EXECUTIVE SUMMARY

METHODOLOGY AND COVERAGE

The CFSVA 2014 is the first comprehensive food security assessment conducted by WFP in Djibouti. The study covered the main towns of Djibouti and Balbala, regional urban centers, and the five regional rural areas. The objectives of the study were: to provide a clear understanding of the current food security situation; to identify the key drivers of food insecurity and its trends in recent years; and to determine the underlying causes of malnutrition of children aged 6 to 59 months and the nutrition status of their mothers. The assessment was conducted between May and September 2014, with data collection completed by end of June 2014.

In order to meet such objectives, a household level questionnaire including modules on demography, habitat, livelihood, food consumption, expenditures and coping strategies adopted was administered to 4,813 households (28,910 people). The household questionnaire also included a comprehensive module on nutrition, collecting information on breastfeeding, infant and child nutrition feeding practices, morbidity and preventive treatment to illnesses from primary caregivers of 2,843 children aged 0-59 months. Information on health and nutrition status of mothers and other women in reproductive age was also collected.

In addition to the household's questionnaire, anthropometric measurement of 432 children aged 6-59 months was conducted in Obock region to produce a causal analysis on key drivers of malnutrition in comparison with household level findings. Furthermore, 112 focus groups were interviewed throughout the country to collect additional complementary information on food security, health, education, access to water. Finally, 227 traders in rural and urban settings of the six regions were interviewed to have a clear understanding on how food availability and prices relate to food insecurity in Djibouti.

HOW MANY HOUSEHOLDS ARE FOOD INSECURE?

In Djibouti[1], 14.5 percent of households are food insecure, of which 2.8 percent are affected by severe food insecurity (approximately 14,200 persons) and 11.7 percent by moderate food insecurity (approximately 56,000 persons). Furthermore, 32.1 percent of households are mildly food secure and remain vulnerable to food insecurity, while over half of the households (53.4 percent) are food secure.

WHERE DO FOOD INSECURE HOUSEHOLDS LIVE?

Almost 60 percent of food insecure households live in rural areas. Around 35 percent of rural households live in moderate food insecurity and 12 percent in severe food insecurity. In urban areas, 7.4 percent of households are moderately (6.5 percent) or severely food insecure (0.9 percent). At least 11.5 percent of the households residing in the main towns in the five regions outside the capital are food insecure. This is higher compared to Djibouti City (6.4 percent), but remains significantly below those observed in the respective rural areas.

The region with the highest rate of food insecurity was Obock (58.1 percent of households), followed by Dikhil (42.3 percent), Arta (32.5 percent), Tadjoura (25.6 percent) and Ali Sabieh (23.8 percent). These areas have also the highest rates of malnutrition according to the SMART of 2013.

Shifting the focus to the 2nd administrative level, the highest proportion of food insecure households was observed in the rural sub-districts of Alaili-Dada (72 percent) and the peri-urban area of Obock district (64 percent), the rural sub-

[1] The plan of survey sample includes the ordinary urban and sedentary rural populations.

districts of Yoboki (Dikhil region) (61 percent), Ali Addeh (Ali Sabieh region) (62 percent) and Dora (Tadjourah region) (50 percent). In Djibouti urban, the highest prevalence of food insecurity was observed in the 2nd urban sub-district of the commune of Boulaos (10%) and the 5th of the commune of Balbala (8%).

WHO ARE THE FOOD INSECURE HOUSEHOLDS?

Food insecure households are characterized by inadequate food consumption, with 87 and 50 percent of households severely and moderately food insecure respectively having poor food consumption. These households rely on a highly undiversified diet mainly based on cereals, tubers, oil and sugar. They spend almost the entire monthly budget on food (around 85 percent) and almost half of it on cereals and tubers.

Food insecurity is more frequent among medium sized households (3 to 8 members) with illiterate household head. They have a comparatively higher presence of chronically ill members, orphans and disabled members, and include the highest proportion of nomadic and semi-sedentary households. Indeed, almost 48 percent of households in severe food insecurity and 37 percent of moderately food insecure are non-sedentary[2].

The food insecure have no working members or have at maximum one active member, often engaging in unstable income generating and non-lucrative jobs such as production and sale of charcoal or firewood, livestock herding or trade of animal products, and casual labour. Food insecure households with salaried or qualified labour among their members are rare. Moderate food insecure households own on average 2.6 assets (often mats, mattresses and radio), whilst severely food insecure only own two assets (generally mattress and mats).

Poverty is one of the main drivers of food insecurity in Djibouti. Approximately 96 percent of the severely food insecure households are in the poorest (82.5 percent) and poor (13.5 percent) quintiles of the population. Likewise, 87 percent of the moderately food insecure households belong to the two poorest quintiles. These households' ability to cope with shocks has been eroded over the years; food insecure households are therefore often forced to adopt strategies that endanger their livelihoods in the long run.

