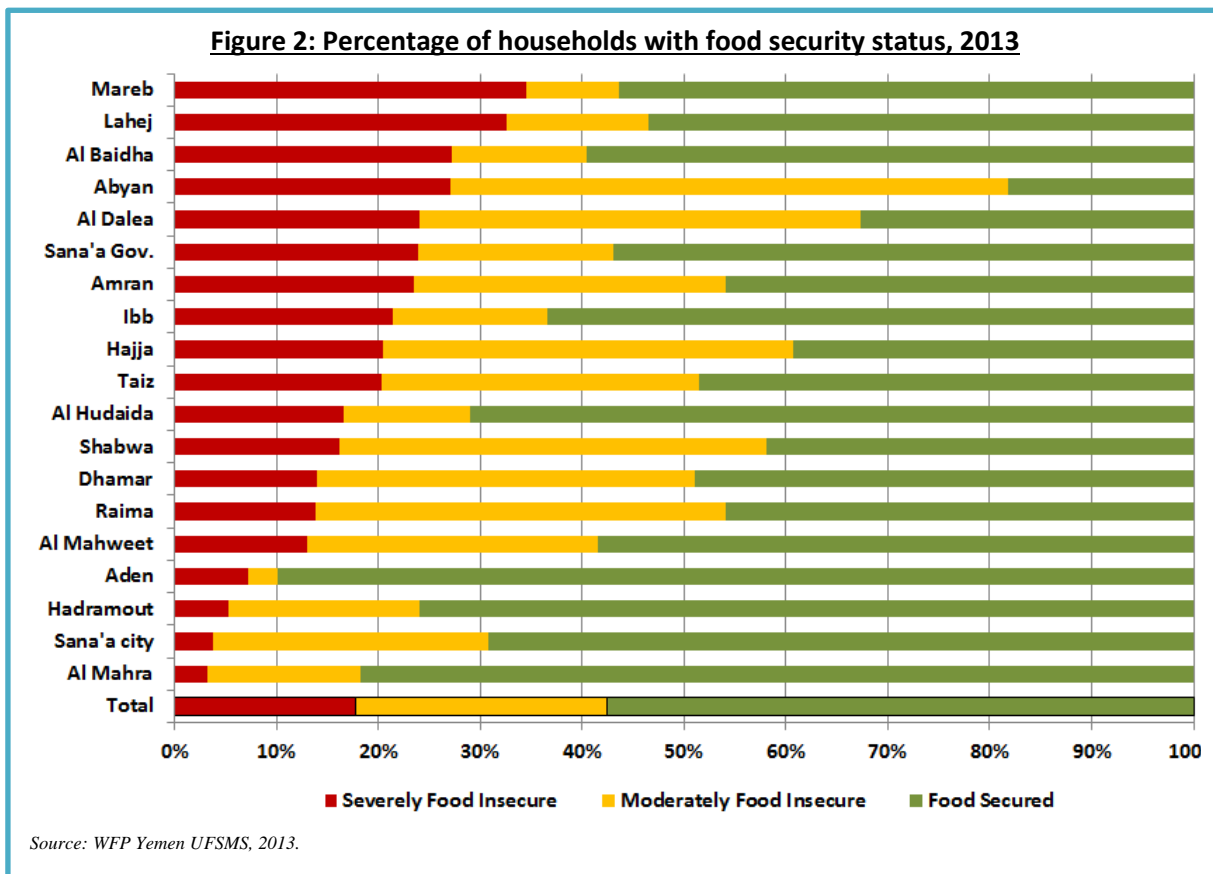
²⁹ IFPRI, Impacts of the triple global crisis on development in Yemen; presentation at Climate Change workshop in Sana'a, November 2009.

³⁰ WFP UFSMS, 2013.

³¹ WFP UFSMS, 2013.

3.2. Where are the food insecure people?

Food insecurity is still most widespread in rural areas than in urban areas – about 49 percent in rural compared with 26 percent in urban areas. There are some shifts both geographically and severity of food insecurity in 2013 compared with 2011. Governorates that had the highest percentage of total food insecure population (over 60 percent) in 2011 were Albayda (77 percent), Mareb (76 percent), and Sana'a governorate (69 percent)³². In 2013, with total percentage of food insecure population of 82 percent, 67 percent and 61 percent, respectively, Abyan, Ad Dalea and Hajja governorates have taken over the highest levels³³ (Figure 2).

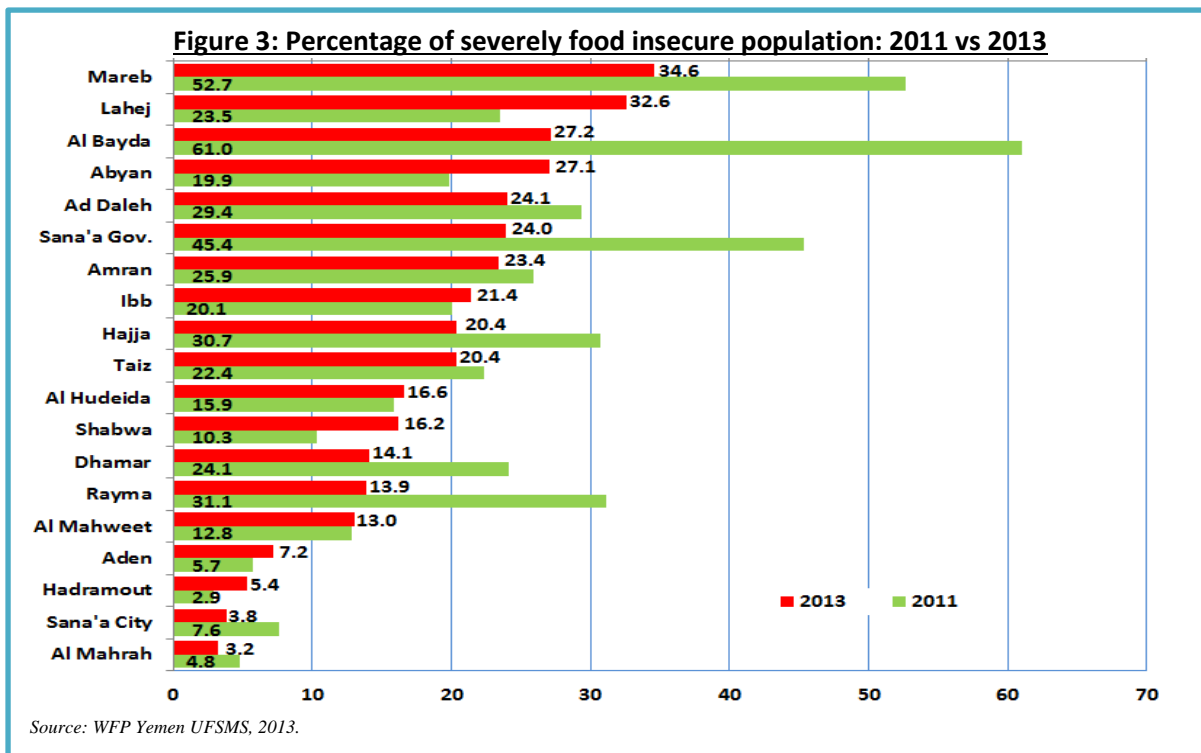


In general the percentage of population with severe food insecurity has reduced in 2013 compared to that in 2011 – from 22.2 percent in 2011 to 17.9 percent in 2013. As the governorate level comparison is presented in Figure 3, although Mareb has found to have the highest severely food insecure population in 2013, it has much lower percentage than it had in 2011. Similar pattern can be observed in most of the governorates. However, Lahej, for instance, has shown a huge increase in the percentage of severely food insecure population between 2011 and 2013 (Figure 3). All in all, from 5 million severely food insecure identified in 2011, about 1 million have improved and joined the moderately food insecure group in 2013 (currently about 4.5 million are assessed to be severely food insecure and 6 million moderately food insecure).

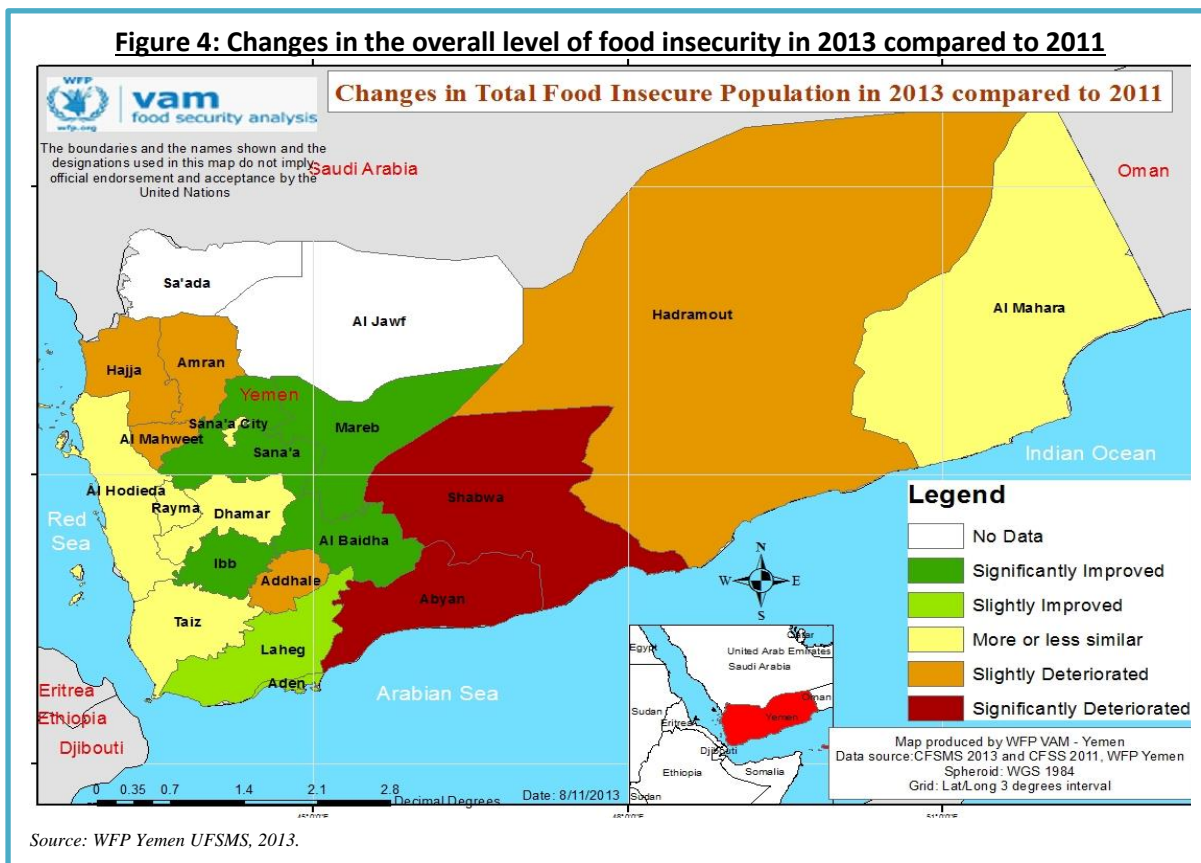
The food security situation of almost all the governorates supported by WFP’s interventions and other humanitarian aid agencies has significantly improved while those which are not assisted have seen dramatic deterioration between 2011 and 2013.

³² WFP CFSS, 2011.

³³ WFP UFSMS, 2013.



Although the overall food security situation in the country has slightly improved between 2011 and 2013, there are apparent differences among the governorates. As shown in the map below, while Abyan and Shabwa have seen deterioration in the last two years, Mareb, Sana'a, Sana'a City, Ibb, and Al Bayda have shown significantly improved food security situation during the same period.

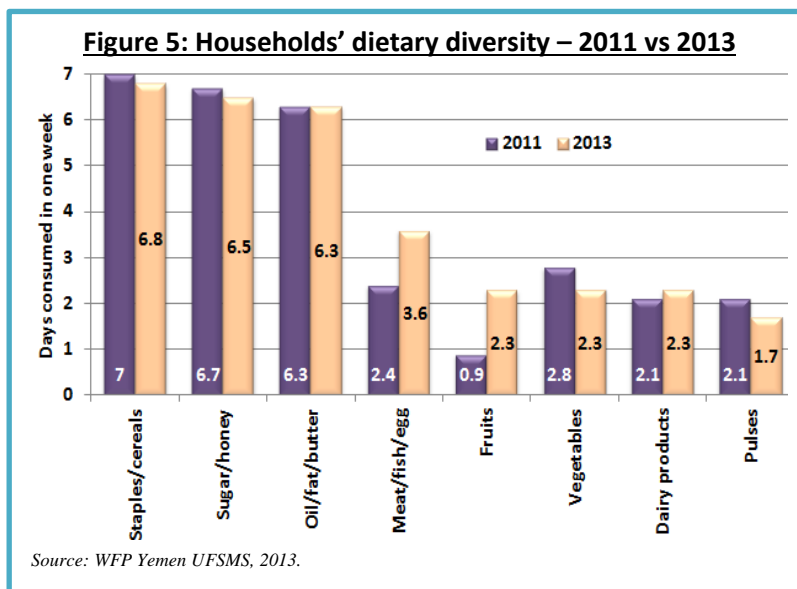


3.3. Who are the food insecure households/people?

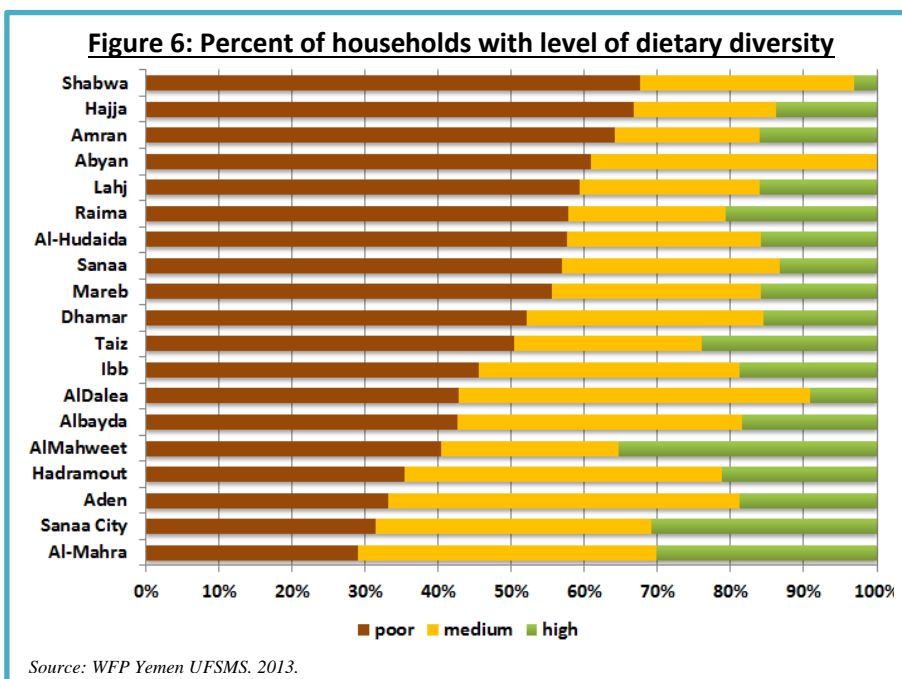
Dietary diversity

The diet of many Yemeni households is poorly diversified, much worse in 2011 than it was in 2009³⁴. The main staple food items, wheat and rice, together with oil/fat and sugar/honey are continued to be the three dominant types of food groups that are consumed almost every single day by the majority of the population in Yemen.

Although oil/fat consumption has remained unchanged between 2011 and 2013, there is slight deterioration on the intake of staples and sugar/honey during the last two years. Interestingly, some remarkable improvements have been noticed on the consumption of meat/fish/eggs and fruits/juice. On the other hand, pulses and vegetables are consumed for fewer days in a week in 2013 than they were two years back (Figure 5).



The study findings indicate that about half of the population in Yemen have poor dietary intake. Looking at the regional variations on dietary diversity, the UFSMS results showed that over 60 percent of the population in Shabwa, Hajja, Amran and Abyan governorates have poor dietary diversity. The situation in Abyan is particularly worrisome as none of the population was found to have a well balanced diet. On the other hand, Al-Mahra, Sana'a City and Aden governorates have lower percentages of population in poor dietary intake (Figure 6).



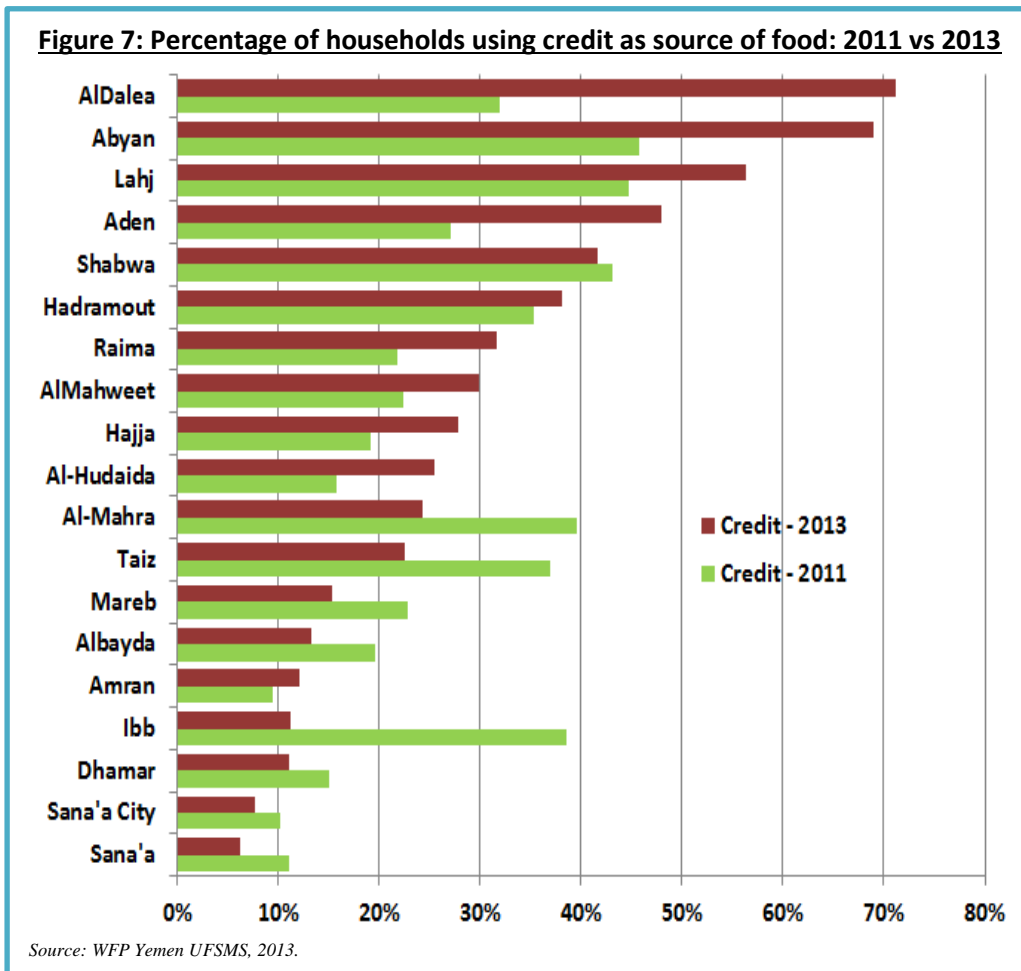
³⁴ WFP CFSS, 2011.

Sources of food and use of credit to purchase food

About 96 percent of the population in Yemen are net buyers³⁵ and are heavily vulnerable to market shocks and volatility of prices which are becoming highly prevalent in the country in recent years. Purchase remains the main food access modality for both rural and urban households (nationally over 95 percent of food consumed at household level is purchased with about 100 percent for urban areas and 75-85 percent for rural areas). Higher food prices translate into a further increase in expenditures on food to the detriment of other needs such as health, education and asset/livelihoods building.

The overall minor improvement in food security between 2011 and 2013 was mainly due to increasingly continued use of credit by food insecure households to purchase food. In 2013, about 45 percent of households purchased food using credit³⁶, an increase from 33 percent in 2011³⁷ which will apparently make those populations more vulnerable and ultimately may lead them into destitution.

The findings of the UFSMS confirmed that 95 percent of the households in Yemen continued to access their food through purchase (72 percent purchase with own cash while the remaining 23 percent buy their food on credit). Another 2.3 percent of the households get their food through



borrowing and/or gift from relatives and friends. That means, one quarter of the households depends on credit and borrowing to access their food. The UFSMS results further indicate that only 1.7 of the households use their own agricultural production as source of food while the remaining 1.6 percent rely on food assistance (0.4 percent) and other sources.

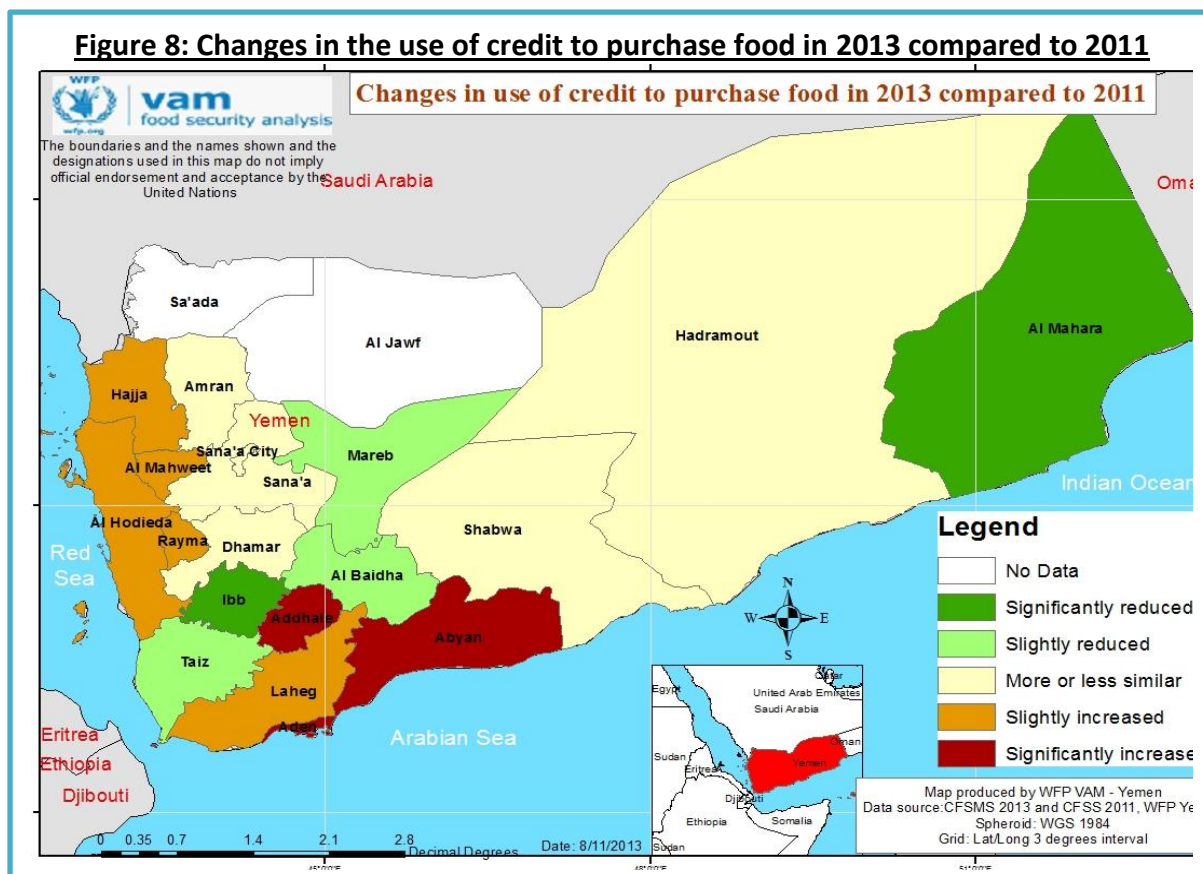
³⁵ IFPRI, 2010.

³⁶ WFP FSMS, 2013, (an average for the 11 governorates covered by the FSMS, Feb. 2013).