EVOLUTION OF FOOD SECURITY

Over the last 13 months, the prevalence of food insecurity among rural households in Djibouti has decreased from 67 percent to 46.6 percent, with severe food insecurity decreasing by 6.4 percent and moderate food insecurity by 14 percent. This trend is similar in all regions, except in Obock where food insecure households increased by 1.1 percent. Severe food insecurity has significantly improved, decreasing by 28.5 percent in Ali Sabieh and 9.5 percent in Arta but remained high in Dikhil, Tadjourah and Obock.

In Djibouti town and Balbala, the level of food consumption has improved considerably since 2012, as households with inadequate food consumption decreased from 39 percent to 19 percent. The most significant improvement was observed in Balbala, with an increase of 13 percent for households with adequate consumption and the least in Boulaos neighborhoods with 7 percent.

The improvement of the food security and consumption in rural areas are at the backdrop of a significant decrease in number of pastoralists in all the five regions between 2010 and 2014. For an example the number of pastoralists declined by 8 percent in Tadjourah, 6 percent in Ali Sabieh and 10 percent in Obock. The decrease was mainly due to

[2] Nomads in Djibouti are defined as the population subject to continuous migration following livestock in accordance to seasonal rainfall patterns. Semi-sedentary refer to population migrating for shorter periods of time (usually 3 weeks to 4 months) and more often not implying the displacement of all households' members.

recurrent drought and erratic rainfall patterns of Heys-Dada and Karan-Karma rainy season since 2006. The increase in the proportion of salaried workers compensated the loss in livestock ownership except in Obock, therefore explaining the improvement in the food security status in these regions. Salaried workers increased by 17 percent in Ali Sabieh, by 4.5 percent in Dikhil, by 3.3 percent in Tadjourah, whilst skilled labour and daily workers increased by 5 percent at Tadjourah. The opening of construction sites of big infrastructure development in Djibouti, namely port of Tadjourah, the road from Tadjourah to Ethiopia and the Djibouti-Addis Ababa railway increased local employment opportunities, resulting in higher economic food access.

However, it is important to emphasize that these employment opportunities are temporary and most households will face risks of food insecurity once the infrastructure development is completed. Hence, continued monitoring is necessary especially given the high poverty levels and increased use of coping mechanisms that are unsustainable in the long run more so in urban areas.

WHAT ARE THE CAUSES OF FOOD INSECURITY?

Food consumption

At the national level, 17.5 percent of households have inadequate (poor and borderline) food consumption. Around 9 percent have poor food consumption, generally composed of cereals (wheat and sorghum flour, rice consumed on average 6.2 days per week), oil and fat (4 days), sugar (3.7 days) and occasionally vegetables (1.5 days). The diet lacks in animal proteins, vegetables, fruits and dairy products. Over 80 percent of households with poor consumption never consume iron-rich foods, and over 70 percent of them never eat foods rich in vitamin A. About 8 percent of the households have a borderline consumption. Their diet includes cereals (daily), vegetables (3.1 days per week), pulses (2.7 days), sugar (6 days) and oil (6.5 days). Dairy products are consumed on average once per week and animal protein even more rarely (0.7 days). Finally, approximately 43 percent of households with inadequate food consumption never have access to protein rich foods.

Almost half of rural households (46.6 percent) have inadequate food consumption (32.3 percent-poor and 14.3 percent–borderline). This compares unfavorably with 10.8 percent in urban areas (4.2 percent with poor and 6.4 percent with borderline). Consistently with the regional patterns of food insecurity, the highest prevalence of households with inadequate food consumption are in Obock region (60 percent, with a peak of 68 percent in rural areas), Dikhil (47 percent) and Arta (36 percent).

Dependence on markets

Both urban and rural households in the six regions, regardless of their livelihoods and income sources, depend almost exclusively on markets for the supply of food products. Food is sourced mainly by cash purchase by approximately 90 percent of the households, whilst purchase on credit is approximately by 6 percent. Own production is extremely low; the only significant proportion is in the region of Obock for meat (33 percent), offal (28 percent), fish (6 percent), and eggs (13 percent). The higher presence of livestock herders, widespread poverty and low purchasing power of households in Obock (and to a lesser extent in Dikhil) justify a higher dependence on food sources alternative to purchase compared to the rest of the country.

Household poverty

Given the high dependence on markets for food supply, poverty is the main causal factor to food insecurity in Djibouti. Extreme poverty affects almost 42 percent of households at the national level and relative poverty almost 80 percent[3]. As previously highlighted, around 90 percent of the food insecure households belong to the two poorest quintiles of the population. Dikhil and Obock regions have the highest poverty levels and prevalence of food insecure households (EDAM 3, 2012 - DISED). In these regions, 77 percent of households are affected by extreme of poverty and almost each household by relative poverty (96 percent).

Another sign of the economic vulnerability of households is the extremely high proportion of food expenditures on the households' monthly budget (65.3 percent). In rural areas, this value rises to 82 percent with a peak in Obock (88 percent). In urban areas, food expenditures cover on average 62 percent of the monthly budget.

Food prices

During the first half of 2014 retail prices of major imported commodities, including rice (Belem), wheat flour, pasta and sorghum flour were stable. However, prices remained generally high at the 2013 levels and have not declined significantly since the price crisis of 2008. The prices have remained high despite a significantly higher than normal (+ 8.5 percent) main productive season harvest in Ethiopia (Meher- October to December 2013) which is an important source of imports for wheat flour and sorghum[4] and the stable prices of cereals in the international market in 2014 .

The complex food supply chain structure is composed by three levels of traders comprising importers (national or foreigners), wholesalers in Djibouti town and in lower number in the chief-towns, and a wide network of retailers. The high number of actors helps reduce risks of stocks shortages and market disruption even during the lean season. However, the complexity of the supply chain also results into high nominal prices, particularly in the five 'rural' regions where retail prices for non-cereal foods such as pulses and vegetables are far higher than in the capital, notably in Obock.

Shocks

In the past 12 months, 28 percent of households in Djibouti suffered from at least one shock. The most recurrent shocks are the decrease in family income (27.3 percent), drought (25.3 percent), high food prices (22.5 percent) diseases or abnormal death rates of livestock (6.5 percent). In urban areas, 38 percent of the households reported a decline in household income, followed by high food prices (24.5 percent). In rural areas, the impact of drought (38.5 percent) is the most recurrent shock followed by high food prices (20.7 percent), job loss (17.1 percent) and constraints associated with animal production (12.5 percent). Compared to May 2013, a 4 percent increase in the households affected by drought was observed in rural areas. The effects of drought are particularly evident in the coastal pastoral zones of Obock and Tadjourah, mainly dependent on the October- February Heys-Dada rainy season. Rainfall in these areas has been erratic and insufficient over the last six years including 2013. Likewise, the Northwest and Southeast pastoral areas received erratic and insufficient July-October Karan Karma rainfall.

[3] DISED - EDAM3 (2012) Extreme poverty is set on thresholds corresponding to a minimum level of expenditure of 114 096 FDJ (1.8 US$ / day) which is the estimated cost of the food basket providing the minimum energy supply at 2012 prices. Relative poverty is calculated from the proportion of food expenditure on the total expenditure of the 2nd quintile DEA.

[4] Central statistical agency of Ethiopia, agricultural sample survey 2013 / 2014 (2006 Ethiopian calendar)

COPING STRATEGIES ADOPTED BY HOUSEHOLDS

To meet food shortages, during the weeks prior to the interviews over half of the households (53.3 percent) adopted at least one food consumption or livelihood-related coping mechanism. The coping mechanisms adopted will negatively affect the economic stability of the livelihoods in the short to long term. The analysis indicates high vulnerability to food insecurity due to low economic access to food mainly in rural areas where 84 percent adopted coping mechanisms as opposed to 46 percent in urban areas. Obock and Dikhil regions have the highest proportion of households adopting coping mechanisms (86 percent).

Over 50 percent of the households adopted at least one food-related coping strategy in the seven days prior to the survey, of which 57 percent are in rural areas and 17.5 percent in urban areas. The most common strategies used are the consumption of less preferred or less expensive foods (47 percent of households), the decrease in the amount of food during meals (28 percent), and borrowing of food (27 percent). In addition, during the 30 days prior to the survey one in five households in Djibouti adopted livelihood coping strategies: 45 percent of them have used stress strategies such as selling domestic items, spend saving and borrowing money or food; 38 percent used crisis strategies such as reducing essential non-food expenditures (education, health, etc), sell productive assets and withdraw children from school; and 17 percent emergency strategies such as begging, selling the house or engage in illegal activities.

NUTRITIONAL STATUS

Acute and chronic malnutrition, as well as underweight rates of children aged from 6 to 59 months remain above the thresholds of criticality in almost all regions, including in Djibouti City and Balbala.

According to the results of the SMART survey conducted by UNICEF in December 2013, the national prevalence of global acute malnutrition (GAM) was 17.8 percent. GAM prevalence ranged between 14.7 percent and 17.9 percent in Djibouti Ville, Balbala and four other regions (Ali-Sabieh, Arta, Dikhil, Tadjoura), well above the WHO critical threshold of 10 percent. The CFSVA collected nutrition data only in Obock. The results indicate an increase of GAM prevalence in Obock region[5] to 29.9 percent from 25.7 percent in December 2013 due to seasonality trends as the CFSVA was conducted during the lean season.