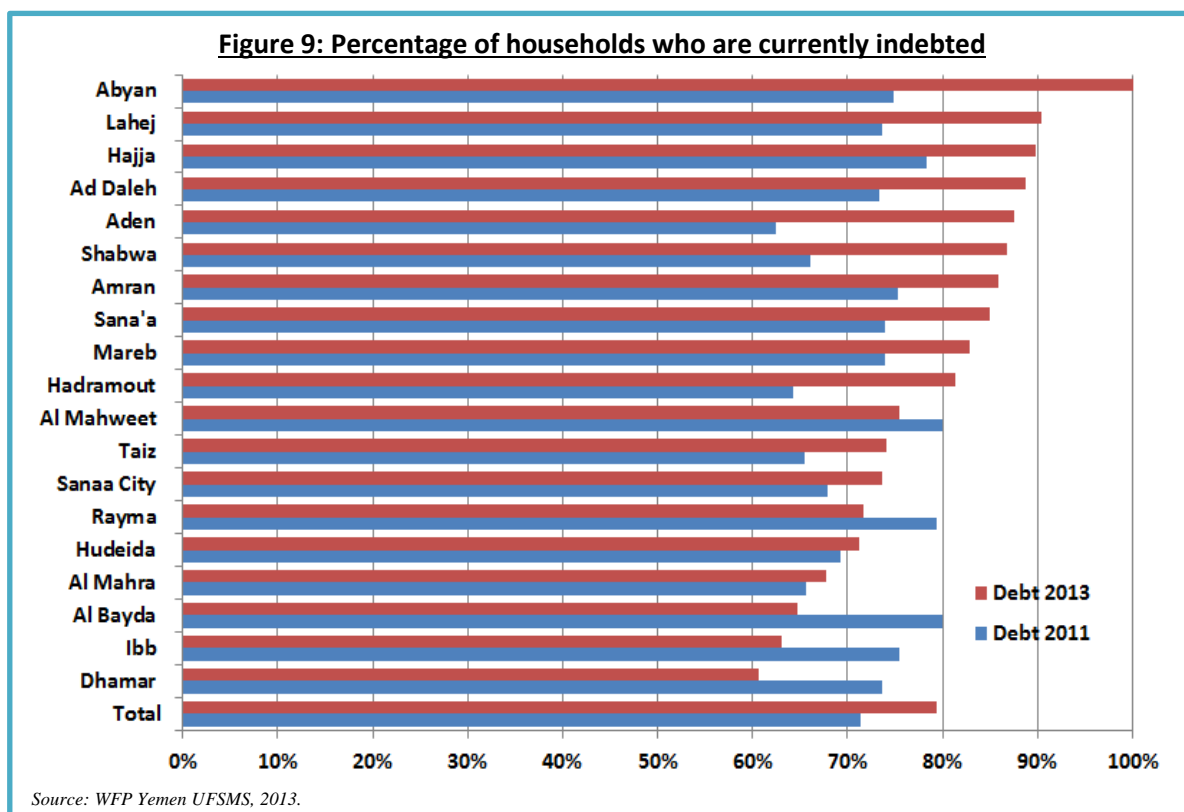
³⁷ WFP CFSS, 2011 (an average for the 11 governorates covered by the FSMS, Feb. 2013).

Comparing the current use of credit with that of 2011, the overall average proportion of households accessing their food on credit has slightly reduced (only by 2 percentage points) during the last two years – came down from 25 percent in 2011 to 23 percent in 2013. However, at governorate level huge variations prevail, as shown in Figure 7 above. Accordingly, the use of credit has dramatically increased in AlDalea, Abyan, Aden and Lahj governorates between 2011 and 2013.

On the other hand, the situation in Ibb, Al Mahra, Taiz and Mareb has hugely reversed mainly due to the fact that some of these governorates have employed much more intensified coping strategies in 2013 than they did in 2011(see section 3.4 for more details). The map presented below also clearly shows the changes in the use of credit for purchasing food between 2011 and 2013.



The sustained high use of credits has also increased the debt levels of food insecure households, and hence worsening their vulnerability much more than before. As depicted in Figure 9, the majority of the governorates have seen big increase of percentages of households who are indebted currently compared to 2011. The situation in Abyan is particularly worrisome as all of the households in the governorate are indebted. The main reasons for households' indebtedness were to buy food (45 percent) and to cover health expenses (30 percent).



Expenditure on food and non-food items

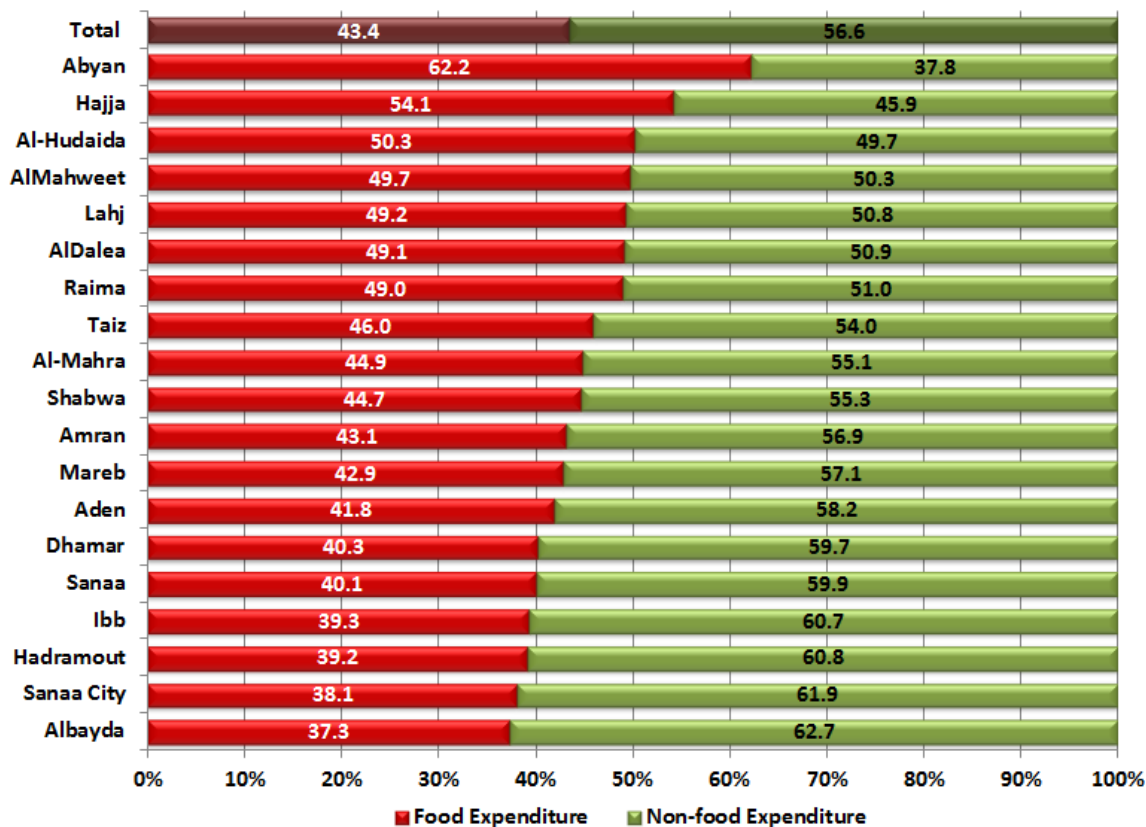
The food security survey conducted in Yemen in 2011 – CFSS 2011³⁸ – revealed that food expenditures account for about 45 percent of the overall household expenditures. The current UFSMS findings indicated that expenditure on food has marginally declined by less than 2 percentage points (now food expenses are 43.4 percent of the entire household expenditure).

With expenditure share of 26 percent, staples/cereals, mainly wheat and rice, are the main food items households' money is currently spent on while the remaining 17 percent covers expenditure on other food items such as vegetables, pulses, meat/eggs, oil, and sugar. Of non-food expenditures (56.6 percent of total expenditure), households' mainly spend on utilities (electricity, water, etc.) (10 percent), health (9 percent), qat (8 percent), cooking fuel (7 percent), and transport (4 percent). Compared to 2011, expenditure on qat has reduced by 2 percentage points while expenditure on health increased by 4 percentage points in 2013.

Expenditure patterns differ across the governorates with the majority of households in Abyan have the highest expenditure on food (62 percent) while those in Al Bayda have the lowest food expenses (37 percent) – Figure 10. Although this survey has found an overall slight reduction in expenditure on food in 2013 compared to 2011 at national level, there are remarkable differences between the governorates in terms of changes in expenditure pattern during the last two years. Abyan, Hajja, Al Hudieda, Aldalea and Sana'a City have seen remarkable increase on the percentage of households' expenditure on food. On the other hand, Hadramout, Ibb, Dhamar, Rayma and Al Mahra have shown significant reduction on the share of food expenditure (Figure 11).

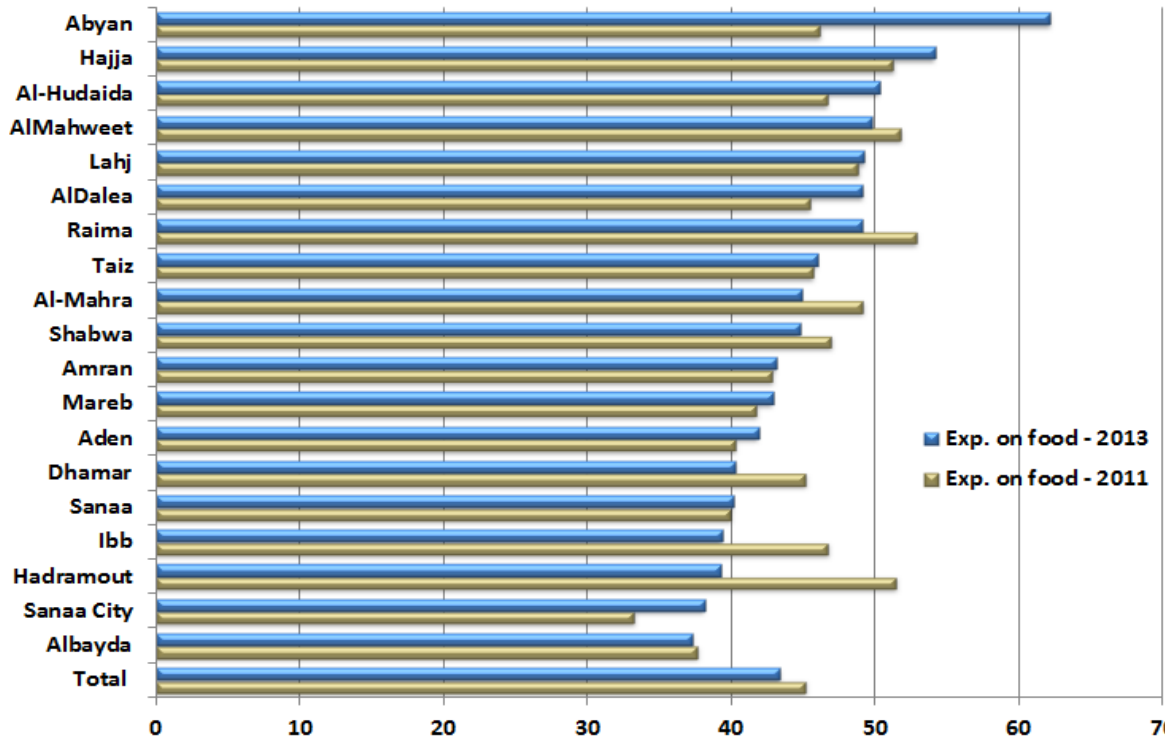
³⁸ WFP Yemen CFSS 2011.

Figure 10: Percentage of Expenditure on Food and Non-Food (2013)



Source: WFP Yemen UFSMS, 2013.

Figure 11: Percentage share of households' food expenditure – 2011 vs 2013

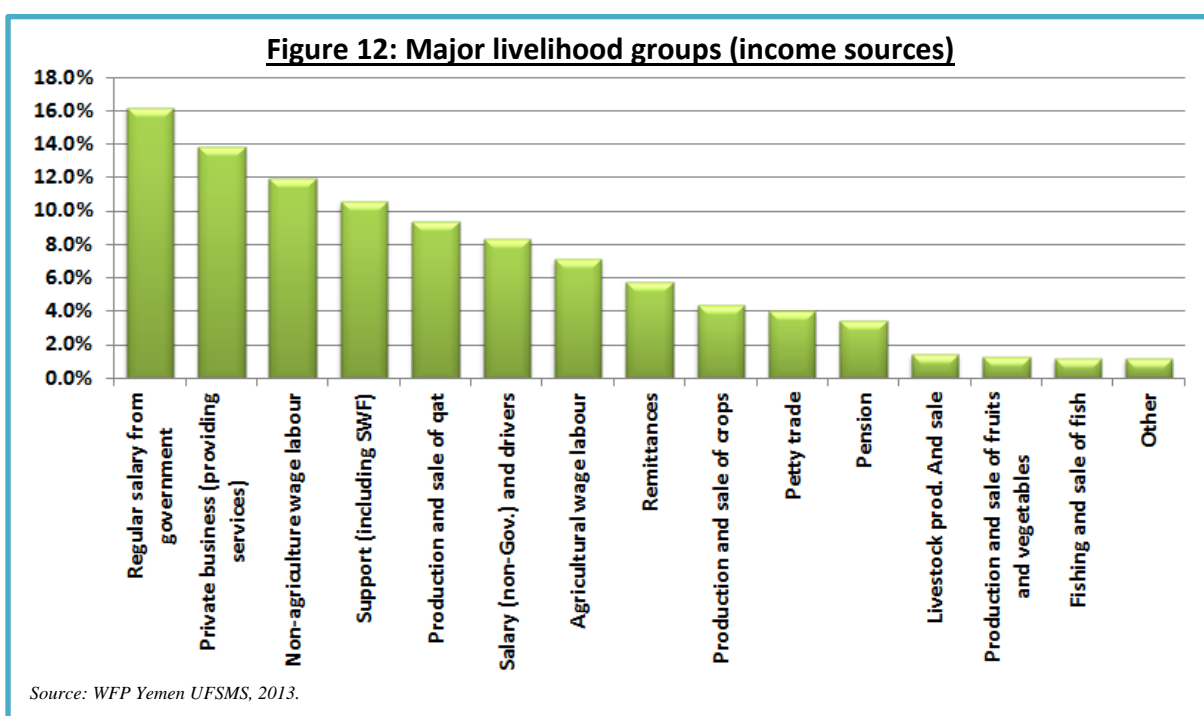


Source: WFP Yemen UFSMS, 2013 and CFSS 2011.

Livelihoods/income sources

Livelihoods strategies and income sources vary greatly by urban and rural areas. Agricultural production and sale of products, sale of livestock and animal products as well as agricultural labour are the main sources of income and livelihoods for rural households. Urban dwellers usually depend on salaries (government and non-government), private businesses and petty trading. Income from non-agricultural labour and remittances are also additional sources for both rural and urban households. Cash incomes for rural residents are mainly from sale of qat, vegetables, other cash crops, agricultural and non-agricultural labour, sale of livestock and products, and remittances.

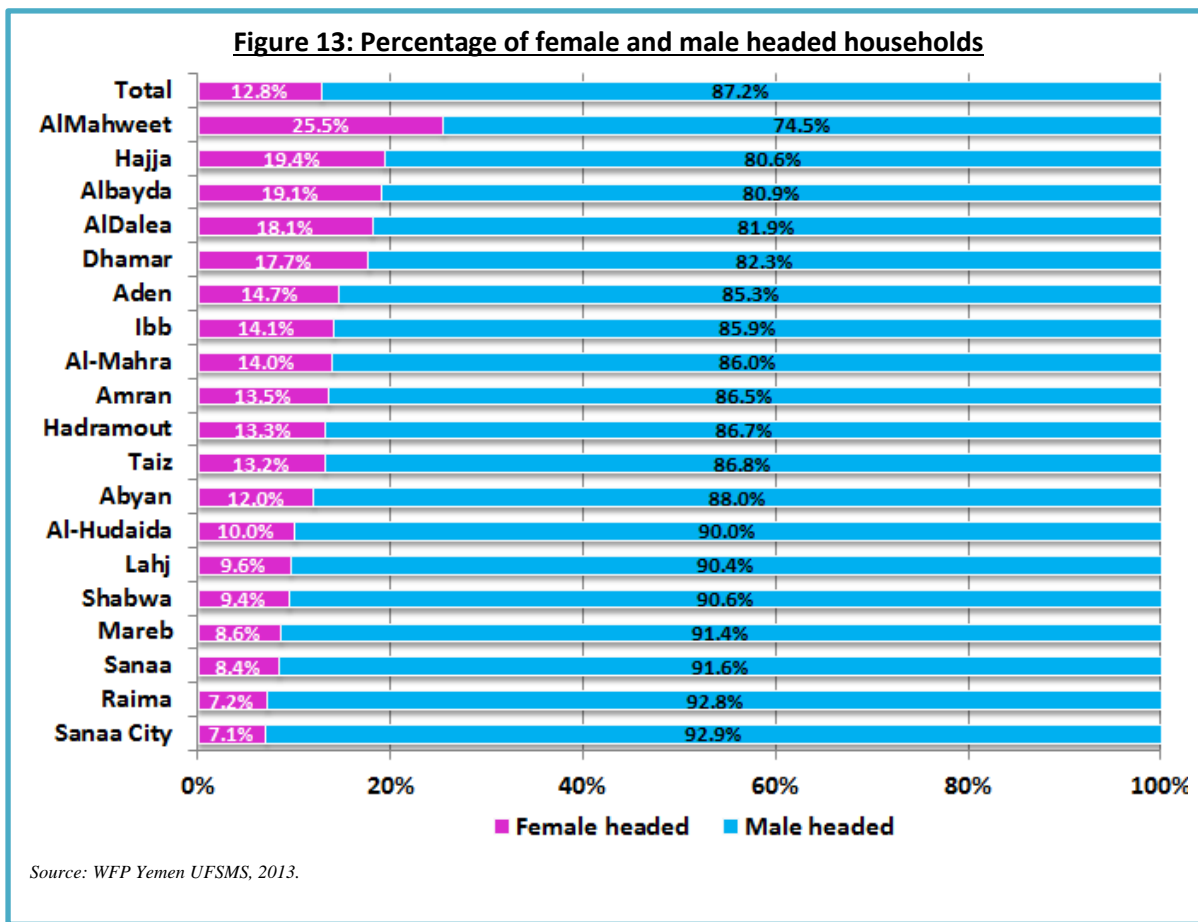
On the other hand, urban households earn their income through salaries and business/trade as well as pension and remittances. As indicated in Figure 12, although production and sale of crops does not contribute much to the cash income of rural households, it employs over half of the working population³⁹.



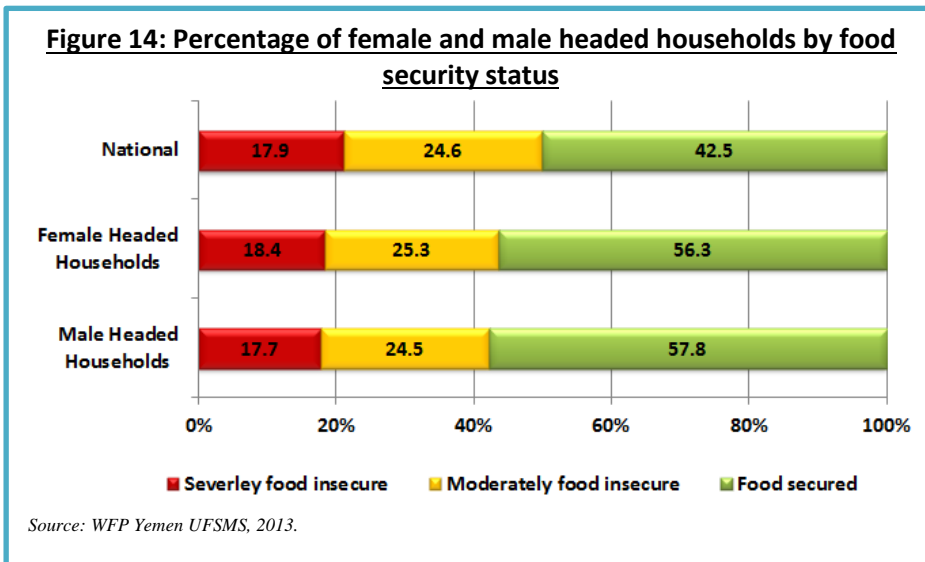
The UFSMS findings further revealed that the majority of households (84 percent) have only one working member, from an average family size of 7. While 9 percent of the households reportedly have two family members who are currently working earning income, only 3 percent have more than two members working and the remaining 4 percent have no one earning income. Of those members of the households who are currently earning income, most of them (over 94 percent) are living and working within their localities/governorates while the remaining are working either outside of their governorates or out of Yemen.

Women-headed households: Nationally, women-headed households constitute about 13 percent of the households covered by the UFSMS. There are noticeable differences among the governorates. Al Mahweet governorate has the largest proportion of women-headed households (25.5 percent) followed by Hajja and Albayda with about 19 percent of the households in the governorates are headed by women (Figure 13).

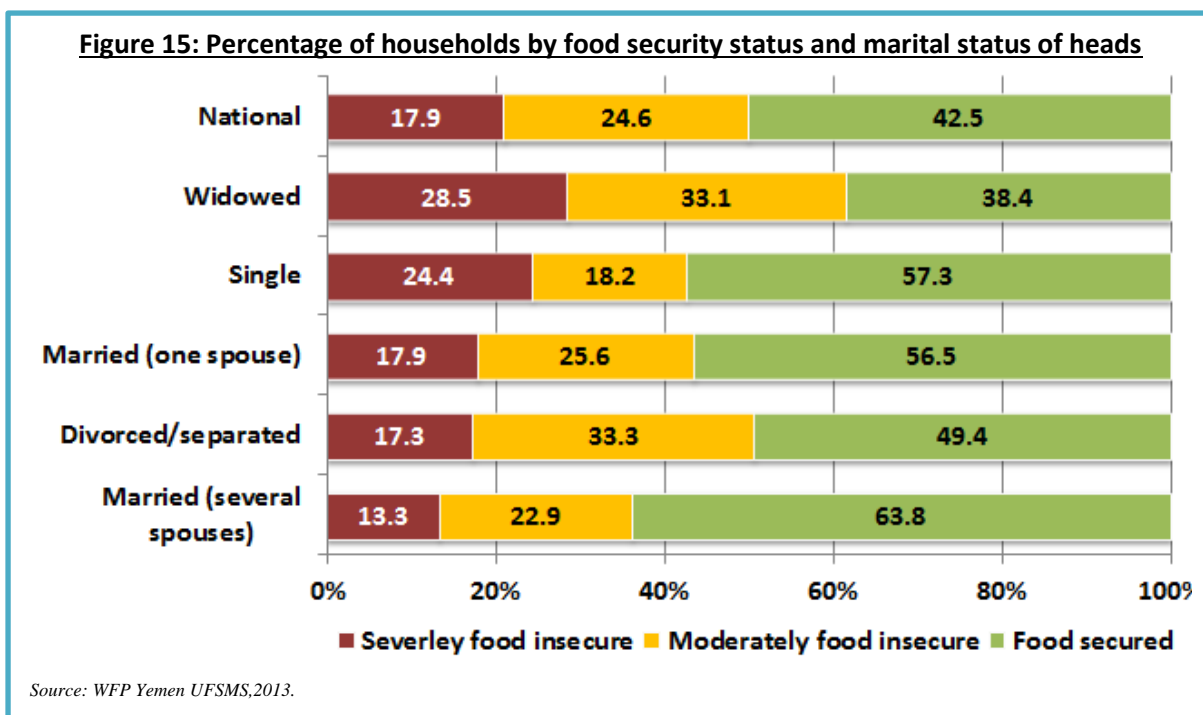
³⁹ FAO/WFP CFSAM, 2009



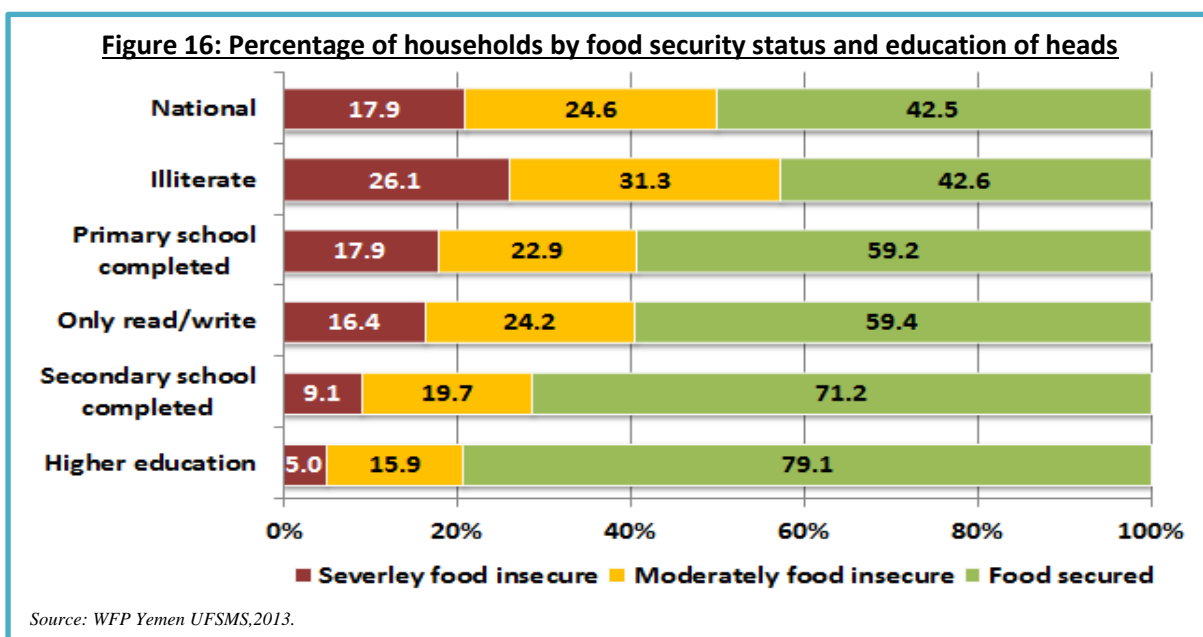
The level of food insecurity among the women headed households has continued to be higher than those headed by men, interestingly though the difference is not that big like the findings of the previous surveys. Currently, about 44 percent of the women headed families are food insecure which is marginally higher compared to men headed households (42 percent) – Figure 14. The 2011 CFSS had found 52 percent of the women headed households were food insecure compared to 44 percent for men headed families.



From the women-headed households, those with **widowed** head of family experience the highest level of food insecurity – about 62 percent of households with widowed women heads are food insecure. With a total of 43 percent, single women headed families are the second highest food insecure groups (Figure 15).



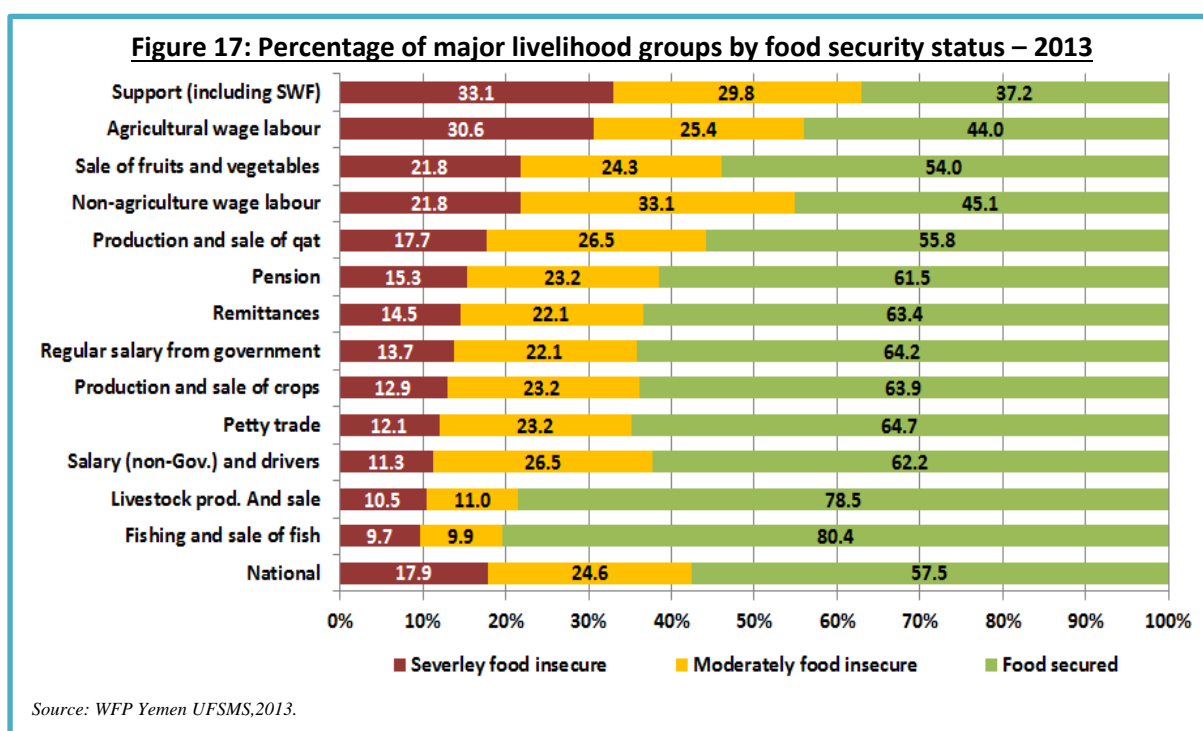
Households with illiterate heads of families: Several studies have shown that there is a direct relationship between level of education and food security – good level of educational attainment provides better job opportunities and improves income sources and hence enhances food security condition. Of the total households covered by the UFSMS, a little over 40 percent of the households are headed by illiterate family members. Heads of households with no formal education but can read and write constitute about 17 percent while those who completed primary and secondary education account for 16 and 17 percent, respectively. Only less than 10 percent have reported to have higher education. Literacy rates vary considerably across all categories, with marked differences observed between rural and urban areas, between governorates, as well as by gender.



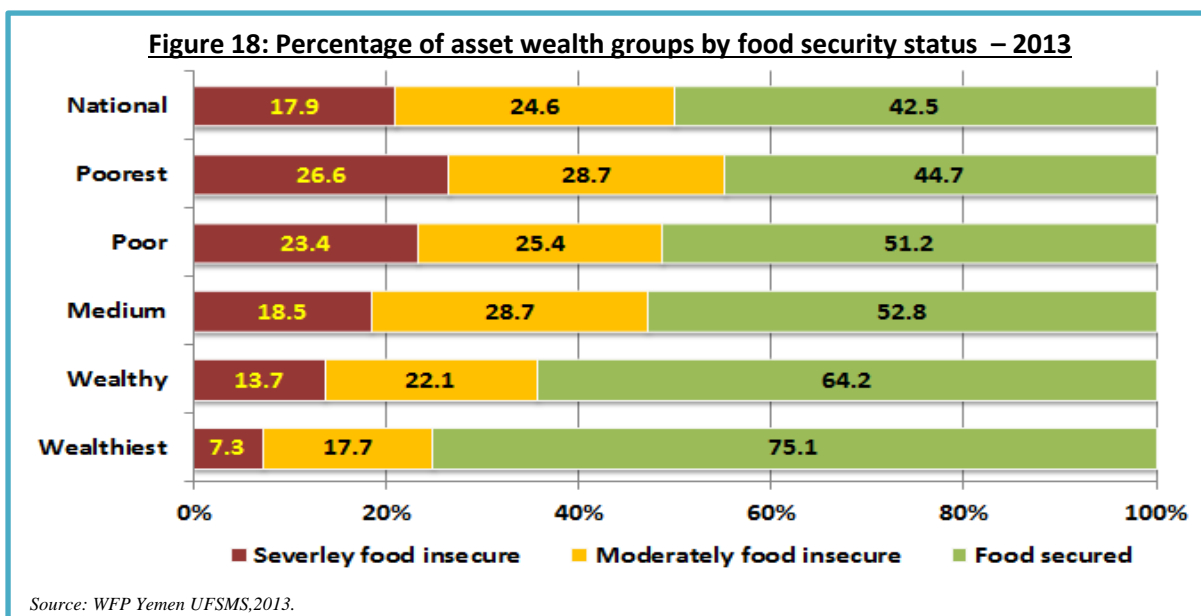
Looking at differences among the governorates, Hajja governorate, with 64 percent, has the highest proportion of illiterate heads of households followed by Al Hudieda (58 percent), Al Mahweet (53

percent), Rayma (50%), Albayda (47 percent), Ibb (44 percent), and Abyan (42 percent). As expected, households headed by illiterate person have the highest level of food insecurity (about 57 percent of those households are food insecure of which 26 percent are severely food insecure). About 41 percent of the households whose heads have primary education and those with no formal education were found to be food insecure (Figure 16 above).

Households dependent on support, and agricultural and non-agricultural wage labour: Livelihoods and income sources of households determine the status of their food security conditions. During the UFSMS analysis, various livelihood groups were established based on households' main sources of income and their food security situation was assessed. According to the results of the survey, households whose main source of living is support from family and friends or the social welfare fund were found to be the highest food insecure group – 63 percent of them are food insecure. From those households who are dependent on agricultural and non-agricultural wage labour, over 55 percent are currently food insecure (Figure 17).



Poor households: Based on households' possession of various assets, relative wealth status was formulated and used as a proxy indicator of the level of poverty among the population covered by the UFSMS. Accordingly, five wealth categories were established – poorest, poor, medium, wealthy and wealthiest. Findings of the survey revealed that the poorest and poor wealth groups constitute 37 percent, the better off groups (wealthy and wealthiest) account for 35 percent and the remaining 28 percent is the middle group. The proportion of the poorest alone found to be 24 percent. Like the previous surveys, a direct relationship between wealth status and food security was found. The poorest households have continued to suffer from the highest level of food insecurity, with over 54 percent of them are currently food insecure (Figure 18).



Indebted households: The UFSMS analysis on the level of households' indebtedness showed that nearly 80 percent of the households are currently indebted. The main reasons for debt were to buy food (over 45 percent) and to cover health expenses (about 30 percent) – Table 1. This indicator is particularly important for indicating that poor households have continued to be food insecure due to the cumulative effect of shocks that forced them to be highly indebted such that they could not get out of easily.

Table 1: Percentage of households with current debt and reason for indebtedness

Governorate	Currently indebted	Reasons for indebtedness		
		To buy food	To cover health expenses	other
Ibb	63.0%	29.8%	42.1%	28%
Abyan	100.0%	49.5%	12.5%	38%
Sanaa City	73.7%	36.8%	32.5%	31%
Albayda	64.7%	35.2%	21.6%	43%
Taiz	74.1%	26.4%	48.6%	25%
Hajja	89.8%	55.7%	28.4%	16%
Al-Hudaida	71.2%	40.8%	42.5%	17%
Hadramout	81.4%	58.7%	25.0%	16%
Dhamar	60.7%	31.0%	34.5%	34%
Shabwa	86.8%	59.0%	22.3%	19%
Sanaa	85.0%	33.3%	34.8%	32%
Aden	87.5%	44.5%	17.6%	38%
Lahj	90.4%	74.0%	13.0%	13%
Mareb	82.9%	50.9%	31.0%	18%
AlMahweet	75.5%	37.5%	43.3%	19%
Al-Mahra	67.8%	34.4%	24.6%	41%
Amran	85.9%	39.0%	26.2%	35%
AlDalea	88.8%	65.7%	27.7%	7%
Raima	71.6%	31.7%	44.6%	24%
Total	79.4%	45.4%	29.6%	25%

Source: WFP Yemen UFSMS, 2013.

3.4. Why are those people food insecure and what are their coping strategies?

Major reasons for food insecurity

The major causes and driving factors for the high level of food insecurity include:

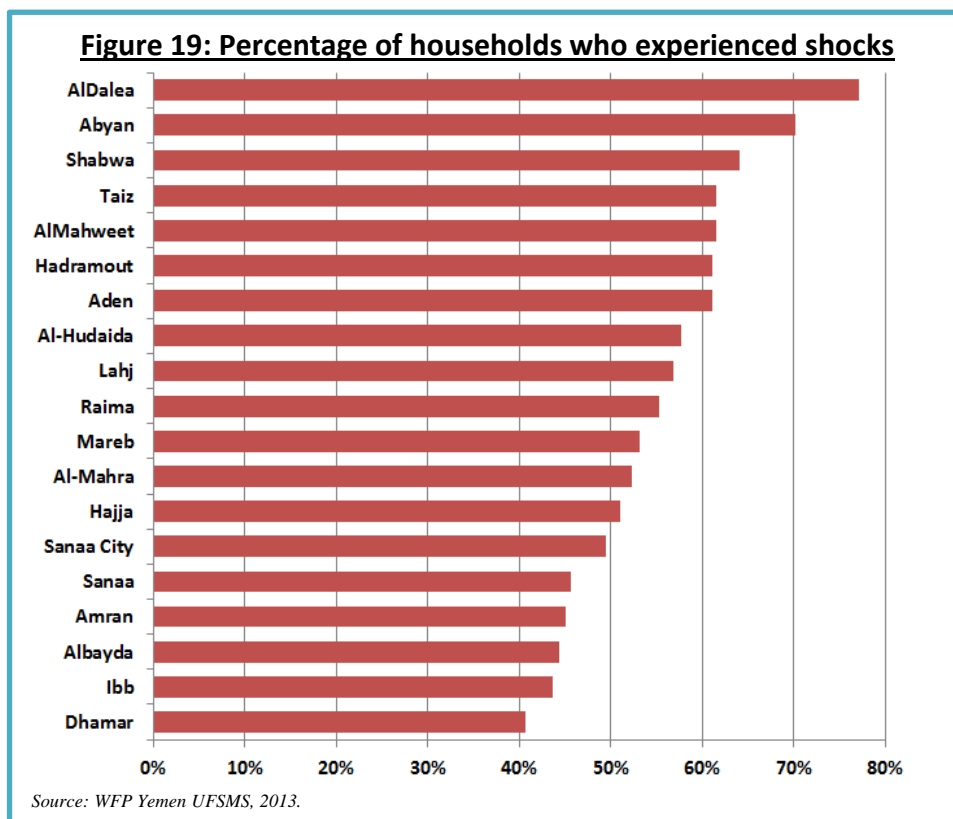
- Political instability, deterioration in economic growth, extreme poverty, high population growth, volatility of prices of food and other essential commodities, increasing cost of living including unaffordable health expenses, high level of debt, unemployment and a reduction in remittances.
- Government capacity to provide social services remains at very low levels in many parts of the country where humanitarian needs are also high.
- Increased localised conflicts particularly in the north and the south continued in 2013, exacerbated by weak rule of law and security systems.
- Environmental degradation, climate change/variability and lack of rainfall, and water scarcity.
- Power interruption due to tribal sabotage, oil pipeline damages, and other infrastructure destruction due to conflicts.

While the above summarizes most of the reasons for the on-going high level of insecurity at macro, meso and micro levels, the following sections shade some light on the key issues that are worsening food insecurity at household level.

Shocks experienced

There are several shocks that are affecting the precarious food security situation of poor households in Yemen. Nationally, an average of about 56 percent of the households has experienced different types of shocks in 2013 (Figure 19). The major shocks that have affected almost all the governorates include high food prices (20 percent), high level of indebtedness (9 percent), expensive health services (8 percent) and insecurity (5 percent).

However, the magnitude and severity of the shocks differs by governorate. For instance, while the overall average prevalence of insecurity/violence is about 5 percent at



national level, the situation was reported as high as 25 percent in AlDalea followed by Aden (14 percent), Abyan (13 percent), and Lahej and Al Bayda (8 percent).

Deteriorated economic situation of households

The UFSMS has looked into the changes in the households' economic condition during the last 6 months prior to the survey. According to the findings, over 50 percent of the households have perceived their economic situation as having been deteriorated while close to 40 percent of the surveyed households saw their situation unchanged. Only 10 percent of the households felt that their situation has improved (Table 2).

Table 2: Perception of households about their current economic situation compared to 6 months ago

Governorate	Percentage of households with perceived changes of their economic situation				
	Much worse	Slightly worse	Same	Slightly better	Much better
Ibb	13.0%	40.6%	39.1%	4.2%	3.1%
Abyan	29.2%	67.2%	2.1%	1.6%	.0%
Sana'a city	10.9%	38.5%	39.1%	9.0%	2.6%
Al Baidha	11.0%	30.1%	38.2%	19.1%	1.5%
Taiz	19.5%	16.8%	58.4%	3.7%	1.6%
Hajja	11.7%	31.6%	42.3%	12.8%	1.5%
Al Hudaida	15.9%	25.9%	52.4%	4.1%	1.8%
Hadramout	31.0%	53.1%	14.2%	1.8%	.0%
Dhamar	14.6%	33.3%	34.9%	13.0%	4.2%
Shabwa	49.7%	37.7%	9.4%	3.1%	.0%
Sana'a Gov.	10.2%	38.9%	40.1%	8.4%	2.4%
Aden	25.0%	52.2%	21.3%	1.5%	.0%
Lahej	24.6%	48.1%	26.2%	.5%	.5%
Mareb	7.1%	30.0%	43.6%	10.0%	9.3%
Al Mahweet	19.9%	18.0%	56.5%	2.5%	3.1%
Al Mahra	14.0%	48.4%	31.2%	5.4%	1.1%
Amran	12.5%	36.5%	39.1%	9.9%	2.1%
Al Dalea	34.6%	56.9%	8.5%	.0%	.0%
Raima	26.7%	34.9%	37.4%	.5%	.5%
Total	17.3%	35.0%	39.5%	6.2%	2.0%

Source: WFP Yemen UFSMS. 2013.

For those households who reported that their economic situation has worsened now compared to their condition 6 months ago, the main reasons include declining income level, high food prices and increasing cost of living, as reported by 33 percent, 25 percent and 27 percent of the households, respectively. The reasons vary across the governorates. For instance, considerable proportion of the households in Sana'a, Amran, Ad Dalea, Ibb and Rayma governorates have reported poor agricultural and livestock performance among the reasons for the deterioration of their economic wellbeing. On the other hand, significant proportion of the households in Ad Dalea, Aden and Al Mahweet have indicated worsened security situation affecting their economic condition (Table 3).

Table 3: Main reasons for deterioration of households' economic situation during the past 6 months

Governorate	Main reasons for deterioration of economic situation						
	Poor agric. and livestock performance	Declining Income level	High food prices	Worsened cost of living	Reduced remittances	Worsened Security situation	Poor access to market
Ibb	13.9%	32.7%	21.8%	29.7%	2.0%	.0%	.0%
Abyan	.0%	5.4%	53.5%	39.5%	.5%	1.1%	.0%
Sana'a city	.0%	43.8%	12.3%	34.2%	5.5%	2.7%	1.4%
Al Baidha	.0%	50.0%	26.9%	13.5%	.0%	9.6%	.0%
Taiz	5.9%	36.8%	29.4%	14.7%	.0%	1.5%	11.8%
Hajja	8.5%	47.6%	24.4%	13.4%	6.1%	.0%	.0%
Al Hudaida	.0%	42.3%	36.6%	14.1%	1.4%	.0%	5.6%
Hadramout	1.1%	16.0%	26.6%	45.7%	5.3%	3.2%	2.2%
Dhamar	4.5%	42.0%	29.5%	21.6%	.0%	2.3%	.0%
Shabwa	.6%	25.2%	39.9%	33.7%	.6%	.0%	.0%
Sana'a Gov.	19.2%	41.0%	17.9%	15.4%	.0%	6.4%	.0%
Aden	.0%	14.4%	6.7%	61.5%	1.9%	15.4%	.0%
Lahej	5.9%	19.3%	12.6%	46.7%	.7%	9.6%	5.2%
Mareb	.0%	38.5%	26.9%	21.2%	1.9%	7.7%	3.8%
Al Mahweet	3.3%	27.9%	37.7%	16.4%	.0%	14.8%	.0%
Al Mahra	.0%	25.9%	36.2%	31.0%	5.2%	.0%	1.7%
Amran	19.1%	41.5%	17.0%	17.0%	1.1%	4.3%	.0%
Al Dalea	15.7%	31.4%	8.1%	9.9%	4.1%	30.2%	.6%
Raima	11.7%	21.7%	39.2%	17.5%	5.0%	.0%	5.0%
Total	6.6%	33.2%	24.7%	26.5%	2.1%	4.4%	2.4%

Source: WFP Yemen UFSMS, 2013.

High dependency on one income earning member of household

According to the results of the UFSMS, the majority of the households (84 percent) have only one family member who is currently working and earning some income. With a national average family size of 7.5, having only one family member earning income and covering all the expenses of the household will hardly be sufficient. This apparently puts those households in a difficult situation to meet their minimum food requirements. Abyan is the worst where almost all the households have only one working person in the family which makes the governorate one of the most vulnerable and the highest food insecure governorates (Table 4).

Table 4: Percentage of households with family members who are working and earning income

Percentage of household with number of members who are currently earning an income				
Governorate	0	1	2	3
Ibb	4.2%	76.6%	13.5%	5.7%
Abyan	0.5%	99.5%	0.0%	0.0%
Sanaa City	2.6%	88.5%	6.4%	2.6%
Albayda	1.5%	81.6%	12.5%	4.4%
Taiz	5.3%	88.9%	4.7%	1.1%
Hajja	8.7%	80.5%	8.2%	2.6%
Al-Hudaida	5.9%	80.6%	11.2%	2.4%
Hadramout	5.3%	86.7%	7.1%	0.9%
Dhamar	0.0%	84.4%	9.4%	6.3%
Shabwa	6.3%	89.0%	3.7%	1.0%
Sanaa	0.6%	84.4%	10.8%	4.2%
Aden	0.7%	77.2%	22.1%	0.0%
Lahj	2.7%	83.4%	13.4%	0.5%
Mareb	2.1%	80.0%	10.7%	7.1%
AlMahweet	9.3%	80.7%	8.7%	1.2%
Al-Mahra	2.2%	84.9%	11.8%	1.1%
Amran	2.1%	88.0%	6.3%	3.6%
AlDalea	3.7%	78.7%	17.6%	0.0%
Raima	1.5%	91.2%	4.1%	3.1%
Total	3.8%	84.0%	9.4%	2.8%

Source: WFP Yemen UFSMS, 2013.

Coping strategies being used by food insecure households

According to the UFSMS results, about 58 percent of the households nationally do not have enough food or money to buy food to sustain their minimum consumption requirements. The magnitude of the problem ranges from 40 percent in Sana'a City to as high as 100 percent in Abyan governorate (UFSMS, 2013). When a community experiences a shock, various types of responses are put in place, depending on the type and magnitude of the problem as well as the level of vulnerability the community has experienced. These coping strategies range from short-term and less destructive, to longer-term irreversible and highly damaging mechanisms.

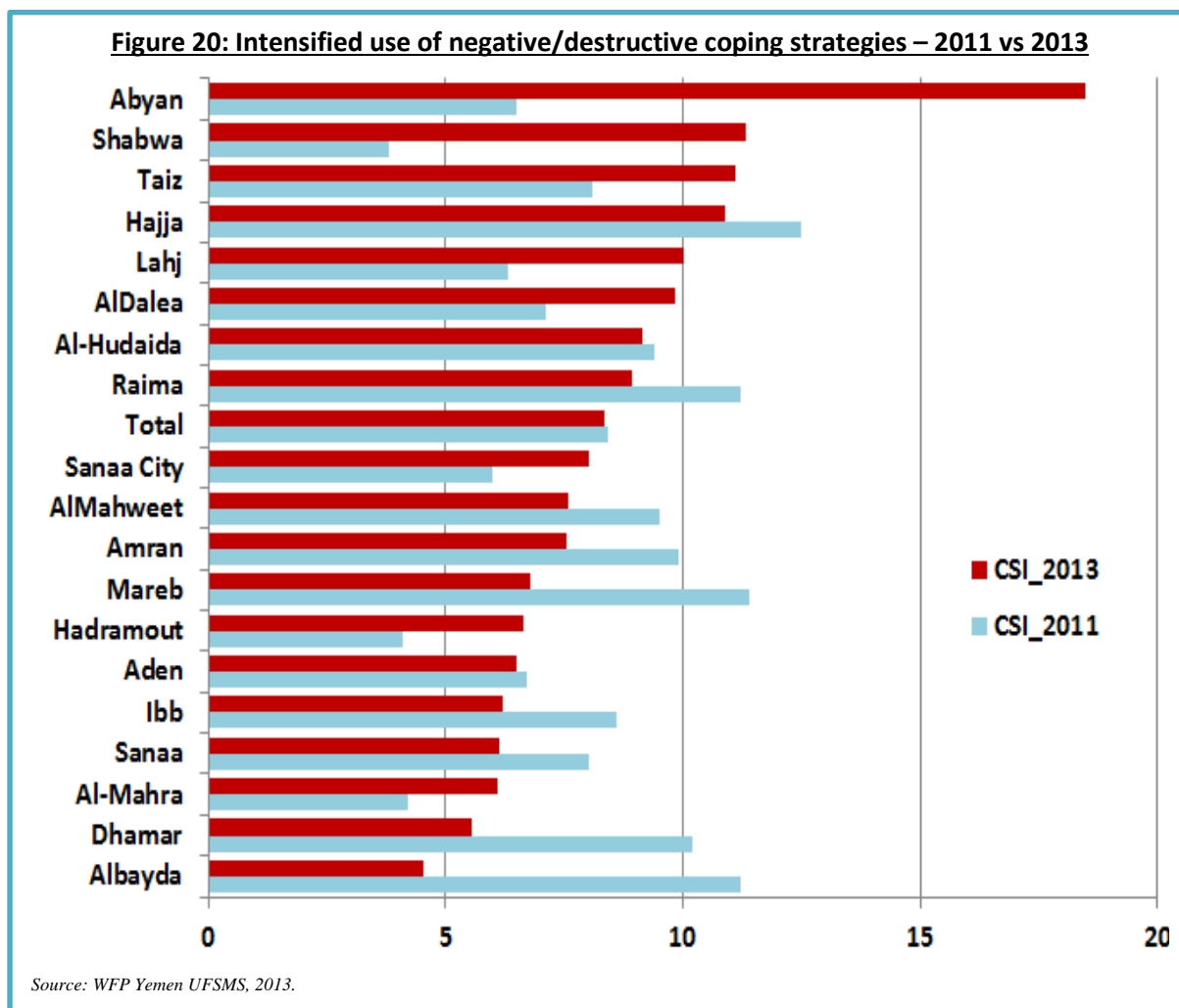
Some of the destructive consumption-related measures that have been employed by the food insecure and vulnerable Yemeni households in 2013 include: eating less preferred or less expensive foods (66 percent), limiting portion size at meal times (56 percent), reducing the number of meals eaten per day (47 percent), and limiting adult intake in favor of children (65 percent). Borrowing food/money from friends and relatives and buying food on credit are also among the common coping mechanisms practiced by the majority of the food insecure population in the country which drain their capacity to manage through future shocks and make them more vulnerable (Table 5).