In 2013, the prevalence of chronic malnutrition was 29.7 percent at the national level and shows no improvement since the previous SMART survey 2010. In the Obock region, this rate was estimated at 45.0 percent in 2014 (CFSVA) which exceeds the critical threshold of 40 percent[6] and is consistent with the 45.9 percent prevalence observed in December 2013 (SMART survey). Finally, severe chronic malnutrition affects 24.6 percent of children 6-59 months in Obock.

UNDERLYING CAUSES OF MALNUTRITION

Acute malnutrition

The joint analysis on malnutrition and food security conducted in Obock region helped identifying causal relations between the acute malnutrition with health indicators, child feeding and mother caring practices. Among the main determinants of acute malnutrition in Obock are clearly inadequate breastfeeding practices, such as poor exclusive

[5] Anthropometric measurement was only conducted in Obock region under the CFSVA.

[6] Cut-off values for public health significance, WHO 1995

breastfeeding and low continuation of breastfeeding. Furthermore, access to a minimum adequate diet for infants aged 6 to 23 months is very limited due to low minimum dietary diversity and low minimum meal frequency. As a consequence, the access to foods rich in micronutrients such as Vitamin A and iron for these children is almost nonexistent.

In Obock, health and care practices indicators such as vaccination against BCG, measles, vitamin A supplementation, deworming and the use of the impregnated mosquito net are not statistically associated with acute malnutrition but are contributing factors to malnutrition, due to their low coverage rate. In addition, although morbidity to common diseases such as fever, diarrhea, and the Acute Respiratory infections is relatively low in the region, malnutrition could be underpinned by low access to medical treatment for sick children observed in Obock and mainly due to households' poverty, the high distance to the health centers or because the disease is considered not serious by mothers.

Food insecurity of households is closely associated with malnutrition of children, indicating that food security is an important factor to be considered in Obock. The causal analysis conducted in this region indicates a relation between households' food insecurity and malnutrition in children aged 6-59 months, particularly in the case of severe acute malnutrition. GAM prevalence ranged from 27 percent among children within food secure households to 35 percent in severely food insecure households. Likewise, severe acute malnutrition (SAM) ranged from 4 percent among children in food secure to 18 percent among those in severely food insecure households. The link between household food consumption and malnutrition is also evident. Almost two thirds of malnourished children are part of a household having inadequate consumption, of which 51 percent are in households with low food consumption.

The above mentioned determinants of acute malnutrition generally apply to the rest of the country. Therefore, a joint analysis on malnutrition and food security within the same households as the one conducted in Obock should be extended to the other regions in order to provide statistical support to these indicative findings.

Balbala and Djibouti city recorded the highest rates of morbidity to diseases among children (mainly fever, diarrhea and respiratory infections). This is probably related to the unsafe hygienic environment and more precarious health care practice especially in Balbala. Furthermore, the low levels of early breastfeeding and exclusive breastfeeding contribute to high morbidity and malnutrition rates in Balbala. In the other regions, acute malnutrition seems more linked to low access to nutrient food for children, alongside the other determinants outlined for Obock. In general, only 4 percent of children 6 to 23 months have access to a minimum adequate diet.

Finally, a clear causal relation was identified between the nutritional status of the child and that of the mother. The prevalence of acute malnutrition of children whose mothers are malnourished (44.8 percent) is higher as opposed to those children whose mothers are not malnourished (28.3 percent).

Chronic malnutrition

The factors that significantly impact stunting of children aged 6 to 59 months in Obock are: Low rates of immunization for BCG and measles; Low Vitamin A supplementation; and low education level of the mother.

Low coverage rates obtained for the preventive treatment in Obock compared to national average are mainly due to the scarcity of health services inhibiting the access to these services as well as the low level of education of mothers and subsequent ignorance of the importance of such practices. In Obock, 52.6 percent of children were vaccinated

with BCG[7] against a national average of 79.3 percent, 57.8 percent against measles (national average 79.7 percent), 34.2 percent received Vitamin A supplementation (national average 55.9 percent) and 20.4 percent a deworming treatment (national average 36.3 percent).

Although chronic malnutrition is not statistically associated with breastfeeding and young child feeding practices, inadequate children's diet will impact nutrition status in the long term.

The link between children's stunting and their households' food consumption exists but is less significant than on the case of acute malnutrition. About 60 percent of children affected by chronic malnutrition are part of food insecure households, with a peak in the sub-district of Alaili Dada (73.1 percent). The causal relation of inadequate household's food consumption and stunting is also not evident. Monitoring the evolution of chronic malnutrition and food consumption in the long term is therefore necessary to substantiate the causal relationship between the two in Obock as well as in the rest of the country.

[7] Bacillus Calmette Guérin (anti-tuberculosis vaccin)