Table 5: Percent of households who don't have enough food by coping strategies they used

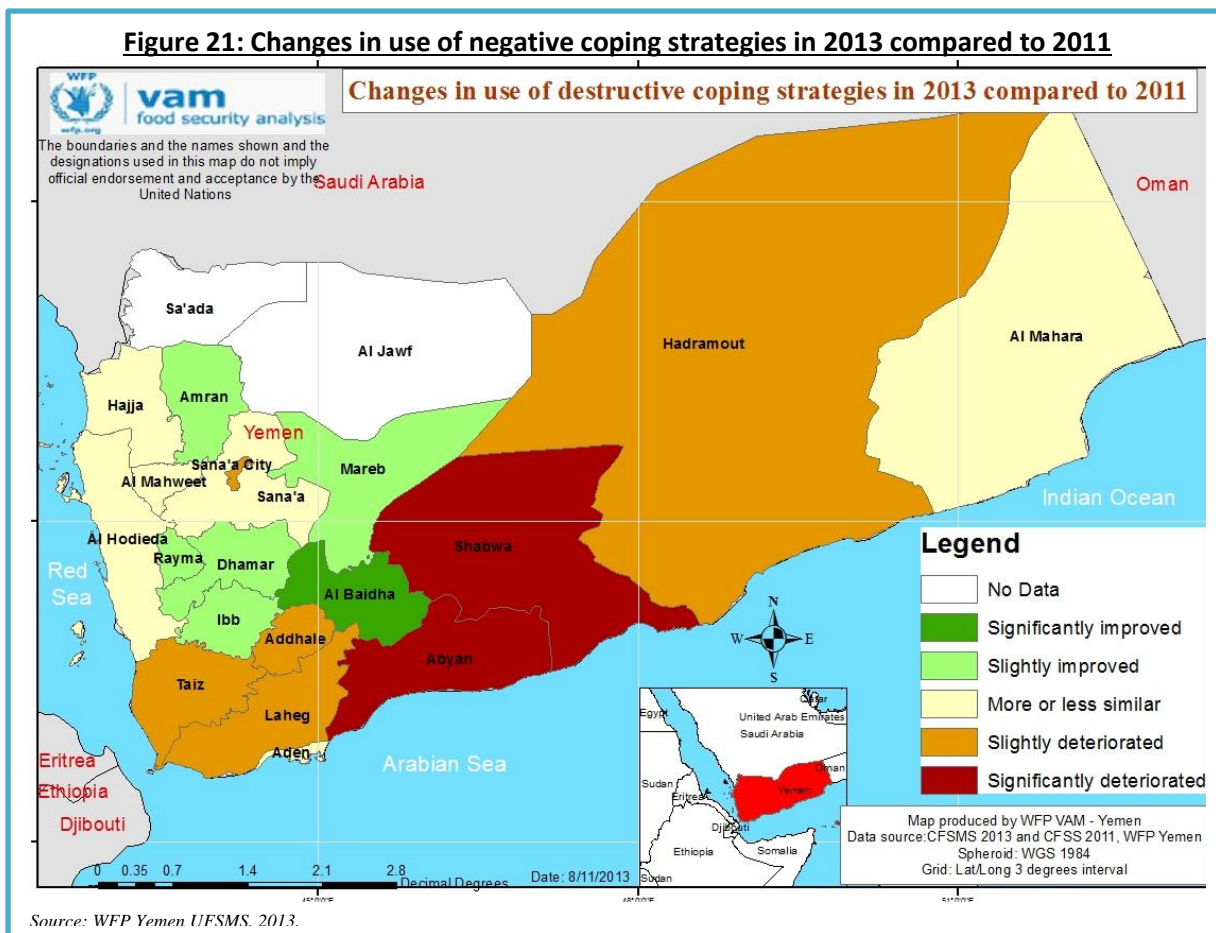
Governorate	No enough food or money to buy food	Consumption related coping strategies used			
		Eat less preferred food	Eat limited variety of food	Eat smaller meals	Eat fewer meals
Ibb	48.6%	61.2%	51.8%	43.4%	29.3%
Abyan	100.0%	100.0%	100.0%	100.0%	99.0%
Sanaa City	40.4%	49.4%	48.7%	40.4%	39.1%
Albayda	41.9%	53.7%	45.6%	37.5%	33.8%
Taiz	74.3%	72.5%	74.2%	68.4%	61.1%
Hajja	59.0%	73.0%	71.9%	62.2%	61.7%
Al-Hudaida	60.6%	69.4%	71.8%	69.4%	55.3%
Hadramout	63.7%	50.4%	56.6%	56.6%	43.4%
Dhamar	47.9%	59.9%	45.8%	41.1%	32.3%
Shabwa	74.9%	76.4%	79.1%	72.8%	66.5%
Sanaa	43.7%	52.7%	52.1%	39.5%	34.7%
Aden	71.5%	93.2%	91.8%	53.5%	36.9%
Lahj	90.4%	98.9%	97.3%	69.0%	41.7%
Mareb	51.1%	58.6%	55.0%	50.0%	43.6%
AlMahweet	57.1%	62.1%	68.3%	54.0%	44.7%
Al-Mahra	43.0%	31.2%	35.5%	31.2%	26.9%
Amran	42.7%	57.3%	56.3%	46.4%	42.7%
AlDalea	82.4%	96.8%	96.8%	82.4%	71.1%
Raima	57.7%	83.5%	85.1%	61.3%	46.9%
Total	58.2%	66.5%	65.0%	55.7%	46.8%

Source: WFP Yemen UFSMS, 2013.

The deterioration of food security situation between 2009 and 2011 and persisted through 2013 has forced food insecure population to intensify the use of negative/destructive coping strategies by two fold or more. A coping strategies index (CSI), which is established by combining the above mentioned common coping mechanisms used by Yemenis, is the standard tool to measure the degree and intensity of employing destructive coping measures. According to the governorate level analysis of the CSI for 2011 and 2013, Abyan, Shabwa, Taiz and AlDalea were found to have increased use of negative coping mechanisms in 2013 compared to 2011 (Figure 20).



The map presented below also shows the geographical variations in terms of changes in the use of destructive coping strategies. The situation in Al Baida governorate has significantly improved (lesser use of destructive coping measures in 2013 than in 2011). While Mareb, Dhamar, Amran, Rayma and Ibb showed slight improvement, all the other governorates have either continued to employ the strategies in 2013 or have shown deterioration (more intensified use of negative coping mechanisms) compared with the situation in 2011.



While the high level of negative coping strategies being employed by the food insecure households continues, the food security outlook is anticipated to be even worse in 2014, as the major causes of current food insecurity will likely to persist in the coming months, and are also likely to be aggravated by:

- lower crop production prospect in 2013 compared to last year,
- uncertainty on the political transition process,
- the impact of huge reduction in remittances due to the imminent deportation of over quarter a million Yemeni working migrants from Saudi Arabia⁴⁰,
- increasing inflation and declining purchasing power, and
- worsening indebtedness among the poor households.

3.5. Nutrition situation in the country: levels of malnutrition and causes

Chronic malnutrition (stunting)

About half of Yemen's children are chronically malnourished and one out of ten does not live to reach the age of five⁴¹. The proportion of stunted children was 55.7 percent in 2005/06⁴², and increased to 58 percent in 2010⁴³ and improved by 2011/12 and became 47 percent⁴⁴ – remaining at

⁴⁰ <http://www.theguardian.com/world/2013/apr/02/saudi-arabia-expels-yemeni-workers>.

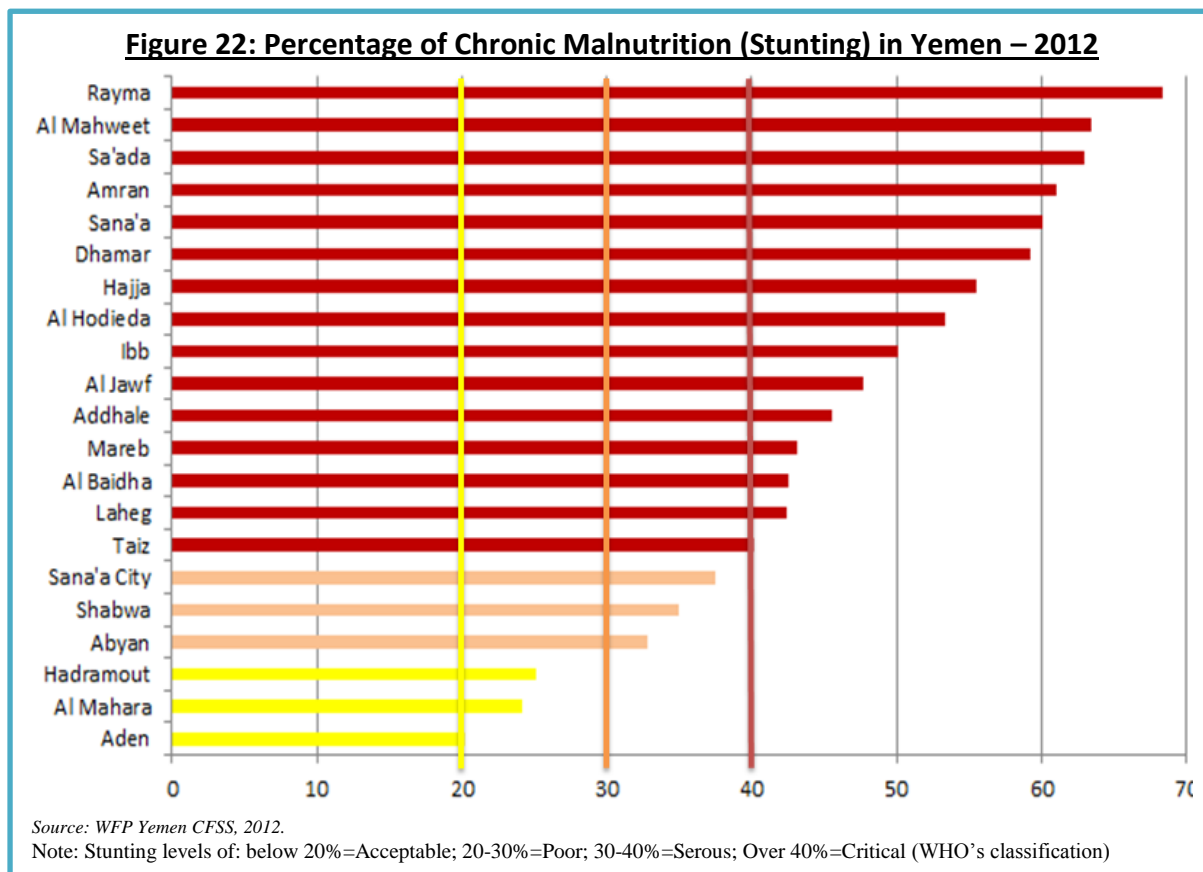
⁴¹ WFP CFSS, 2011.

⁴² CSO Household Budget Survey, 2005/2006.

⁴³ IFPRI, 2010.

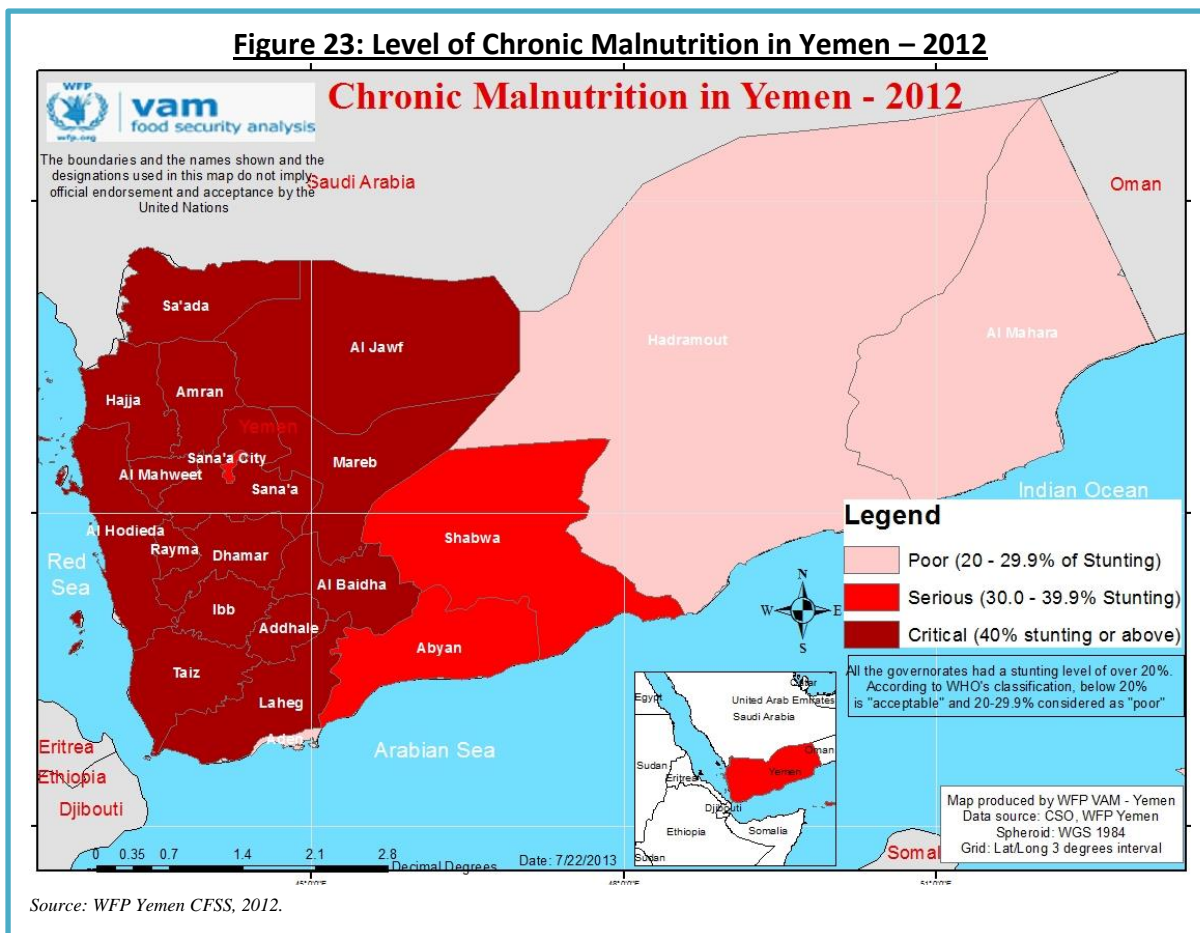
⁴⁴ WFP CFSS, 2011.

critical level throughout all these years, according to WHO’s cut-off points⁴⁵. Such emergency levels of chronic malnutrition – or stunting – are second globally only to Afghanistan. Sub-national details on stunting show that Aden, Al Mahra, and Hadramout governorates have “poor” level of stunting; Abyan, Shabwa and Sana’a City have “serious” level of stunting; while all the other governorates have “critical” level of stunting in 2012⁴⁶ (Figures 22 and 23).



⁴⁵ WHO (2006, 2009) Child Growth Standards. (Stunting levels of: Below 20%=Acceptable; 20-30%=Poor; 30-40%=Serous; Over 40%=Critical).

⁴⁶ WFP CFSS, 2011.



Acute malnutrition (wasting)

Moderate and severe acute child malnutrition (wasting) is highly prevalent, especially in rural areas, thus threatening Yemen's future social and economic development. The high prevalence of acute malnutrition is due to both food insecurity and health problems as a result of poor water and sanitation facilities, poor care and feeding practices and insufficient health services as well as lack of money to get treatment. The national level global acute malnutrition (GAM) was 13.2 percent in 2005/06⁴⁷, increased to 15.7 percent in 2010⁴⁸, and gone down to 13.0 percent in 2012⁴⁹. While the GAM levels in 2005/06 and 2012 are classified as "serious", the level in 2010 was at a "critical" level according to WHO's standard cut-off points for acute malnutrition (wasting)⁵⁰.

The 2011 CFSS data on GAM rates by governorate indicates that Al Hudieda, Lahej and Aden are at "critical" level; Hajjah, Taiz, Addhale, Al Mahweet, Amran, Abyan and Ibb are at "serious" level; while all the remaining governorates are at "poor" level of wasting (Figures 24A, 24B and 25). UNICEF-led SMART Surveys conducted in 9 governorates have also confirmed the seriousness of acute malnutrition in the country⁵¹. The situation in Hudieda, Aden, Lahj, Hajja, western highlands of Ibb, and conflict affected districts of Abyan is exceptionally "critical" and worrisome (Figure 24B).

⁴⁷ CSO Household Budget Survey, 2005/2006.

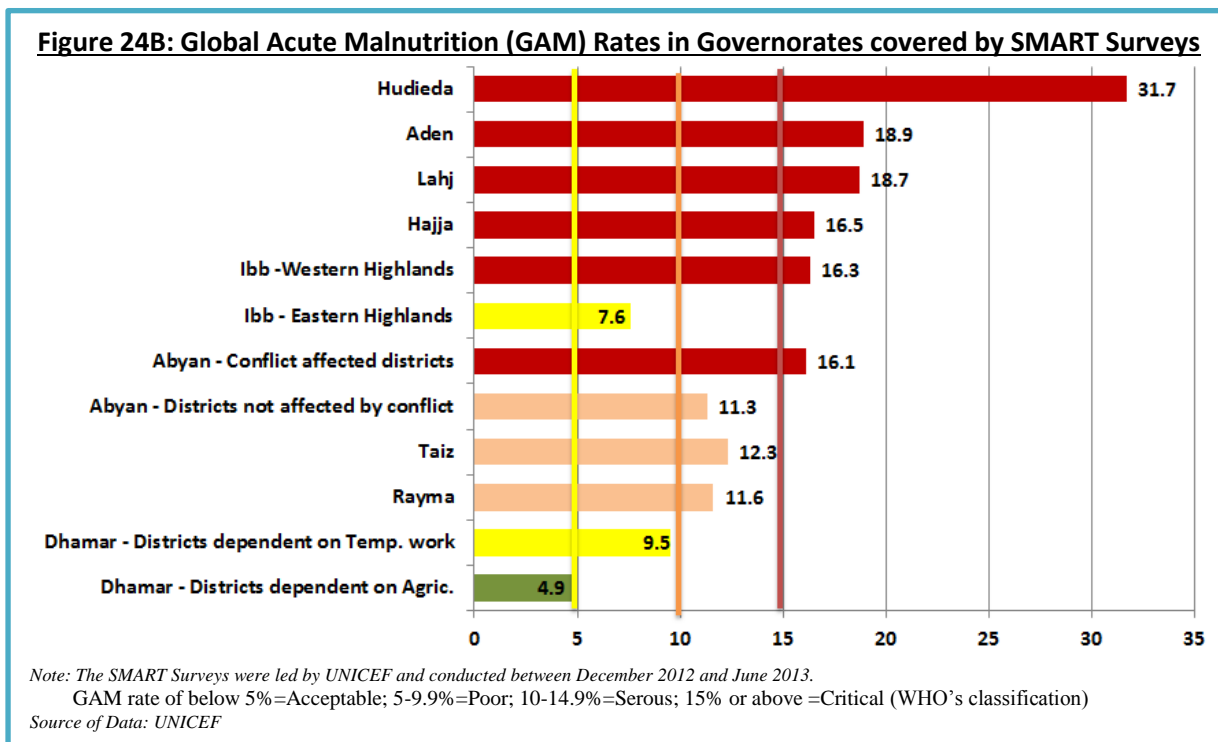
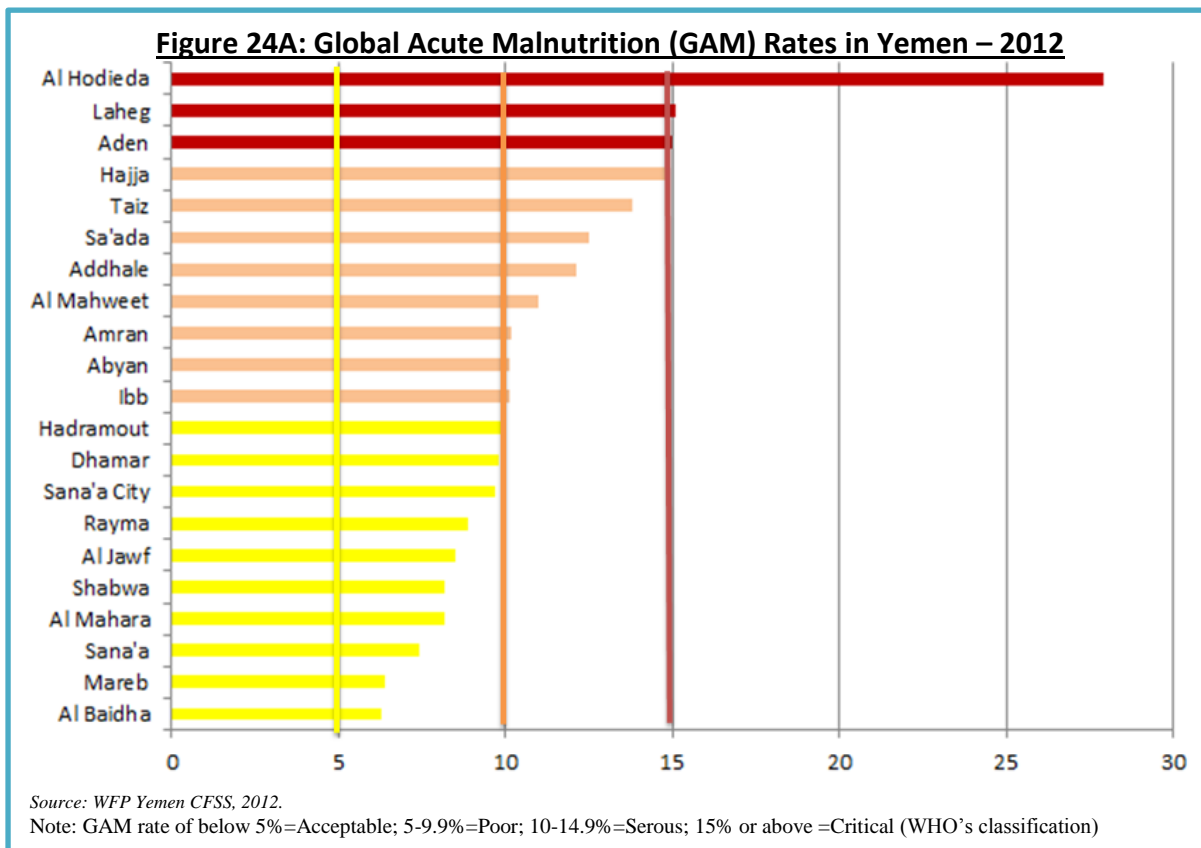
⁴⁸ IFPRI, 2010.

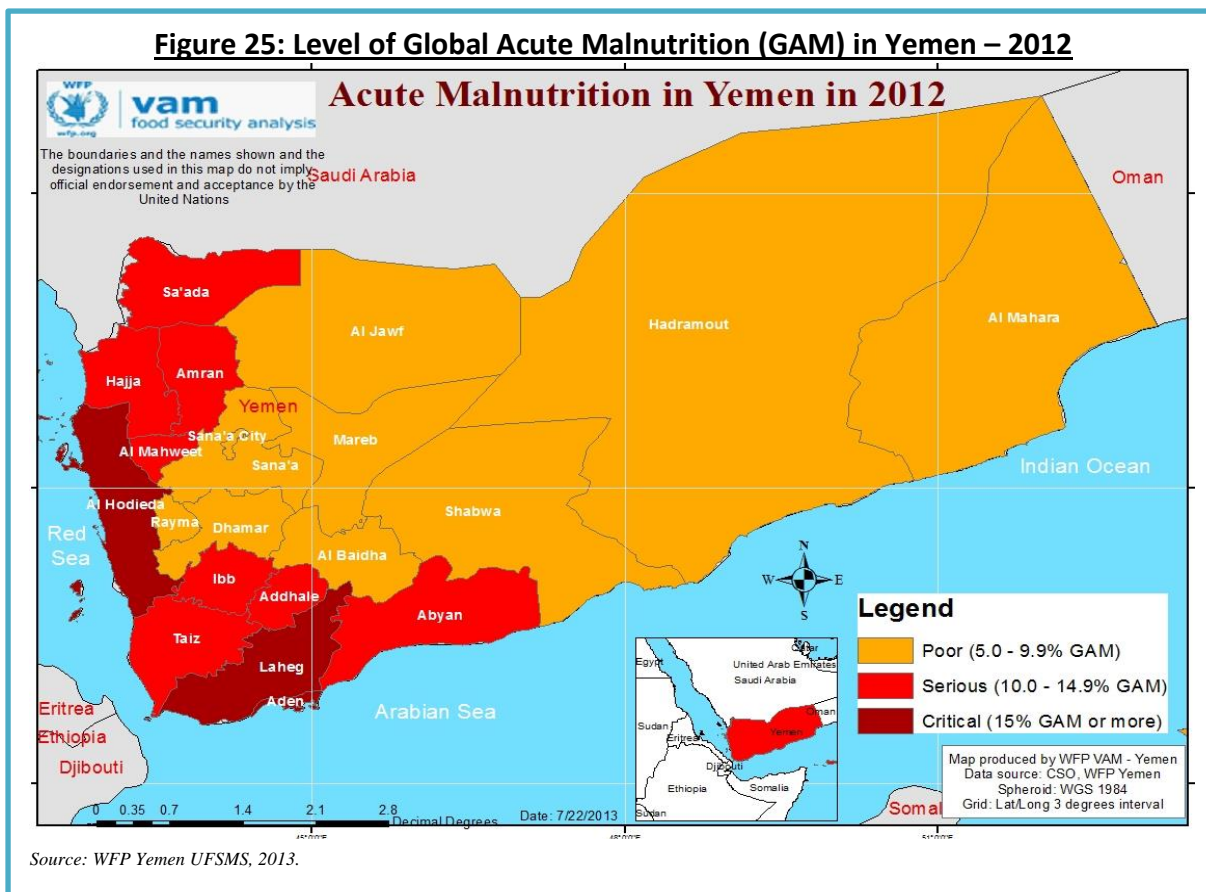
⁴⁹ WFP CFSS, 2011.

⁵⁰ WHO (2006, 2009) Child Growth Standards. (GAM rate of: Below 5%=Acceptable; 5-9.9%=Poor; 10-14.9%=Serous; 15% or above =Critical).

⁵¹ UNICEF SMART Surveys (conducted in 9 governorates between December 2012 – June 2013).

<http://yemen.humanitarianresponse.info/clusters/nutrition/resources>.





Water and sanitation

The use of unimproved drinking water and sanitation facilities heightens the likelihood of having acutely malnourished children and women in the household. Access to safe drinking water appears to have deteriorated since 2003, particularly in rural areas. At the national level, 52.6 percent of the population drinks from unimproved water sources in 2013, which is up from 40.9 percent in 2010 and 34 percent six years ago⁵².

While the situation in the urban areas has improved substantially, with 82.3 percent of households having access to safe drinking water compared with 32 percent in 2003, more than half of the rural population (55 percent) still drinks unimproved water. More than one quarter of all households drinking unimproved water is likely to have acutely malnourished women and children (close to 30 percent in both cases). Indeed, drinking water from unimproved sources was found to be a determining factor of malnutrition in women⁵³.

According to the information from UN OCHA in Yemen, while most of the governorates of Yemen have remarkably high percentages of households who are using unimproved water sources, the situation in Hajja and Sa'ada governorates is the worst of all (Figures 26 and 27). Access to improved sanitation facilities is also among the huge problems in most parts of the country which further aggravates the widespread malnutrition situation. Most of the households within the majority of the governorates are found to use unimproved types of sanitation services (Figures 28 and 29).

⁵² WFP Yemen CFSS 2009 and 2011.

⁵³ WFP Yemen CFSS 2009 and 2011.

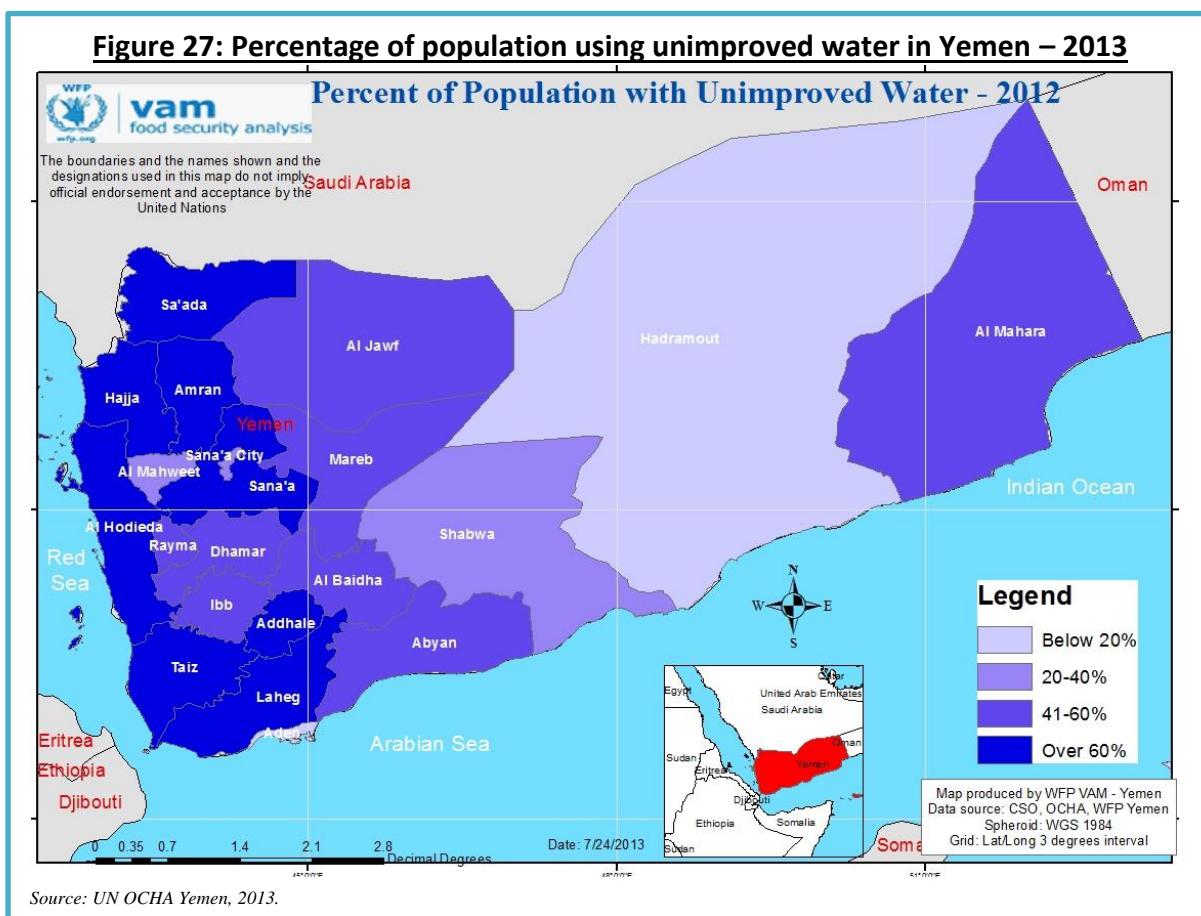
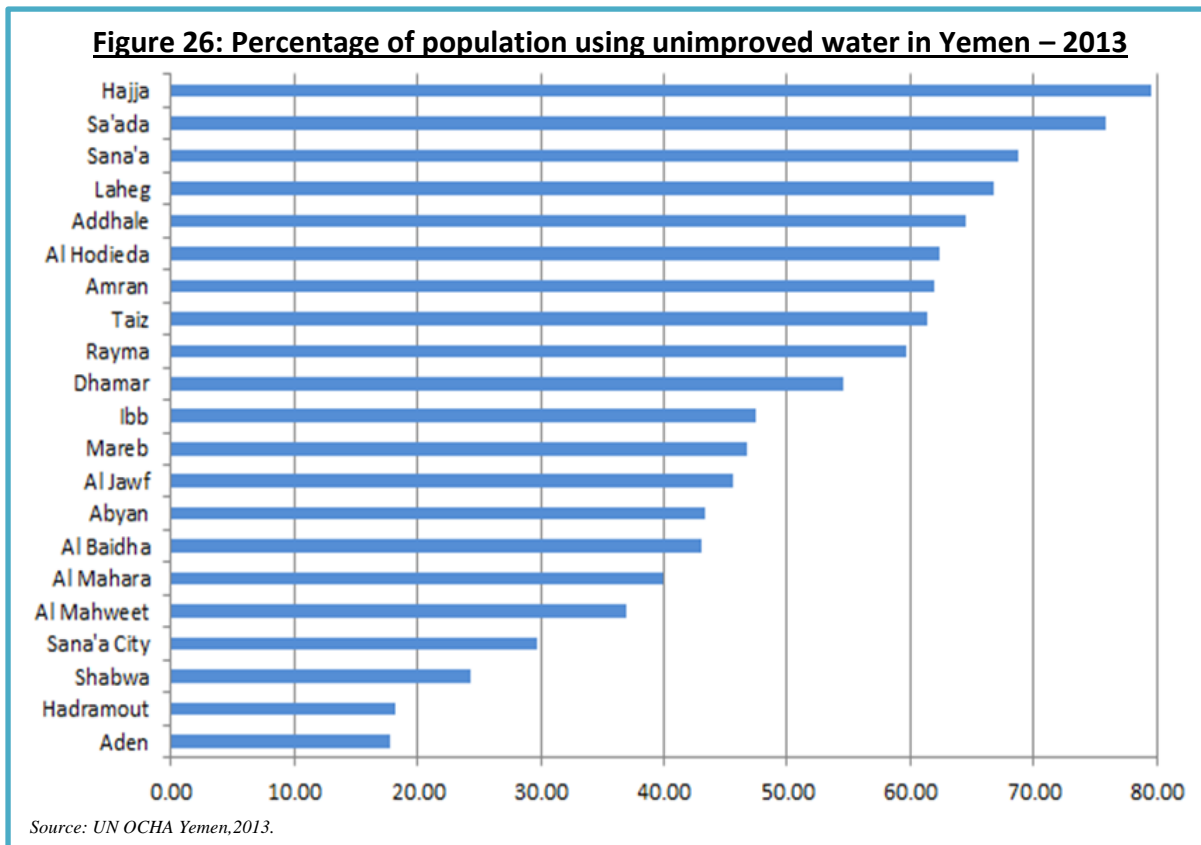
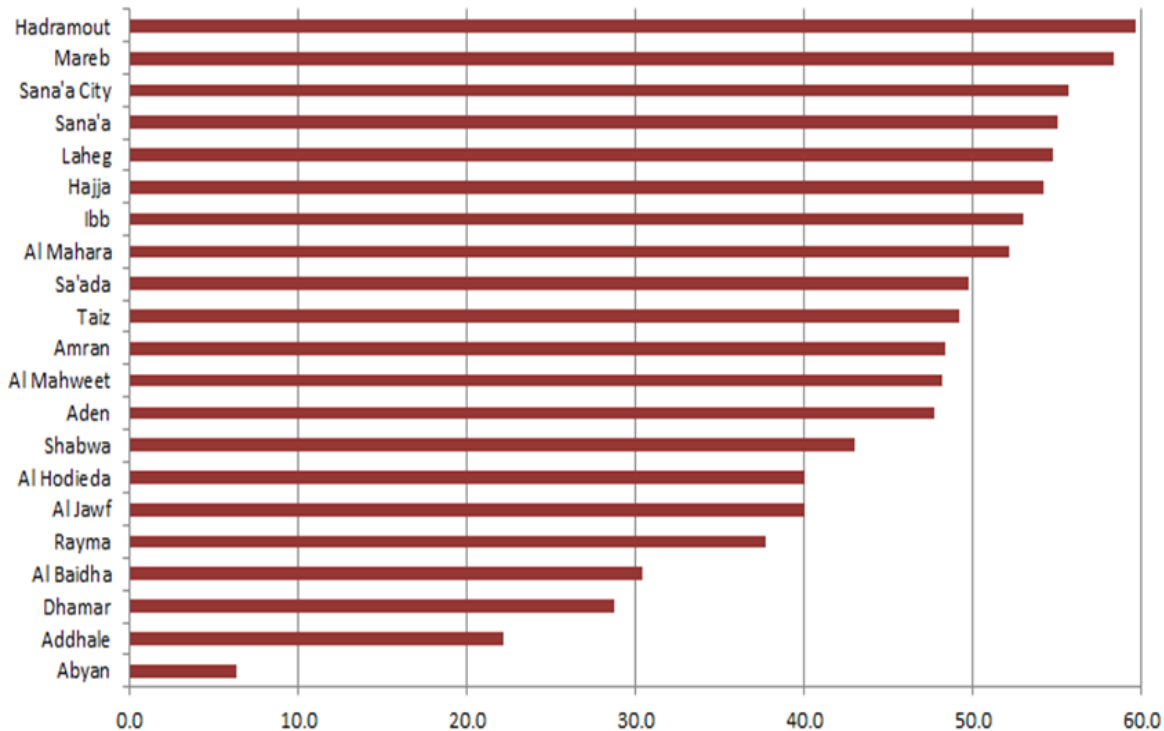
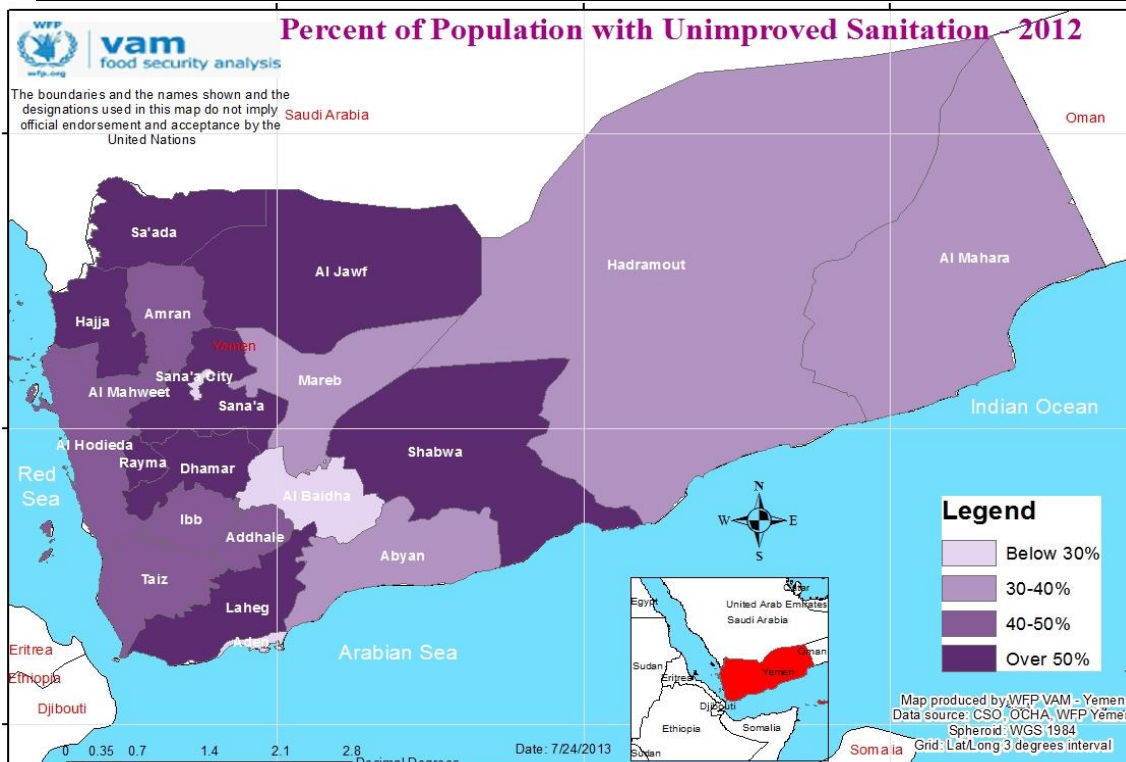


Figure 28: Percentage of households using unimproved Sanitation in Yemen – 2013



Source: UN OCHA Yemen, 2013.

Figure 29: Percentage of population using unimproved sanitation in Yemen – 2013



Source: UN OCHA Yemen, 2013.

Health situation

People are exposed to life-threatening epidemics due to high malnutrition rates, the breakdown of health services, and poor water and sanitation mixed with people's vulnerability to infections, particularly women and children. This year has witnessed repeated disease outbreaks such as measles, dengue, chikungunya and even polio. Epidemiological data suggests that the key morbidities in communities are diarrhoea, acute respiratory tract infections and malaria. Children under age 5 bear a heavy burden: they account for nearly 50% of diarrhoea and ARI cases, according to WHO⁵⁴.

The ongoing conflicts and socioeconomic disruption in Yemen have reduced the capacity of health-care services. In July 2012, WHO assessed 49 health facilities in Abyan, 44 (90%) of which lacked the essential drugs required for a minimum package of health-care services. The same assessment found that out of 49 health facilities, 18 (37%) were partially or fully damaged and nine (18%) were looted. Only 6% of the facilities in Abyan were conducting immunization campaigns on a daily basis.⁵⁵

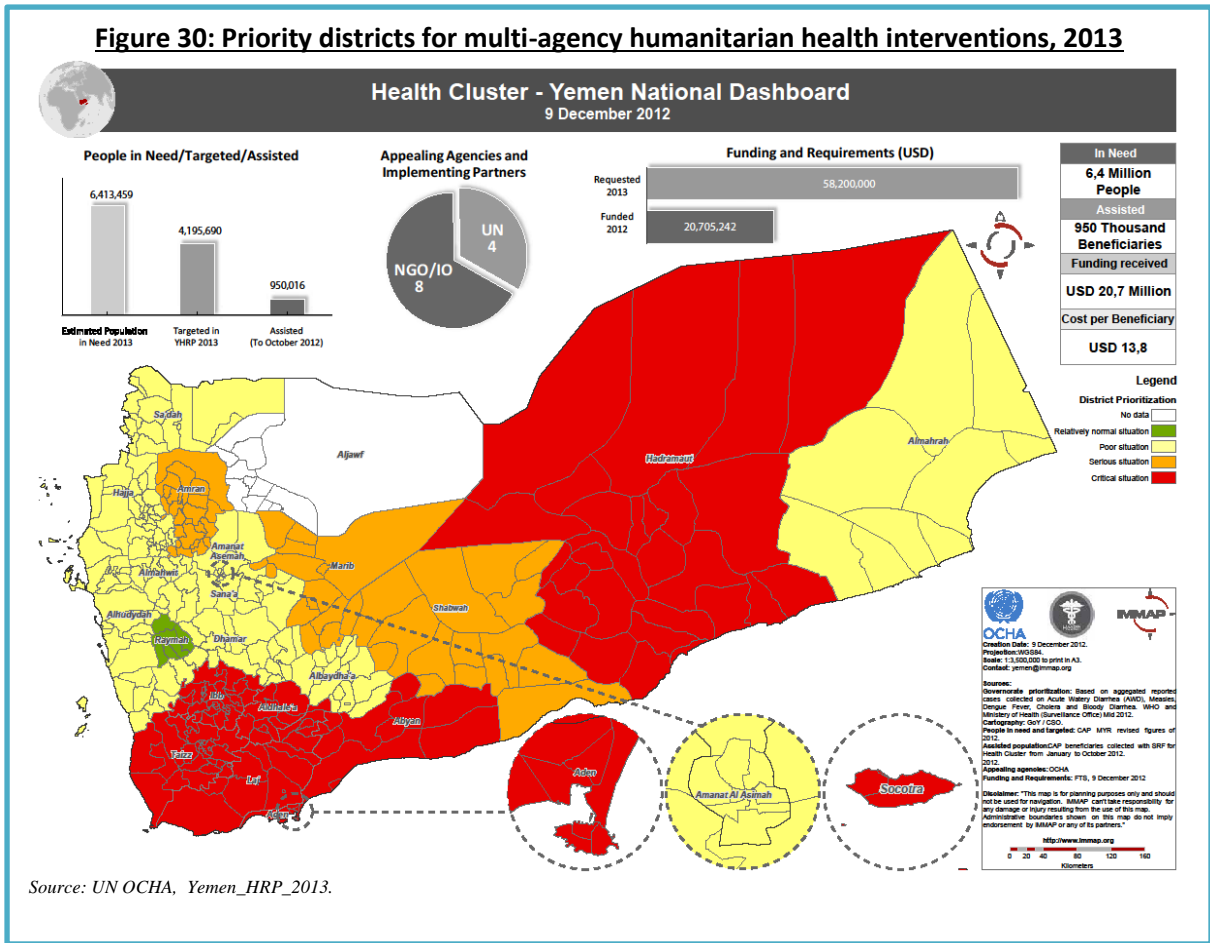
Although the overall population in need of health related interventions is estimated at 6 million in 12 affected governorates, the Health Cluster is targeting 4,195,690 beneficiaries in 59 priority districts identified through geographical prioritization and based on needs assessment criteria, including the total affected population, IDP populations, availability of basic health care services and coverage of measles vaccination in the prioritized districts⁵⁶. Figure 30 below shows those governorates and districts that were prioritized by the health cluster for integrated/coordinated humanitarian health interventions in 2013.

⁵⁴ UN OCHA, Yemen, 2013.

⁵⁵ Cold Chain Rapid Needs Assessment, July 2012 (as cited in UN OCHA YHR2013).

⁵⁶ UN OCHA Yemen_HRP_2013, Yemen.

Figure 30: Priority districts for multi-agency humanitarian health interventions, 2013



IV. Socio-political and macro-economic situation of Yemen

4.1. Socio-political situation

Arab spring and uprising in Yemen – the 2011 political crisis and consequences

In the wake of uprisings in Tunisia, Egypt and other countries in the Middle East and North Africa (MENA) in early 2011, protests in Yemen against the rule of then-President Ali Abdullah Saleh began in early February and continued through the end of the year. Political crisis escalated into armed conflict, with many protestors and members of the security forces killed or injured. There was fighting between government forces and tribal fighters in several governorates, some involving the powerful Hashed tribal federation that sided with protestors. Clashes between rival factions within the military increased speculation that Yemen's fragile state could collapse into civil war.

Although Yemen's uprising followed those within the region, it has taken its own path in response to its unique, complex social and political environment. Prior to the 2011 uprising, the Yemeni government was trying to deal with a number of major security issues. A rebellion by followers of dissident cleric Hussein al-Houthi in the northern governorate of Sadaah began in 2004. There was a secessionist movement in southern governorates that echoed a similar uprising in 1994 that led to a brief civil war won by the northern forces, although underlying resentments continued. There is international concern about the presence of Al Qaeda in Yemen, particularly in some southern governorates, given Yemen's strategic position at the entrance to the Red Sea.

On paper, Yemen appears to have all the elements of a functioning democracy. The constitution adopted in 1991 contained groundbreaking provisions for the country, including an independent and impartial judiciary and election management body. However, in practice, adherence to rule of law and support for an independent judiciary have not been strong. There were signs of improvements before the 2011 uprising. In recent years, elections for the president, parliament and local councils have been reasonably free and fair, although parliamentary elections, due in 2009, have been postponed twice. There has been a recent commitment to protecting human rights and improving the status and well-being of women.

The 2011 uprising was mainly led by young people frustrated on the lack of jobs and economic development and the heavy hand of what amounted to one-party rule. Although removing President Saleh has taken time and has come with a considerable loss of life, expectations remain high about what can be achieved. However, different groups have competing interests and agendas. In some areas of Yemen, strong tribalism means the authority of the central government is weak. On top of the widespread corruption, the 2011 uprising exposed serious divisions within the military.

In addition to the deep-rooted structural problems in Yemen accumulated over several years such as a very high level of poverty, high unemployment, widespread illiteracy, high malnutrition, a rapidly growing population, a declining water supply and diminishing reserves of oil and gas, the 2011 political crisis has resulted in high level of humanitarian emergency. Consequently, nearly half of Yemenis could not feed themselves, over 13 million people suffered from lack of access to safe water and sanitation, and nearly a million children turned out to be acutely malnourished, according to the 2013 Humanitarian Response Plan. Moreover, due to the contraction of the national economy as a result of the crisis, Yemen's economic survival has become increasingly dependent on international aid.

Post-crisis developments – transition plan, implementation process and progress

After almost a year of crisis, in the wake of the Arab Spring, Yemen has embarked on a political transition based on an agreement brokered by the Gulf Cooperation Council (GCC) with the support of the five permanent members of the United Nations Security Council and the European Union. The Government of National Reconciliation was formed and confirmed by the Parliament in December 2011. The negotiations resulted in two agreements: the GCC Initiative and the Agreement on the Implementation of the Transitional Process in Yemen in Accordance with the Gulf Cooperation Council Initiative. The ruling party, the General People's Congress (GPC), and the coalition of opposition parties, the Joint Meeting Parties (JMP), were signatories to the Agreement.

The Agreement envisages a transition period until 2014, divided into two phases. Phase I covered the early presidential election held on February 21, 2012, and ended with the inauguration of the new president. Phase II covers the remaining period until 2014 and will include consideration of changes to the constitution; a constitutional referendum; reform of political and electoral laws; parliamentary and local council elections; and presidential elections, if required. In signing the Agreement, then-President Ali Abdullah Saleh agreed to resign from the presidency and to delegate presidential powers to Vice President Abed Rabbo Mansour al-Hadi until the early presidential election could be held.

Political change in Yemen is making slow but steady progress as the transfer-of-power agreement, known as the Gulf Initiative, is implemented. So far, this internationally brokered two-year transition plan has been regarded as a success. The first phase of the transition plan ended ninety days after Saleh signed the Transition Agreement. It brought about the resignation of Ali Abdullah Saleh after thirty-three years as president. Then, the Parliament nominated a consensus candidate, who was elected – or rather confirmed – by the people with remarkable turnout, as president of Yemen for a period of two years. Since February 2012, former Vice-President Abed Rabbo Mansour Hadi holds Yemen's highest public office. A National Dialogue Conference was formed, which was set to produce a new constitution within the next nine months, thereby creating the conditions for parliamentary and presidential elections in spring 2014.

The second phase is supposed to provide for the organisation and implementation of a National Dialogue, through which all relevant political and social stakeholders are to shape the future of their country together. The Transition Agreement doesn't offer details regarding the exact shape and form of this dialogue conference, but there are clear statements about who is to participate and what is to be negotiated. In addition to the signatories of the Transition Agreement, the following stakeholders are explicitly mentioned: the Youth movement, the Southern Movement (Al-Hirak al-Ganubi or Hirak), the Houthi from the north, other political parties, representatives of civil society, and women's group.

The Transition Agreement also spells out the following topics and tasks for the National Dialogue⁵⁷:

- The process of drafting the Constitution, including the establishment of a Constitutional Drafting Commission and its membership;
- Constitutional reform, addressing the structure of the State and political system, and submitting constitutional amendments to the Yemeni people through a referendum;
- The dialogue shall address the issue of the South in a manner conducive to a just national solution that preserves the unity, stability, and security of Yemen;
- Examination of the various issues with a national dimension, including the causes of tension in Sa'ada;

⁵⁷ Friedrich Ebert Stiftung (Sep. 2012): Political Change with Pitfalls, An Interim Report on the Yemen Transition Process.

- Taking steps towards building a comprehensive democratic system, including reform of the civil service, the judiciary, and local governance;
- Taking steps aimed at achieving national reconciliation and transitional justice, and measures to ensure that violations of human rights and humanitarian law do not occur in the future;
- The adoption of legal and other means to strengthen the protection and rights of vulnerable groups including children as well as the advancement of women;
- Contribution to determining the priorities of programmes for reconstruction and sustainable economic development in order to create job opportunities and better economic, social, and cultural services for all.

Implementation of the GCC agreement is largely on track though gains achieved so far are fragile and important challenges lie ahead. Although the Yemeni transition plan has produced some notable achievements, whether it can actually move the country out of its deep economic, political, and humanitarian crisis remains to be seen. It lies primarily in the hands of Yemeni elites to shape the process of democratic reconstruction in line with the GCC Initiative in a participatory and effective way. Nevertheless, a successful political transition towards a democratic and stable Yemen is not guaranteed. The process is being jeopardized by an elite power struggle that is raging behind the scenes. Political analysts warned that if the Gulf Initiative fails, Yemen is threatened by complete state failure, civil war, and further deterioration of an already dramatic humanitarian situation.

Security in Yemen also remains fragile and unpredictable. The lead up to the National Dialogue had introduced a new level of unpredictability to the security environment as many delegations were unwilling to name delegates due to the possible security risks. There is a growing concern of possible Al Qaeda attacks. The past year of political transition has witnessed slow-paced progress in restructuring of the army and the security and dismantling of ex-regime remnants in senior government positions. Widespread arms possessions, lawless regions, armed tribal groups, sustained sabotage to energy supplies, an active Al Qaeda network, political assassinations, and kidnappings continue to pose threats to the political transition and the security of the Yemeni civilians. Tensions between Al-Hirak and Al-Islah are expected to continue in the south⁵⁸.

The NDC – Representation, progress/achievements, expectations, and challenges

The National Dialogue was planned to begin in September 2012 at the latest. However, due to some unforeseen factors it had to be postponed by six months and finally the NDC was launched on 18 March 2013. According to the agreement put in the transition plan, the NDC has given a six month plan of operation and expected to be concluded on 18 September 2013. With a total member of 565 participants, the NDC offered an opportunity to bring together the different rival factions/actors that are composed of political parties, civil society, independent youth, women (nearly 30 percent), Houthis, and Southern Movement so that inclusiveness is ensured.

Initially challenged with heated debates and arguments among the participants, after few weeks of the NDC's commencement, some consensus was reached how to deal with the various tasks it was formed for. Guided by the major topics outlined in the transition plan, the NDC has established nine committees/groups in order to discuss and come up with some results on those issues. The major issues/topics that have been discussed by each group include Southern Issue, Sa'ada Issue, National Issues, State-Building, Good Governance, Military/Security, Special Entities, Rights/Freedoms, and Development. During initial discussions, each committee has identified several subtopics under each major issue of the dialogue.

⁵⁸ Friedrich Ebert Stiftung (Sep. 2012): Political Change with Pitfalls, An Interim Report on the Yemen Transition Process.

As indicated in the transition plan, the NDC is expected to deal with all of the above-mentioned issues within six months, and then submit final recommendations. Immediately after these six months, the government is to appoint a Constitutional Commission, which shall develop a draft constitution within three months. Then a constitutional referendum is to be conducted. Parliamentary and presidential elections are planned within three months after the public adoption of the constitution. The Transition Agreement is binding. In case of discrepancies between the Initiative and the current Yemeni constitution, it is the former, which is to be followed. The Agreement has brought about some notable successes, but there have also been various deviations from the original plan and some serious obstacles that still have to be dealt with.

The 565-member National Dialogue aims at drafting a new constitution and an electoral law that would pave the way for parliamentary and presidential elections scheduled for February 2014. Success of the political transition is contingent on continued support from the international community, successful restructuring of the military and security establishments, and delivering tangible, visible and quick results on the economic front, especially in terms of enhanced access to basic services and job and income opportunities.

Encountered by the rapidly approaching deadline – only six weeks away from their six-month mandate, the 565 participants of the National Dialogue Conference (NDC) are struggling to consolidate the various conclusions and recommendations that were set for them to come out of the dialogue that will serve as a blueprint for a new Yemen. The chairman of the NDC has recently reported that each group is instructed to deliver the draft outputs for each major issue by late August so that the expected outcome of the dialogue process can be concluded by the deadline – 18 September 2013. While the progress thus far is somehow commendable, according to the members of the dialogue and all the supporting bodies, the NDC has still a lot to accomplish by the closing date of its timeline.

With hopes ranging from better living standards and a more open and fair society, to improved public services and higher levels of security, Yemenis have justifiably high expectations of the country's National Dialogue Conference, underway since March 18, 2013. The conference, part of the Gulf Cooperation Council (GCC) plan for the Arab Spring's only negotiated transition so far, is of great significance not only for Yemen, but also for the wider region and beyond. Making a success of the conference is vital for the continued existence of Yemen as a state—literally, by offering a credible alternative to Southern secessionists, and more figuratively by avoiding a descent into a protracted civil war. In many ways, this is also the spectrum of success: a minimal version of avoiding violent anarchy and a contested state breakup, and a more maximalist approach that sees success defined by the more ambitious goals contained in those Yemeni hopes⁵⁹.

There is a mixed feeling about and expectations from the NDC – both domestically and internationally – for some citizens, the NDC is seen as a magic bullet that can end the conflict, insecurity and lack of basic development; but for others nothing significant is expected and rather they view it as a wastage of time and resources spent on at the expense of further deteriorations in all aspect including ignorance of the current humanitarian emergency. Reinforcing the later views, the humanitarian coordinator in Yemen, recently told IRIN that while the political process is moving forward, the security situation and humanitarian issues risk destabilizing the process.

The latest humanitarian bulletin recently published by the UN Office for the Coordination of Humanitarian Affairs (OCHA) reports that “although the National Dialogue is key to ultimately resolving the crisis, it also runs a real risk of overshadowing the immediate need to maintain effective humanitarian assistance for the rest of 2013.” (IRIN, July 2013). While there is a great deal

⁵⁹ Stefan Wolff (July 2013). Managing Expectations: Yemen's NDC.

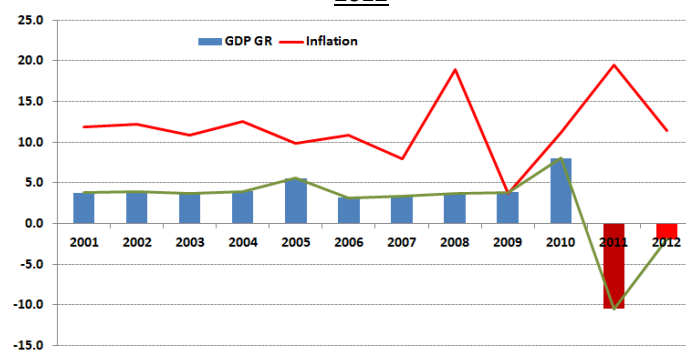
of uncertainty about the outcome of the NDC, the process itself has been severely challenged by complex outstanding issues that include the unmet need of the youth, issues related to the south and Sa'ada, the growing security threat, the stagnation of the economic development, poor capacity of the government to provide the minimum public services, destitution and frustration of millions of poor people in the country, etc.

Thus the future success of Yemen socio-political conditions is dependent upon the successful implementation of the transition plan and the capacity of the next regime to be elected in early 2014 to build an effective and capable state, rather than the size of Yemen's natural resource endowments. In as much as the next Yemeni regime can build trustworthy institutions and nurture conducive domestic investment environment, the transition will be successful. However, most of the socio-political as well as the security challenges will remain unchanged for several months or some years to come.

4.2. Macro-economic trends

Yemen's political stalemate is destroying the economy. Violence and labor strife have shut down oil production, the central bank's foreign reserves are being drawn down, and the fighting, demonstrations, electrical outages, and fuel shortages have paralyzed local businesses. Yemen's economic situation has been very difficult in 2012. There have been continued attacks on oil pipelines and electricity transmission lines leading to interruptions of oil production and electricity delivery. Yemen's economy is still recovering from the 2011 political crisis and has yet to reach the pre-crisis level – real GDP growth was 7.7% (2010); -10.5% (2011); and -1.9% (2012)⁶⁰ (Figure 31). GDP per capita in 2012 was recorded at \$2,300 which is still below the level in 2011 (\$2,400) and 2010 (\$2,700), and ranked as 188th out of 209 countries⁶¹.

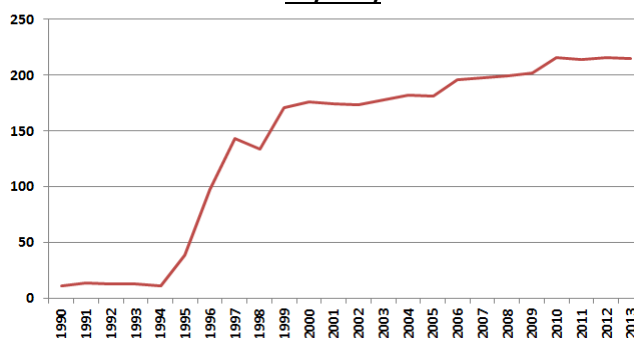
Figure 31: GDP Real Growth Rate and Inflation in Yemen - 2001-2012



Source: World Bank, CSO Yemen

Nonetheless, there are signs of economic activity revival after a 10 percent decline in 2011. Inflation had come down to below 5 percent in 2009 after the record high in 2008. However the 2011 crisis has set the highest inflation in the last decade which then came down to around 12 percent in 2012. The exchange rate has appreciated then stabilized at pre-crisis levels and foreign exchange reserves have increased to over US\$5.0 billion. These developments have allowed the authorities to reduce the policy interest rate from 20 percent to 18 percent. The fiscal deficit is expected at around 5.5

Figure 32: Trend in exchange rate (Yearly average YR/USD)



Source: WFP Yemen Market Monitoring Data Archive

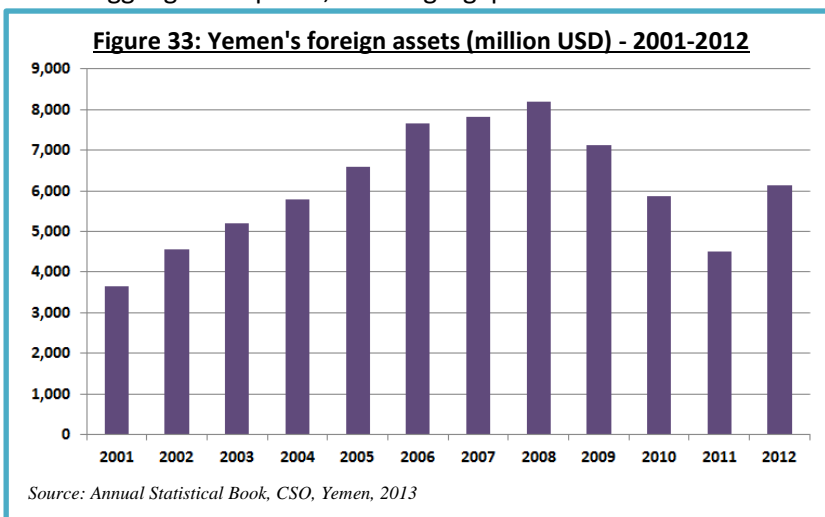
⁶⁰ CIA World Fact Book, 2013.

⁶¹ CIA World Fact Book, 2013.

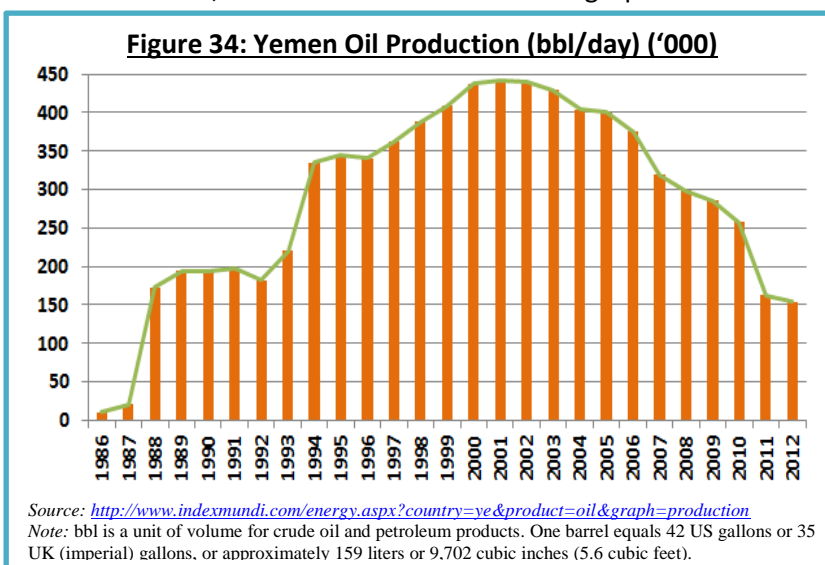
percent of GDP as a result of the Saudi oil grant and cuts in capital expenditures and transfers. Looking at the structure of the economy before the 2011 crisis, agriculture made up 11 percent of Yemeni GDP, the industrial sector contributed 43 percent, and the oil sector share was 19 percent. The services sector contributed close to 46 percent of GDP, and trade and transportation together made up 20 percent of GDP. The oil sector remains substantial and contributes almost one-fifth of the country's GDP. Both the agricultural and industrial sectors are import reliant, with import intensities of 45 and 39 percent, respectively. Industry makes up close to 72 percent of the import bill, with food processing alone using up 28.5 percent of Yemen's import value.

The contribution of agriculture to the national GDP has even declined further in 2012 (only 7.9 percent of the GDP), while industry contributed to the GDP by 40.6 percent and services by 51.5 percent. Although its contribution to the macro-economic growth (GDP) has been minimal and even shrinking down in recent years, agriculture plays an important role by employing more than half of the labour force and providing livelihood for about half of the population⁶².

Although the economy has been struggling to improve, the huge gap between the total value of exports and imports persisted in 2012 – total value of exports was recorded at \$7.958 billion f.o.b. and total value of imports stood at USD 8.893 billion f.o.b. (both 2012 est.), with gross external debt amounting USD 6.472 billion which is 42.5 percent of GDP in 2012. However, the country was able to increase its foreign assets in 2012 compared to the crisis year of 2011 as well as that of 2010 (Figure 33).



Started its first extraction/production in 1986, Yemen has never been a large producer of oil by global standards. By 1995 Yemen was producing about 350 thousand bbl/day (bbd) and production peaked at about 450 thousand bbd in 2001, after which it began a slow but steady decline (Figure 34). Saudi Arabia can produce as high as 12 million bbd⁶³.



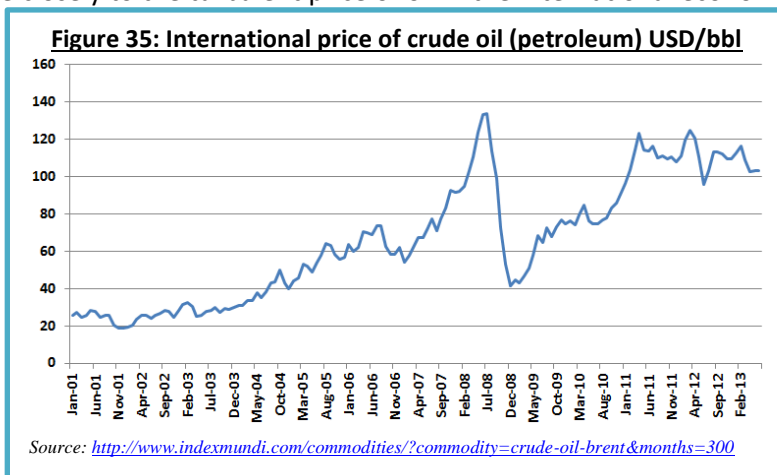
⁶² FAO/WFP CFSAM, 2009.

⁶³ Charles Schimtz (Dec. 2011): Crisis in Yemeni Economy

decline, world oil prices rose steeply and cushioned the economic impact of the decline of Yemen's production. So while oil production was declining, revenues were still climbing. In the last few years Yemen oil revenues were tied more closely to the turbulent price of oil in the international economy than to production levels (Figure 35). Oil prices rose dramatically in the overheated years before the US banking crisis and then dropped precipitously with the global financial collapse.

Yemen's economy is facing a transition away from dependence upon oil exports to a more diversified economy – a welcome development - but unfortunately the success of this transition is itself dependent

upon the capacity of the state to manage the economy. Building a diversified economy based upon the variety of capacities that Yemen does possess will require effective coordination of scarce investment resources, strong bureaucratic capacity to manage state finances, political legitimacy to survive from the macroeconomic shocks in the global economy, and the creation of trustworthy institutions. However, just when the economy most needs effective leadership, Yemen's elite is locked in an internecine struggle that is going to take some time to stabilize, delaying any possible economic recovery. Another challenge for Yemen's economy stem from the decline of oil and the scarcity of Yemen's natural resources, water in particular⁶⁴.



Oil transformed the Yemeni economy and state. From a small proportion of the Yemeni economy in the 1990's, oil grew to dominate exports, constitute about a third of economic output, and contribute about 75% of the state's revenues. Although, the period from 2000 to 2010 in Yemen will be remembered as the oil decade, the recent decline of oil from about a third of GDP to about 10% of GDP left communications, trade, commerce, and transportation to dominate the Yemeni economy. Manufacturing declined from 13% of GDP in 1994 to 7% in 1999 and 5% through most of the oil decade (IMF 2001, p. 146 and CSO Statistical Yearbook 2010). Significant reductions in external aid and the need to contain government spending led to a substantial reduction in public investment, helping to control the fiscal deficit, though at the expense of development objectives⁶⁵.

Although the country did well in 2012 in terms of significantly lower down the high negative economic growth experienced in 2011, Yemen had still to start 2013 loaded by severe economic challenges and large developmental difficulties surrounded by uncertainties in the outcome of the political transition process. Given the fact that all the sectors of the economy have heavily suffered from the impacts of the political instability and security related problems, which have persisted throughout the post-crisis years, economic recovery process will take some more years than anticipated. Burdened by the chronic problems of poverty and the huge level of unmet needs of social services as well as the challenges related to the political and security situation, Yemen's already weak and troubled economy will continue to struggle for some years to come before it starts to move on the positive growth path.

⁶⁴ Charles Schimtz (Dec. 2011): Crisis in Yemeni Economy

⁶⁵ Charles Schimtz (Dec. 2011): Crisis in Yemeni Economy

V. Food availability and Market Dynamics/Trends

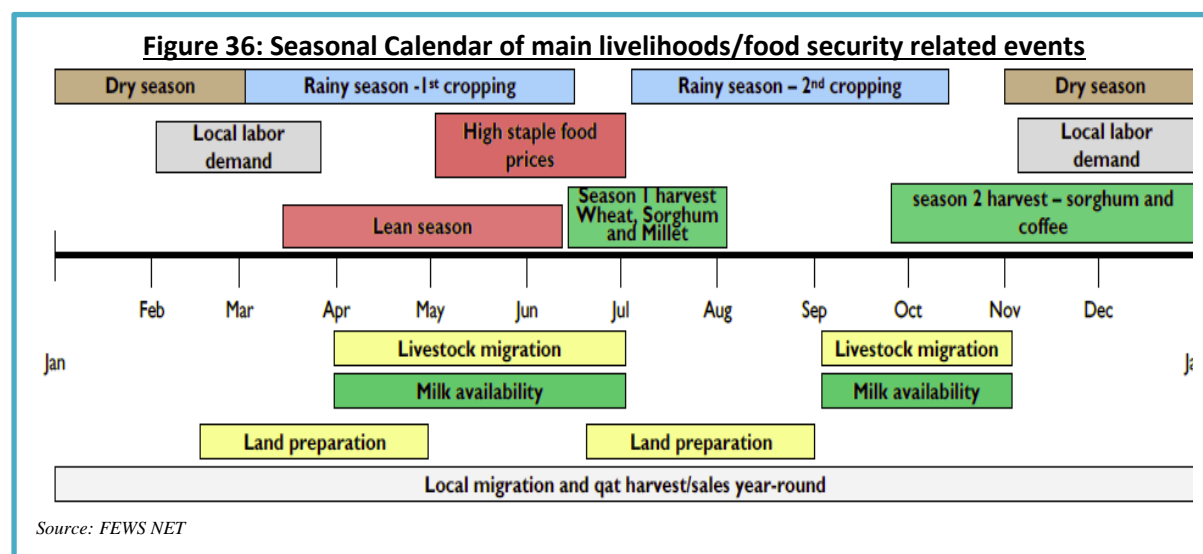
5.1. Agricultural production trends and prospects

Arable land in Yemen is estimated at 1.3 million ha and distributed amongst 1.2 million landholders. Prior to the 1970s, domestic cereal production was almost sufficient to cover national requirements. However, since the 1980s, there has been a structural shift away from cereals and towards high value crops such as vegetables, fruits and qat. Sorghum, wheat, millet, maize and barley occupy the main share of planted area with 58 percent, followed by 29 percent with cash crops (namely qat, fruits, vegetables, cotton, coffee, sesame and tobacco), 10 percent with forage crops (80 percent represented by sorghum) and 4 percent with pulses.

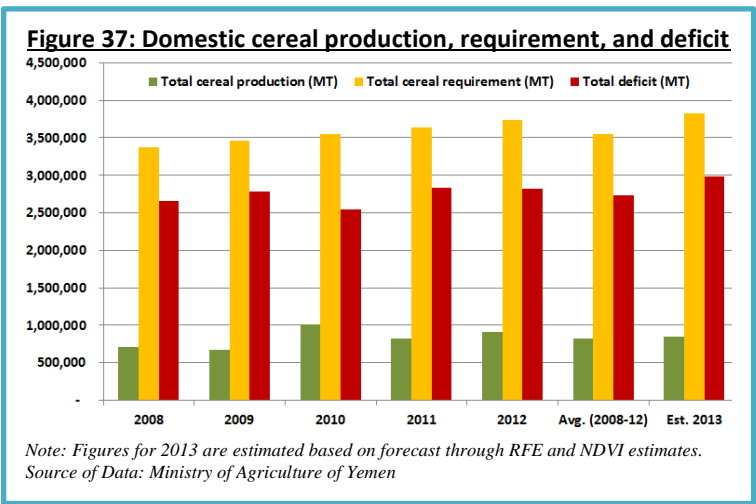
As the predominant cash crop, being more profitable of any other cash crop by 10 to 20 times, qat production plays a key role in rural economies: it accounts for about 6 percent of national GDP and one-third of agricultural GDP, with about 15 percent of employment in the country. Qat production has deeply increased from 76,000 tonnes in 1991 to about 170,000 tonnes in 2012 (20 percent of total crop production) and it is concentrated in the Governorates of Sana'a, Al Bayda, Amran, Hajjah and Ibb. Qat crop uses about 70 percent of groundwater and the strong expansion of area planted in the last decades is the main factor behind the process of depletion of underground water reserves.

Crop performance is determined by quantity and distribution of rainfall as well as by access to irrigation water. About 50 percent of cultivated land is rainfed, while 31 percent is irrigated from groundwater, 10 percent from floods (spate) and the rest from dams, streams and water tankers. Cereal crops are often rainfed, with occasional use of supplementary irrigation, and yields are usually very low, between 0.6 and 1.6 tonnes of grains per ha. Sorghum feeders, often irrigated, produce on average 13 tonnes per ha.

There are two rainy seasons for most of the agricultural areas of Yemen. The first season (summer) runs from March to April/May and is suitable for many drought tolerant crops such as wheat, barley, pulses and some vegetables which can be grown in the central and northern highlands. The second rainy season is the spring season which goes from July to August/September and is suitable for growing sorghum and millet as well as vegetables and fodders which are mainly grown on the eastern plateau and southern uplands. About 300,000 hectares is covered by sorghum which is the main cereal crop grown in the country. The different seasonal activities and major events during the seasons are presented in Figure 36.

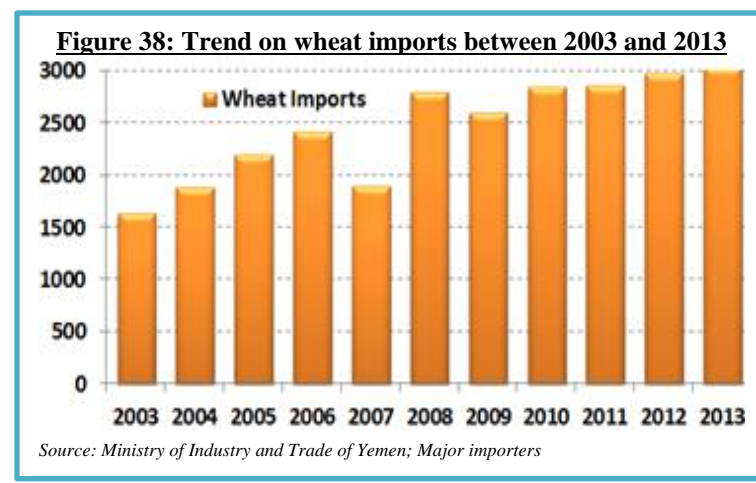


According to agricultural information from Yemen’s MOA, the total production of cereals in 2012 was 909,741 tonnes which was about 11 percent higher than produced in 2011 but it was 10 percent lower than that in 2010. However, although agriculture employs the majority (around 60 percent) of the active labour force of the country, like the previous years, the domestic production in 2012 was only able to cover below 25 percent of national food consumption requirements. Crop production prospects for 2013 agricultural seasons are expected to be about 7 percent lower than last year due to below average rainfall performance recorded between March-July 2013 (Figure 37). An Annex in a separate document provides series of dekadal performance of rainfall and vegetation cover for the first rainy season and the start of the second season.



5.2. Trends and prospects of food imports

In the last five years, the country has annually imported from 3 to 3.5 million tonnes of cereals (mostly wheat which consists of 80-85 percent and 15-20 percent of rice and maize), representing between 75 and 85 percent of domestic utilization. Commercial wheat imports have increased in recent years, reaching a record high in 2013 with 3 million tonnes (including expected arrivals during the coming months); which is 3.5 percent more than 2012 and about 10 percent higher than it was in 2011 (Figure 38). According to information from Ministry of Industry and Trade as well as from the major importers, the total amount of cereals imported in 2013 (both available in stock and that arriving during the last quarter of this year) will be sufficient for the entire national cereal consumption requirement with anticipated carryover for the beginning of 2014 which is estimated to be about 500,000 tonnes. If that projected amount holds true, then it will cover the national requirement for about 1.5 months in 2014.



5.3. National cereal supply/demand balance for 2014

The national cereal supply/demand balance for 2014 provides an indication on the overall cereal availability situation in 2014 with estimated amount of cereals that need to be imported. The supply and demand balance analysis is based on the following estimates and assumptions (all estimation process and assumptions are adopted from the 2009 CFSAM (FAO):

- Total cereal production is estimated at 846,000 tonnes (MT). As this estimate is based on the seasonal rainfall and vegetation cover performance compared to last year and long term

averages together with cereal crop production figures for last year and average of the last five years, final production figures may vary when all crops will be harvested by the end of December 2013 and actual figures are released by MOA.

- Food use is estimated at 3.9 million MT, using the 2014 mid-year population of 26.11 million persons (projected based on the 2013 total population of 25.24 million and annual growth rate of 3 percent) and an average cereal consumption requirement of 151 kg/person/year. Per capita consumption comprises 112 kg of wheat, 16.5 kg of rice, 12.5 kg of sorghum, 7 kg of maize, 2.5 kg of millet and 0.5 kg of barley. Cereals represent about 60 percent of the daily calories requirements (2000-2100 kcal/capita/day), the rest being covered by sugar and oils, and to a lesser extent by meat, fruits and vegetables.
- Seed requirements are estimated at about 51,000MT which is calculated on the basis of recommended seed requirement rate in the country and an estimated total planted area of 830,000 ha of cereals in 2013. The following seed rates have been used: 25 kg/ha for sorghum, 80 kg/ha for maize, 180 kg/ha for wheat, 120 kg/ha for barley and 20 kg/ha for millet.
- Feed use is forecast at about 350,000 MT, mainly through imported maize.
- Post-harvest losses and other uses are estimated at 110,000 MT, with rates ranging from 7 percent for millet to 15 percent for maize and sorghum. Total losses averaged about 13 percent of the total production.
- Cereals stocks, mainly wheat and wheat flour in the silos of main private traders/importers, are expected to have an estimated amount of 500,000 MT that is anticipated to be carried over into 2014 that could to be sufficient for an estimated of 2 months of food consumption in 2014.
- The cereal import requirement in 2014 is estimated at about 3.11 million MT (Table 6), with the proportion of about 80-85 percent wheat and the remaining being rice and maize.

Cereal supply/demand	Total (MT)
Domestic Cereal Availability	1,346,000
Production (Est. 2013)	846,000
Stock carryover	500,000
Total Cereal Requirement	4,454,000
Food Use	3,943,000
Feed Use	350,000
Seed Use	51,000
Losses	110,000
Total cereal import requirement	3,108,000

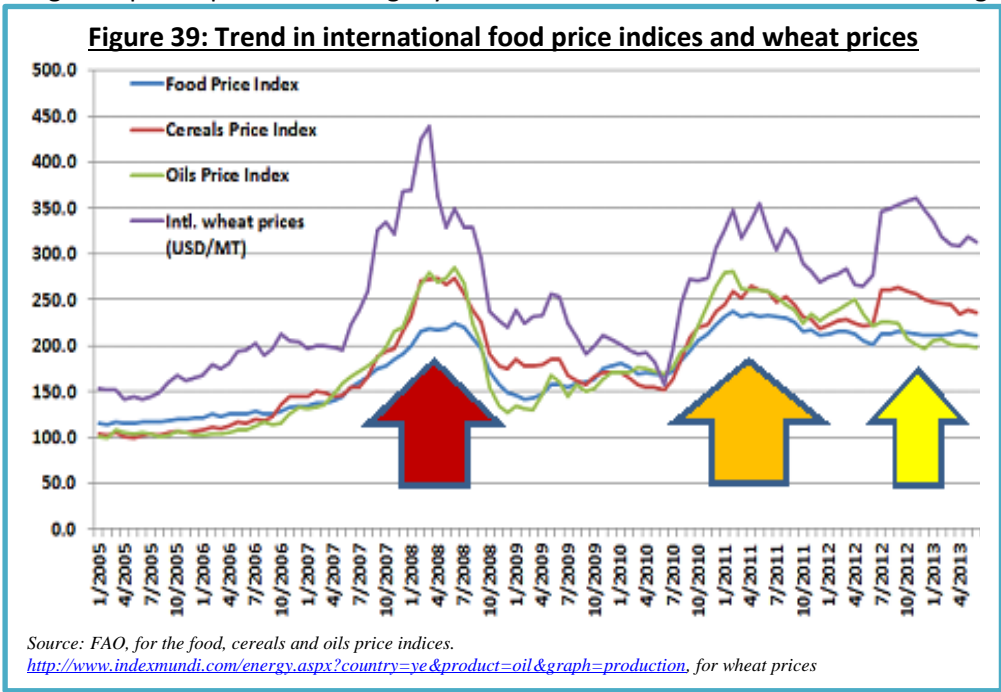
Source: MOA, FAO, Ministry of Industry and Trade of Yemen; Major importers

5.4. Trends on international food prices

World food prices increased dramatically in 2007 and the first and second quarter of 2008 creating a global crisis and causing political and economical instability and social unrest in both poor and developed nations. Systemic causes for the worldwide increases in food prices continue to be the subject of debate. After peaking in the second quarter of 2008 prices fell dramatically during the late 2000s recession but increased during 2009 and 2010, peaking again in early 2011 at a level slightly higher than the level reached in 2008⁶⁶. For instance, prices of wheat have increased, on the average, between 100 percent and 150 percent during the peak times in 2007/08, 2011, and 2012 compared to the levels just before the rises during those years (Figure 39).

⁶⁶ UN Food and Agriculture Organization (2009). The State of Food Insecurity in the World 2009. Rome.

Initial causes of the global price spikes which slightly started the late-2006 and continued through 2007 and the first half of 2008 were mainly droughts in grain-producing nations and rising oil prices. Oil price increases also caused general escalations in the costs of fertilizers, food transportation, and industrial agriculture.



Root causes may be the increasing use of biofuels in developed countries, and an increasing demand for a more varied diet across the expanding middle-class populations of Asia. These factors, coupled with falling world-food stockpiles all contributed to the worldwide rise in food prices⁶⁷.

Yemen is heavily reliant on food imports to meet domestic requirements. This strong dependency on imports, particularly for wheat (over 90 percent) and rice (100 percent), combined with high levels of poverty and high food insecurity leaves the country highly vulnerable to high food price shocks. The global huge rise of food prices in 2007/08 coupled with the impact of high fuel prices and the world economic crisis during the same period had left about 44 percent of Yemenis to be food insecure. Moreover, the repeated high food prices in 2011 coupled with the domestic political crisis had resulted in similar consequences (45 percent of the country’s population became caught by serious food shortages).

During the second half of 2012, international food prices, particularly wheat, had suddenly risen as high as that in 2011 and forced the high level of food insecurity in the country to remain unchanged. Although minor improvements have been recorded in the first half of 2013, the global food prices maintained their high levels which continue to exacerbate the precarious food security situation of in Yemeni. As the international food prices are not expected to go down to the pre-crisis levels any time soon, the food insecure population Yemen are likely to continue to face complicated challenges in 2014.

5.5. Domestic Market Dynamics: Structure, Conduct and Performance

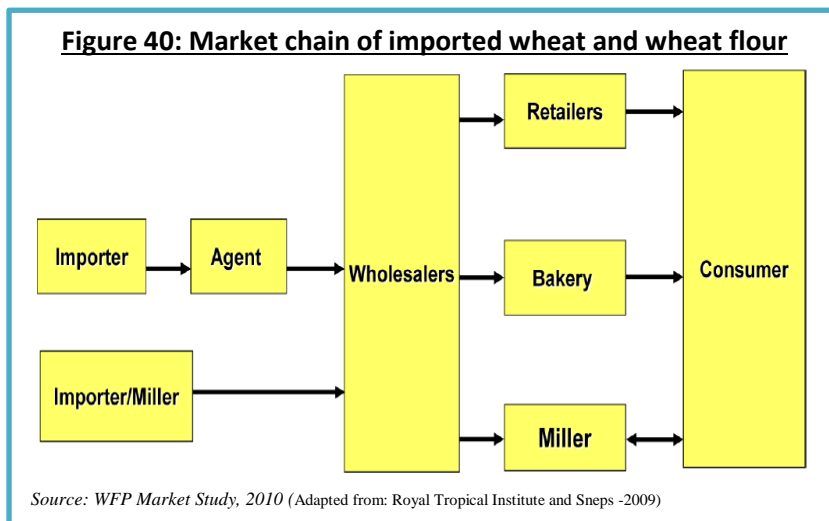
Market structure

Markets in Yemen are characterized mainly by non-competitive behaviour, with a few large importing companies responsible not only for importing the majority of wheat and rice which is present on the markets in Yemen, but also for milling the wheat into flour and ensuring its distribution across a network of agents and sub-agents present in every governorate of Yemen. In

⁶⁷ UN Food and Agriculture Organization (2011). The State of Food Insecurity in the World 2011. Rome.

fact, most traders source the commodities which they sell on the market within the governorate in which they operate. The main source markets are Aden, Hodeida (where the ports are located) and Sana'a, the capital city. The largest importer-cum-miller in the country holds 56 percent market share. The importers also hold much of the margin along the wheat chain, along with retailers.

The imported wheat and rice chain relies upon an extensive network of wholesalers that purchase from a handful of key agents who represent private importers (Figure 40)⁶⁸. There are six big importers in Yemen and four of them own silos and port facilities and provide industrial milling and packaging services. These importers are amongst Yemen's largest industrial groups, with financial interests in many sectors. Larger traders import wheat mainly from Australia, USA, Ukraine, France and Syrian Arab Republic, while smaller traders tend to import from India and China. Between



90 and 95 percent of imported wheat is immediately processed into flour at the sea port in Aden and Al Hodeida, usually by the same trade company⁶⁹.

There is a relatively high degree of integration between markets overall. The greatest level of integration is between Aden and most other governorates, with correlation coefficients over 60 percent, with the exception of Sa'adah. This is relevant due to the fact that Aden is the main port of entry for most of the imported products in Yemen. The other major ports are Al Hodeida and Al Mukalla. Nonetheless, Aden is the major port of entry, and thus the correlation of prices with Aden would indicate that this is the most important market to monitor to understand the potential trends and impacts on the rest of the country.

Thus, while Aden and Hodeida represent very important markets as they represent the main port of entry for the imported staple goods, they are also important direct source markets for neighbouring governorates in addition to the procurement of staples from sub-agents based within the governorate capitals. Market integration and food flows analysis suggest that markets across Yemen are fairly integrated through two channels: the first through the agents and sub-agents of the major importers, and the second through food flows bought in the governorates essentially neighbouring Aden, Hodeida and Sana'a⁷⁰.

Market Conduct

Market power in Yemen is predominantly shared amongst retailers and the importers, according to the results of the 2010 WFP Market Survey. In many cases the agent or sub-agent for a particular importer acts as the wholesaler on the market. As a result, the price is fixed mainly by these major players of the market. The retailers often have a margin which is twice that of wholesalers.

⁶⁸ WFP Market Study, 2010.

⁶⁹ Ibid

⁷⁰ Ibid.

The largest importer-cum-millers have a presence all across Yemen, with agents and sub-agents representing them in every governorate in Yemen. Thus, these importer-cum-millers and their agents are able to sufficiently supply even the far-off reaches of the country such as Hadramout and Al-Mahara. This indicates that there is a very important market share, more than 50 percent market share which is enjoyed by one single importer in the country.

Typically, a market that is characterized by a four-firm concentration ratio that is over 60 percent is considered oligopolistic. In the case of Yemen, the one-firm concentration ratio is over 50 percent – indicating that more than half of the supply of wheat in Yemen is controlled by the importing activities of a single company, thus indicating a strong leaning towards monopolistic behaviour on the market. The two-firm ratio, which stands at 71 percent, means that even the second largest importing firm represents less than 20 percent of the imported wheat on the market.

In fact, the presence of these importer-cum-millers across the country at each governorate through agents and sub-agents means that there is an important degree of vertical integration on the markets, likely including wholesalers as well. Thus, the market displays non-competitive behaviour at the importing end. However, research conducted by the Royal Tropical Institute and Sneps (2009) suggests also that the margins taken on by the retailers is greater than that taken on by wholesalers and agents alike, as shown in the figure below.

Market Performance

The transmission of international prices to the domestic markets is not particularly high (only 20 percent)⁷¹. Any changes in the international wheat prices are not always reflected on the domestic markets in Yemen due to the rigidity of the market structure and monopolistic nature of the market behavior in the country. Those few big importers and their agents fix the wholesale prices and hugely influence the conduct and performance of the domestic markets which is usually echoed in the retail prices.

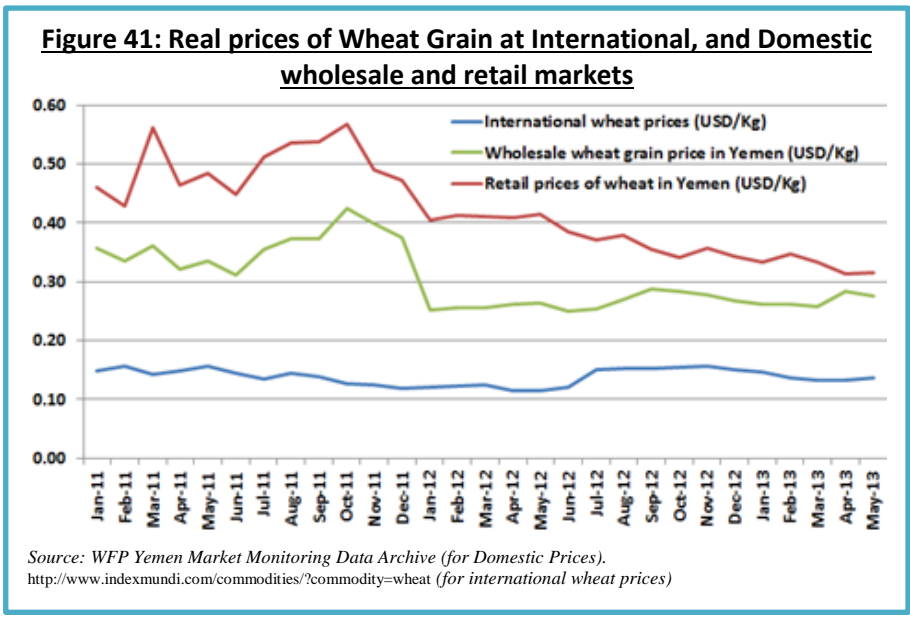
In fact, the presence of these importer-cum-millers across the country at each governorate through agents and sub-agents means that there is an important degree of vertical integration on the markets, likely including wholesalers as well. Thus, the market displays non-competitive behaviour at the importing end. However, research conducted by the Royal Tropical Institute and Sneps (2009) suggests also that the margins taken on by the retailers are greater than that taken on by wholesalers and agents alike⁷².

The price differential between international wheat prices and the prices at the domestic markets are so huge and have not been following similar trends. During the second high international food prices occurred in February 2011, the domestic markets felt the increases between March and April. The real wholesale prices wheat grain during those months were more than two fold compared to the international (about 140 percent higher). On the other hand, the domestic real prices at the retail markets where most of the rural households purchase their food from, the retail prices were almost four times more than the international prices (about 375 percent higher) and 56 percent higher than the wholesale prices (Figure 4). Price increases in Yemen are occurring despite fairly stable global prices for wheat and rice. This clearly shows how the consumers are severely affected as a result of the monopolistic nature of the domestic markets in the country and the prices fixed by traders at different levels regardless of the international market prices.

⁷¹ Source: WFP Yemen Market Study conducted in 2010 and could be accessed at the link: <http://www.wfp.org/content/yemen-market-study-december-2010>.

⁷² WFP Market Study, 2010

The average real wholesale prices of both wheat grain and wheat flour have dropped from their highest levels in October 2011 reaching the record low in January 2012 and remained stable until the second half of the year. However, following another international price spikes in July 2012, the wholesale prices had risen for short period and continued



to be stable at lower levels throughout 2012 and the first half of 2013. On the other hand, the average real retail prices have followed similar trend but with consistently declining trend since their record high in October/November 2011. Nevertheless, there was significant variability of prices since the second half of 2012 that continued until May 2013 (Figure 41).

The comparison of the current local average retail prices of different commodities in the country with prices 2012 and 2011 shows that prices of all commodities in June 2013 were significantly lower than those the same month in 2012. Compared with prices in June 2011, the real retail prices of most of the commodities even much lower in June 2013 with exception of vegetables, red beans and vegetable oil for which the reverse was true (Table 7). However, the daily wage for casual labour and the real prices of sheep were remarkably lower in June 2013 than they were in June 2012. This implies that even though prices of food commodities were down in 2013 compared with 2012, households whose major sources of income are daily wages and sale of sheep could not purchase the amount of food they used to buy in 2012 due to deterioration of the terms of trade (TOT) – refer the Terms of Trade section for more details.

Table 7: Average real retail prices of commodities in 2013 and changes from 2012 and 2011

Commodity	Average Prices in Jun-2013	% change of prices in June 2013 compared to June 2012	% change of prices in June 2013 compared to June 2011
Wheat	75	90.6	86.3
Wheat flour	79	88.0	85.5
SUGAR	120	81.3	76.2
V. OIL	271	82.7	104.3
RICE	143	78.8	62.3
Red beans	208	94.6	124.5
White beans	141	79.1	100.0
Lentils	197	88.5	78.4
Salt	33	96.3	113.0
Potato	99	80.0	146.2
Tomato	121	93.9	226.3
Onion	101	99.0	131.8
Eggs	19	96.6	109.3
PETROL	74	88.0	58.1
DIESEL	60	88.0	78.8
Bottle of Cooking Gas	853	73.5	73.7
Daily wage for casual labour	1,190	79.6	NA
Two years live old male sheep	18,639	81.3	NA

Looking at nominal retail prices of some of those commodities at different strategically located markets in the country, there were some variations on prices as demonstrated in Figures 42-45 below.

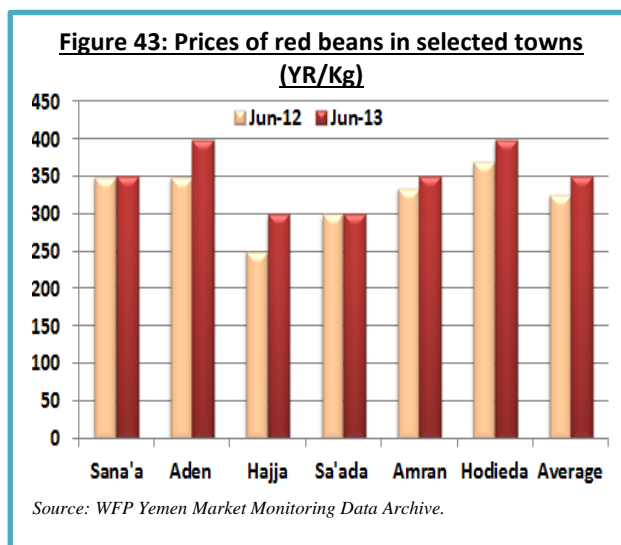
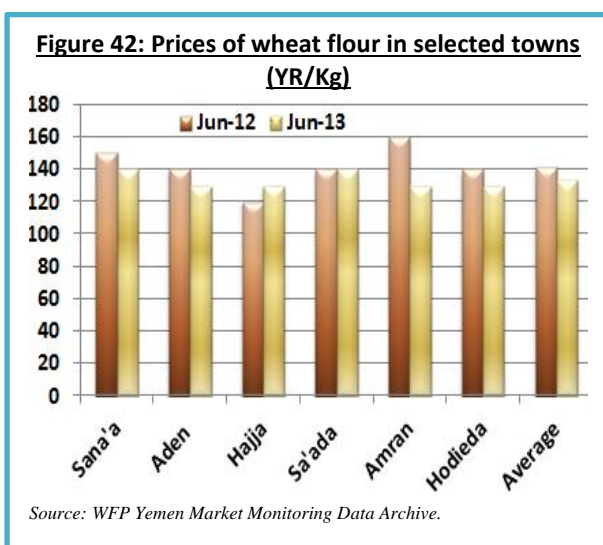
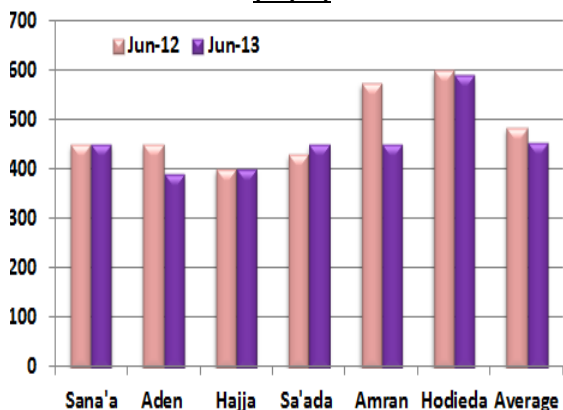
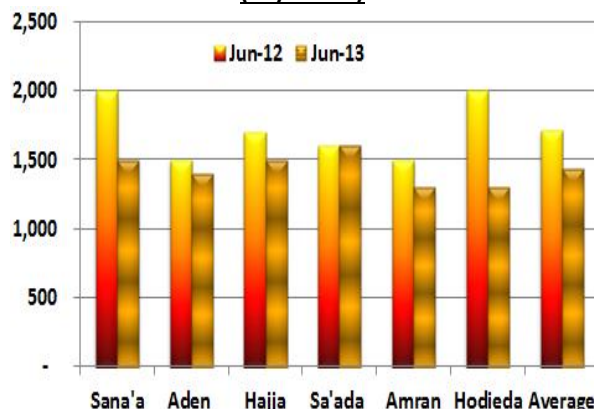


Figure 44: Prices of vegetable oil in selected towns (YR/Lt)



Source: WFP Yemen Market Monitoring Data Archive.

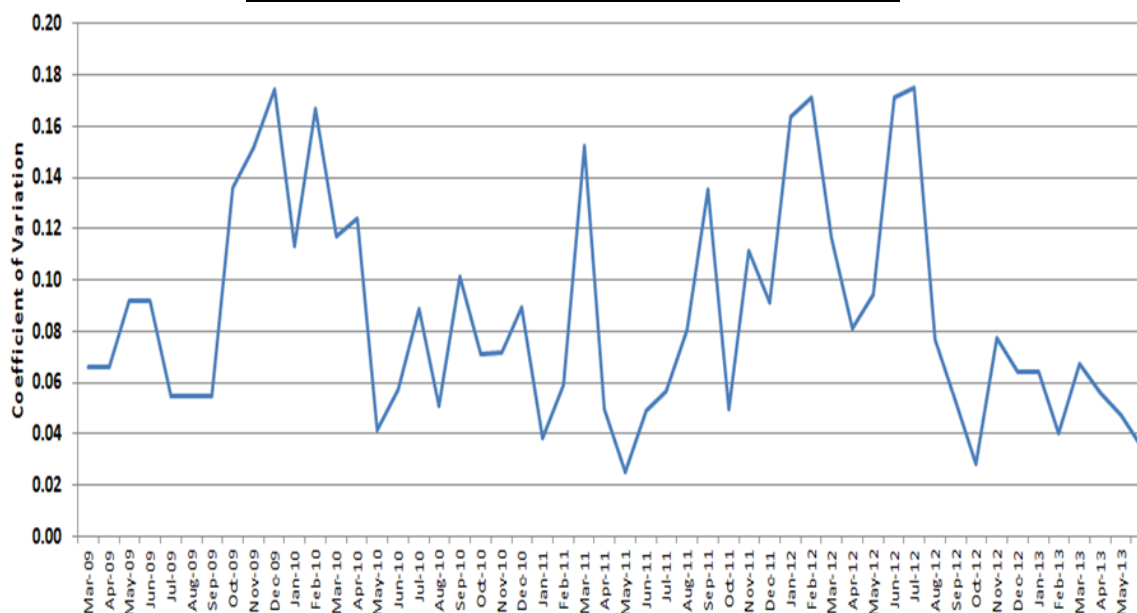
Figure 45: Prices of cooking gas in selected towns (YR/bottle)



Source: WFP Yemen Market Monitoring Data Archive.

Given the fact that most of the wheat grain that is imported to Yemen is domestically processed into wheat flour, the evolution of prices are determined by the level of volatility that is influenced by the variation of prices across different markets. Figure 46 below shows that there has been high volatility of prices of wheat flour, as measured by the coefficient of variation of wheat flour prices across major markets in Yemen, particularly at the end of 2009, early 2012 and mid-2012, peaking over 16 percent. However, since late 2012, the level of volatility has remained at lower percentages (between 4 and 8 percent), even declining in recent months of 2013. This lower volatility implies better market prices and improved access of staple food by the purchase-dependent consumers.

Figure 46: Volatility of retail prices of wheat flour

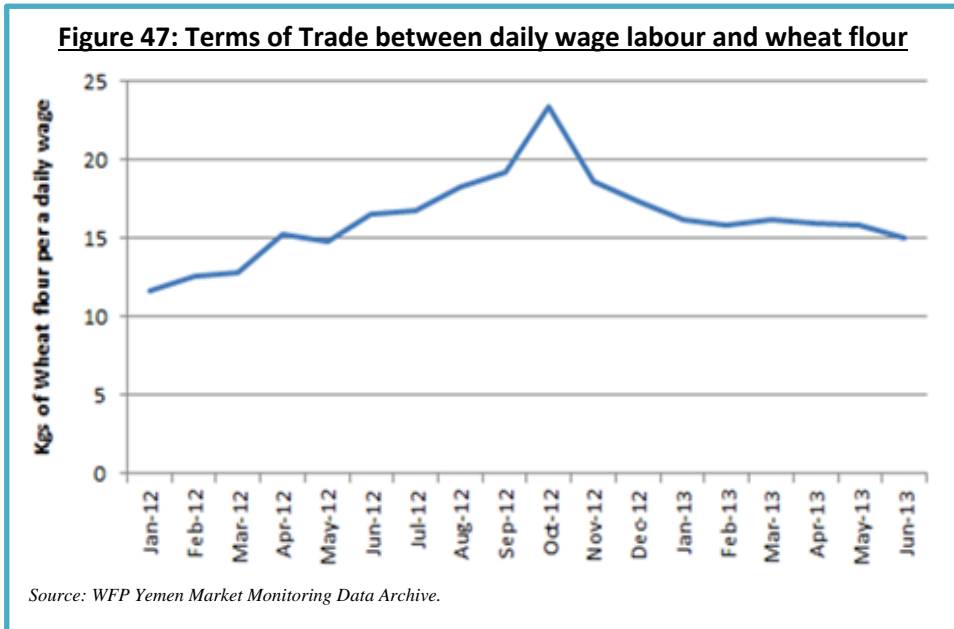


Source: WFP Yemen Market Monitoring Data Archive.

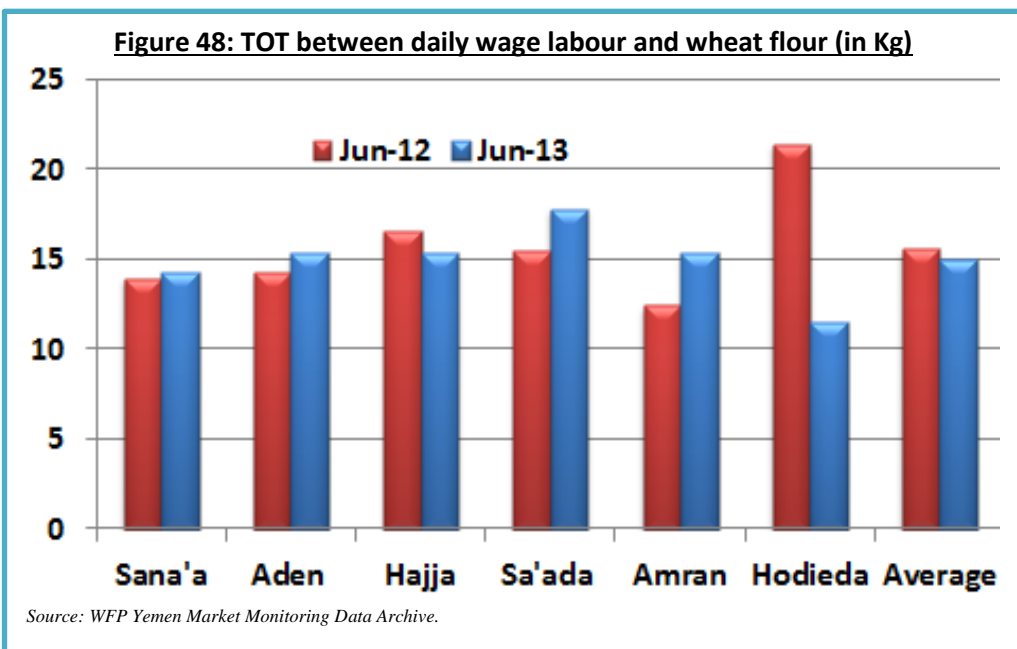
Terms of Trade (TOT) and purchasing power

Analysing the terms of trade between wages/livestock and staple food commodities is indicative of the trends in purchasing power and the impact on the food security situation of households which are dependent on food purchases through income from wage labour and/or livestock.

The average TOT between a daily unskilled labour wage rate and the retail price of wheat flour has been steadily increasing since February 2012 until it reached its peak in October 2012 and slowly going down again since November 2012 (Figure 47). The TOT is believed to follow the seasonal demand for agricultural labour. Although the real wage rates have reduced in 2013 compared to 2012, the decline in the prices of wheat flour has offset the income deficit and resulted in stable TOT in 2013.

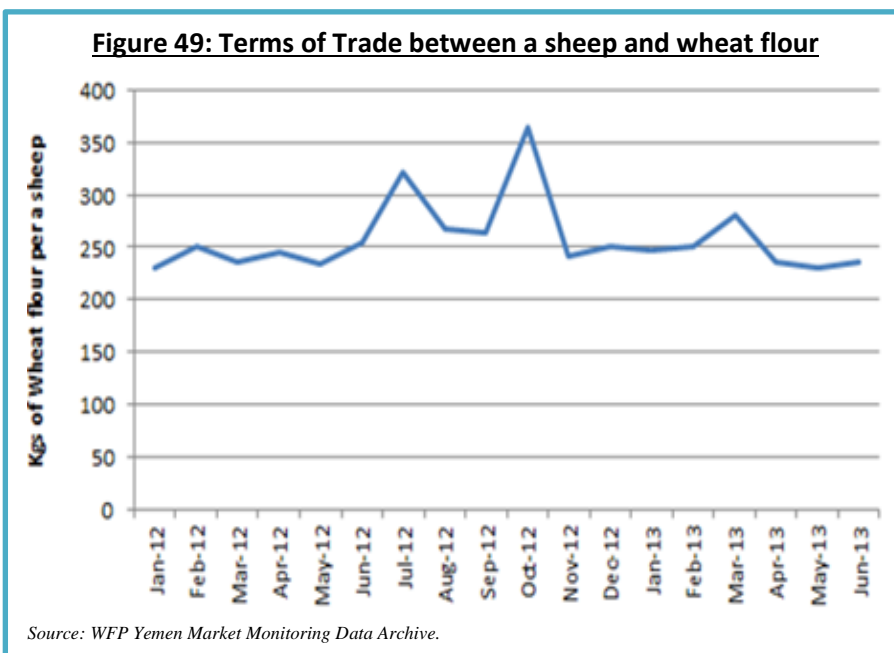


The pattern on the TOT across the major markets in the country shows that there were some variations on the TOT among the markets when comparing June 2013 with June 2012, with only little reduction in



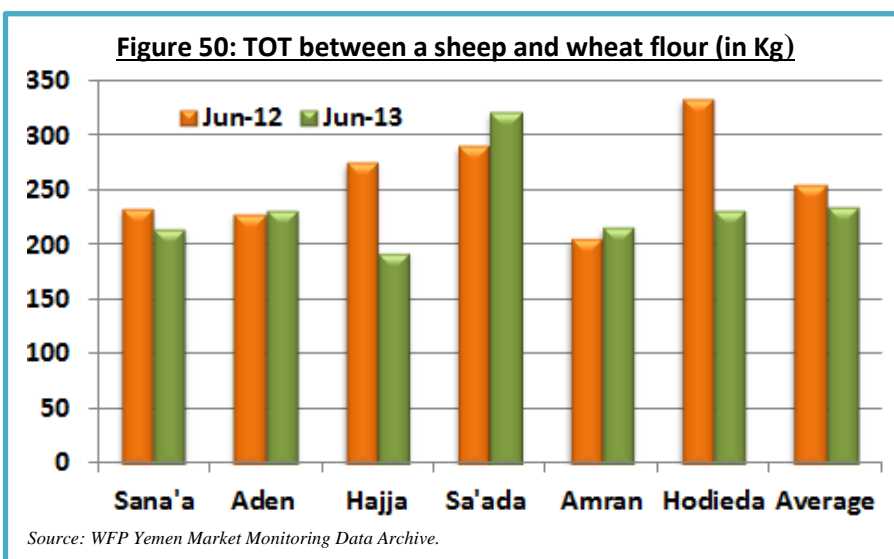
the average TOT June 2013 (Figure 48). As a result of that and increased CPI in 2013, the purchasing power of households, whose livelihood is mainly wage labour, has fallen down by 11.1 percent from the same month last year as measured by the changes in the TOT.

The trend in average TOT between a sheep and amount of wheat flour has generally been stable throughout the past one year and half with the exception of July and October 2012 which were mainly due to lower wheat prices in July following the first season crop harvest time and the Eid holiday in October that increased the demand of sheep which resulted in higher prices for sheep (Figure 49).



However, compared with last year, the average TOT in June 2013 has showed a modest decline with some differences across the main markets in Yemen (Figure 50). Consequently, households which derive some of their income from the sale sheep had lower amount of wheat flour in June 2013 than the same month last year in exchange with a sheep. While the TOT has improved in Aden, Amran and noticeably in Sa'ada, in the remaining markets it has deteriorated in June 2013 compared to that in 2012 (Figure 4).

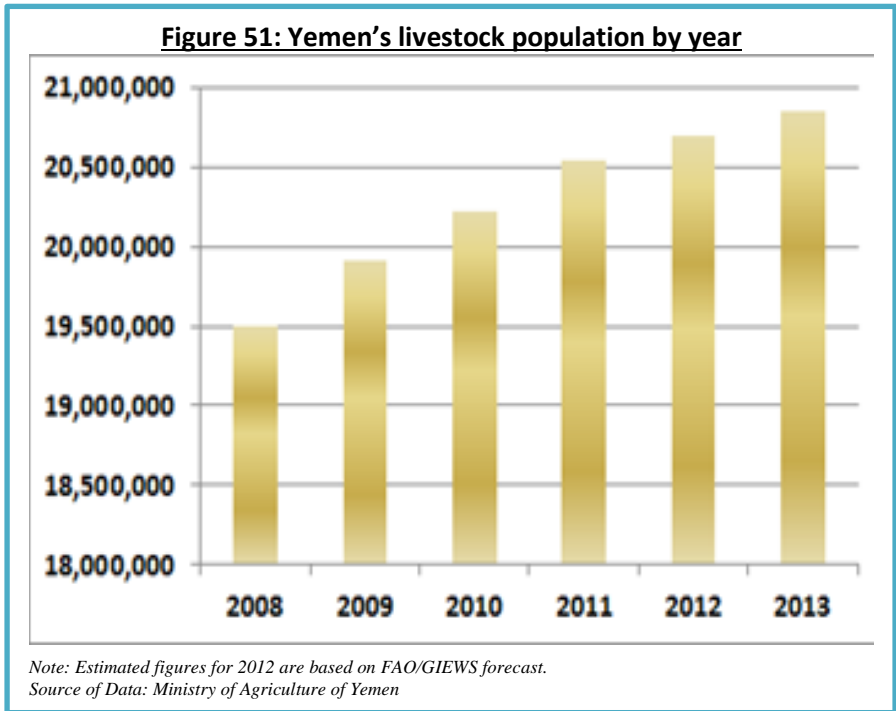
That minor average TOT decline coupled with increased CPI has led the purchasing power of those who are dependent on livestock to be dropped by 9.0 percent in June 2013 compared to the same month last year.



5.6. Livestock population

Livestock represents about 20 percent of agricultural GDP of Yemen and it plays a crucial especially in poor household economy, contributing to poverty alleviation, food security and gender equality. The size of national herd of sheep and goats constitute about 90 percent of the total livestock population and is estimated at 18.6 million in 2012 (each having almost equal numbers). From the total livestock number of 20.7 in 2012, cattle and camels population account for about 8 and 2 percent, respectively. With annual average growth rate of 1.5 percent, the country's livestock number is estimated at 20.9 million in 2013 and expected to reach to 21.2 million in 2014 (Figure 51).

Sheep and goats are found across most of governorates of the country. The greatest concentration of sheep in in Al Hudaydah (12 percent) followed by Hadramaut (8.7 percent) and Shabwa (8.4 percent). Regarding the distribution of goats among the governorates, Hadramaut has the largest proportion (22 percent) while Shabwa and Abyan have 11 and 10 percent, respectively. Over 45 percent of the national cattle herd is found in three governorates – Hadramout (20 percent), Ibb (13.3 percent) and Taiz (12.4 percent). Camels are concentrated in the drier Governorates, such as Al Mahrah, Hadramaut and Al Jawuf, with 34 percent, 24 percent and 14 percent, respectively. Livestock systems vary from pastoralism, agro-



pastoralism to mixed crop-livestock systems and, more recently, small scale intensive animal production units. While sheep and goats are sold to buy staple food (wheat) and other essentials, animals are generally kept for meat, milk, sour milk, butter and draught power as well as wool, skin and manure. Therefore, households that own different livestock will be able to support their livelihoods strategies and can bridge the food gap that they could be facing next year through exchange of their animals with staple food commodities.

VI. Conclusion and Suggested Response Options

6.1. Main conclusion of the Study

The high and increasing level of poverty and other structural problems Yemen fueled by its complex and fragile socio-political state which is further complicated by the deteriorating macro-economic condition as well as worsening conflicts and insecurity situation has resulted in the continued high level of food insecurity widespread across most of the governorates of the country. The high level of unemployment, gender inequality, poor capacity of the government to deliver basic social services, poor infrastructure together with alarmingly depleted natural resources (water and oil) have also severely aggravated the level of poverty and food insecurity in the country.

Although the current level of food insecurity has slightly improved from what it was two years back, the situation is still unacceptably very high – 42.5 percent of the entire population is food insecure. From the total of 25.26 million people, about 4.5 million are severely food insecure and over 6 million are moderately food insecure. Level of both chronic and acute malnutrition is also extremely high. Food is available in all markets at all times in sufficient quantities, though most of the food is imported. Food insecurity for the majority of the population in the country is mainly lack of economic access to food and utilization related problems, such as lack of clean water and sanitation services as well as insufficient health facilities and unaffordable services.

Table 8: Governorates with changes in food security indicators between 2011 and 2013

Food security and related indicators	Governorates showed improvement	Governorate showed deterioration
Food security situation	Al Bayda, Mareb, Ad Daleh, Sana'a, Sana'a City, Amran, Hajja, Taiz, Dhamar, Rayma, Al Mahra <i>(% of severely food insecure households has decreased)</i>	Abyan, Lahej, Ibb, Shabwa, Aden, Hadramout, Al Mahweet <i>(% of severely food insecure households has increased)</i>
Food purchase on credit	Al Bayda, Mareb, Sana'a, Sana'a City, Taiz, Ibb, Dhamar, Al Mahra, Shabwa <i>(% of households who purchase food on credit has decreased)</i>	Abyan, Lahej, Aden, Hadramout, Al Mahweet, Rayma, Ad Daleh, Al Hudieda, Amran <i>(% of households who purchase food on credit has increased)</i>
Indebtedness	Albayda, Al Mahweet, Rayma, Ibb, Dhamar <i>(% of indebted households has decreased)</i>	Abyan, Lahej, Shabwa, Aden, Hadramout, Ad Daleh, Amran, Sana'a City, Sana'a, Hajja, Mareb, Taiz <i>(% of indebted households has increased)</i>
Use of destructive coping strategies	Al Bayda, Mareb, Sana'a, Amran, Hajja, Al Mahweet, Rayma, Ibb, Dhamar <i>(% of households who use destructive coping strategies has decreased)</i>	Abyan, Lahej, Shabwa, Hadramout, Ad Daleh, Sana'a City, Taiz, Al Mahra <i>(% of households who use destructive coping strategies has increased)</i>

Note: Governorates that are not listed in either of the columns above did not have any major changes between 2011 and 2013 on those indicators.

The food security and nutrition situation has noticeably improved in governorates that have been assisted by several humanitarian agencies. However, those which were not sufficiently supported, mainly Abyan and Shabwa governorates, showed extreme deterioration in all the key indicators. Across all the governorates, poor households, households headed by widowed women, those headed by an illiterate member of the family, households who are dependent on support and those whose livelihood is daily wage labour, as well as those households with high indebtedness are the most food insecure.

Acute malnutrition rates continue to be at alarming levels. UNICEF's SMART survey results and the 2011 CFSS data on GAM rates by governorate indicate that Al Hudieda, Lahej, Aden, Abyan, Hajja, and Ibb are at "critical" level; Taiz, Ad Daleh, Al Mahweet, and Amran are at "serious" level; while all the remaining governorates are at "poor" level of wasting.

Despite the relatively stable food prices and other factors in 2012, the humanitarian response operations designed to address the urgent needs of the severely food insecure population (about 5 million people) on top of the assistance provided through the government SWF was only able to stop further deterioration in the level of food insecurity and help some governorates to see minor improvement. In some governorates, slight improvement was achieved at the expense of significantly increased use of credits by the vulnerable households which could potentially lead them to further destitution and deepens their poverty and vulnerability – this justifies the need for strategic shift towards resilience-oriented interventions with appropriate assistance modalities/tools that could eventually address the specific needs of the vulnerable groups in the country so that they can build strong capacity to deal with future shocks without external support.

6.2. Suggested response options

In line with the main conclusion of the UFSMS briefly indicated above, the following response options are suggested for considerations during the formulation of the upcoming PRRO. The recommendations may also be relevant for other partner humanitarian agencies that are operating in Yemen in the areas of food security, nutrition, health and other related issues.

General recommendations on assistance

- Life-saving emergency food security assistance need to be provided to the 4.5 million severely food insecure population living in different governorates of Yemen. Considering the support being provided through the SWF, the suggested assistance need to sufficiently fill the food/cash gap to meet the minimum requirement of those households who are severely food insecure.
- While continuing the current food security and nutrition assistance covering those governorates that have been supported since 2012, the newly emerged highly food insecure governorates, such as Abyan and Shabwa, need to be targeted for similar humanitarian aid.
- Sector specific agencies such as UNICEF and WHO and other relevant NGOs and government organizations through the various Clusters need to align and coordinate their activities with WFP's food security and nutrition related assistance in order to reduce the huge problems related to water, sanitation and health so that the impact of the food security and nutrition interventions that WFP and other partners are implementing could be maximized.

Suggested specific response options for WFP interventions

A. Relief food/cash assistance

Save lives and livelihoods by alleviating the unacceptably high food insecurity status of the Yemeni population and the serious-to-critical level of malnutrition rates among children below 5 years of age and women of reproductive age. **Provision of emergency food-based safety net, complementing Social Welfare Fund's cash transfer with a food transfer to cover the food requirement gap, based on the cost of the minimum food basket.**

Geographic targeting: Prioritization of governorates with high prevalence of severe food insecurity (poor food consumption at the household level) and supported by prioritization of districts with high prevalence of poverty as per latest updates (IFPRI 2010).

Household targeting: As per updated Social Welfare Fund targeting and focusing on the specific population groups (households) identified as the most food insecure by this study.

Period of assistance: During the lean season

B. Nutrition Interventions

Provide targeted therapeutic and supplementary feeding for children aged 6–59 months and pregnant and lactating women in order to reduce and prevent acute malnutrition in children under 5 in targeted populations thereby improve nutritional status of targeted children under 5 and pregnant and lactating women.

Geographic targeting: Prioritization of governorates with high prevalence of acute child malnutrition (which are at “serious” and “critical” levels of wasting). Prioritization of districts with implementation capacity (i.e. health strengthening systems in place), availability of partners and accessibility

Individual targeting: Based on the level of malnutrition of children assisted by health centers, they need to be targeted for supplementary feeding and admissions will be based on a weight-for-height measurement (WFH >-3 SD and <-2 SD) or other equivalent measurements. Similar approach could be used to target pregnant and lactating women (previous experiences in the field).

Blanket supplementary feeding for children aged 6–23 months to prevent acute malnutrition in children under 2 in targeted populations and improve nutritional status of targeted children under 2.

Geographic targeting: Prioritization of governorates with high prevalence of acute child malnutrition (which are at “serious” and “critical” levels of wasting) and prioritization of districts with implementation capacity (i.e. health strengthening systems in place), availability of partners and accessibility.

Individual targeting: Children between 6 and 23 months eligible to receive blanket supplementary food rations.

Period of intervention: Throughout the year for targeted beneficiaries.

C. Asset/resilience building assistance

Those households whose situation has marginally improved and moved from severe to moderate food insecurity need to be targeted for resilience building support through feasible food/cash for asset programmes in order to enhance their capacity to withstand future difficulties and protect them from returning back to their previous condition. Specific intervention modalities and tools as well as duration and seasonality of assistance need to be sought from the recommendations made by the recent resilience mission.

To the extent possible/feasible, apart from the general food/cash distributions for targeted population, resilience building support need to be provided based on the specific needs and context of governorates with respect to their food security condition and appropriate aid modalities such as food/cash for asset. More detailed recommendations may be generated from the recent missions on “Resilience” and “Cash/Food Feasibility”.

Geographic Targeting: Within those governorates where there is high percentage of households facing moderately food insecurity, districts need to be targeted based on their high level of poverty and other relevant indicators to be further supported by series of follow-up registration/verification assessments. Then, households (population groups) which are particularly vulnerable and that are currently the most food insecure (listed above in the conclusion) should be carefully selected from those identified/prioritized districts which will be selected based on their level of poverty.

Household targeting: As per updated Social Welfare Fund targeting and focusing on the specific population groups (households) identified as the most food insecure by this study.

Period of assistance: During the lean season and less busy time for targeted beneficiaries

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Annexes

Computation of key indicators

Food Consumption Score (FCS) and food security groups

Food consumption is a reflection of food availability and food access at the household level. It is frequently used as a proxy indicator of the current food security situation. The Food Consumption Score is a composite score based on the dietary diversity, food frequency, and relative nutritional importance of various food groups consumed by a household.

Households were asked how many days in the week preceding the survey they had eaten a food item from a list of various food items eaten commonly in Yemen. Those items are divided into eight standard food groups: main staples (such as bread, cereals, tubers, and roots); legumes and nuts; meat, fish, poultry and eggs; vegetables (including green leafy vegetables); fruits; oils and fats; milk and other dairy products; and sugar.

Once the items are categorized into the appropriate food groups, the nutritional value of each group (Annex Table 1) and the frequency of consumption (with a maximum of seven days per group) are used to calculate the FCS using the following formula:

$$FCS = (w_{\text{cereals}} * x_{\text{cereals}}) + (w_{\text{pulses}} * x_{\text{pulses}}) + (w_{\text{veg.}} * x_{\text{veg.}}) + (w_{\text{fruits}} * x_{\text{fruits}}) + (w_{\text{animal}} * x_{\text{animal}}) + (w_{\text{dairy}} * x_{\text{dairy}}) + (w_{\text{sugar}} * x_{\text{sugar}}) + (w_{\text{oil}} * x_{\text{oil}}).$$

w_i = Relative nutritional weight of food group

x_i = Number of days of consumption for each food group (≤ 7 days)

Annex Table 1: Grouping of food items and their relative nutritional weight

Food Item	Food group	Weight
Bread, wheat, rice, potatoes, cassava	Cereals, tubers and root crops	2
Beans, peas, lentils and nuts	Pulses	3
Vegetables	Vegetables	1
Fruits	Fruits	1
Beef, goat/sheep meat, poultry, egg and fish	Meat and fish	4
Milk and other dairy products except butter	Milk	4
Sugar and honey	Sugar	0.5
Oil, butter and other fats	Oil	0.5

The FCS is a continuous variable with a range from 0 to 112. To provide more meaningful descriptive analysis of food consumption than reporting average scores, households are categorized into food consumption groups based on their FCS. The standard food consumption groups are poor, borderline, and acceptable.

The standard thresholds of 21 and 35 are used to define the three household food consumption groups (poor, borderline and acceptable). The household FCS is categorized using standard thresholds that indicate the status of the household's food consumption. WFP's standard thresholds are applied when a score of 21 and 35 reflect a poor or moderate diet with low micronutrient value. But when oil and sugar are consumed daily, as is often the case in the Middle East and North Africa, scores of 21 and 35 contain an even

lower amount of dietary diversity. In this situation, the standard threshold is raised to 28 and 42.

Annex Table 2: Food security thresholds (FCS ranges)

Food security group	Standard thresholds	Adjusted thresholds*
Severely food insecure	0-21	0-28
Severely food insecure	21-35	28-42
Food secure	Over 35	Over 42

* with oil and sugar eaten on a daily basis

A score of 28 is a bare minimum for adequacy. A score below 28 equates to a diet that does not include at least a staple, oil, sugar, and vegetables on a daily basis. The value 28 is derived from:

- ⇒ daily frequency * weight of vegetables
- ⇒ + daily frequency * weight of staples
- ⇒ + daily frequency * weight of oil
- ⇒ + daily frequency * weight of sugar
- ⇒ $(7 * 2 = 14) + (7 * 1 = 7) + (7 * 0.5 = 3.5) + (7 * 0.5 = 3.5) = 28$.

Coping Strategies Index (CSI)

The Coping Strategies Index (CSI) is a standard indicator used in food security analysis. Its essential objective is to measure the frequency and severity of negative coping behaviours employed by households when they do not have enough food. The indicator is created by asking households what they do when they do not have enough food and how often they have done so in the past week. Two forms of the CSI exist: the context-specific CSI and the reduced CSI. The reduced CSI, which was used by the CFSS, allows for comparison across surveys by standardize the strategies and the weight measuring their severity.

Households were first asked if there were times in the preceding seven days when they did not have enough food. If yes, they were then asked how many times in the past seven days they employed one of five standard coping strategies. The five standard coping strategies and their severity weightings are:

- A. Eating less-preferred foods (1.0),
- B. Borrowing food / money from friends and relatives (2.0),
- C. Limiting portions at mealtime (1.0),
- D. Limiting adult intake (3.0), and
- E. Reducing the number of meals per day (1.0).

Based on the frequency reported and the severity weight of the coping strategy used, households CSI scores are calculated. Standard thresholds for describing CSI scores do not exist. For descriptive analysis, households that reported having used a coping strategy were divided into terciles based on their ranked CSI. The CSI groups are therefore described as no coping, low coping, medium coping and high coping.

More detailed annex is provided in a separate document which contains several relevant information to support this report.