

## USAID FEWS NET PROJECT

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# DJIBOUTI VILLE URBAN BASELINE STUDY

*An Assessment of Food and Livelihood Security in Djibouti Ville*

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# **1 SUMMARY**

## **1.1 Introduction**

FEWS NET is a famine early warning and food security monitoring project. It is among the proposed activities for the new USAID country program in Djibouti. The current assessment was a preparatory exercise, with the objective of developing an analytical framework for improved monitoring of food security in Djibouti Ville. This involved the collection of primary and secondary data to develop a livelihoods baseline that can be used to help interpret early warning and monitoring data in the future.

The current exercise was undertaken in October 2003, jointly with the Government of Djibouti. Three government ministries/departments were represented on the team; the Ministry of the Interior, the Ministry of Agriculture and the Ministry of Transport and Communication (Department of Meteorology). The assessment team also included experienced field staff from two organizations undertaking similar work in neighbouring countries, FSAU/FAO, Somalia and Save the Children – UK, Ethiopia.

The approach used to develop the Djibouti urban livelihoods baseline was the Food Economy or Household Economy methodology. This involved the following steps/activities:

- A review of secondary sources,
- A zoning exercise during an initial workshop and with the arrondissement authorities, to classify different *quartiers* of the city according to their overall level of wealth.
- Interviews with 29 groups of community key informants in 28 *quartiers* to establish a breakdown of households by wealth and income levels.
- Interviews with 75 focus groups to establish income and expenditure patterns at household level for different wealth groups.
- Interviews with selected key informants to generate information on relevant related issues.
- Analysis of field data and compilation of the baseline picture,
- Scenario analysis looking at the potential impact of selected hazards, and
- Discussion of a monitoring system.

## **1.2 Background**

Djibouti's strategic location on the Red Sea coast is the main economic asset of a country that is mostly barren. It is an important transit port for the region and an international trans-shipment and refueling center. It also hosts important military and naval bases for both France and – since September 2002 - the United States. The economy is based on service activities, with the bulk of this derived from the servicing of the port and railway to neighbouring Ethiopia, and from the military garrisons. Port revenues have increased since 1998 following the war between Ethiopia and Eritea; Djibouti now handles the bulk of Ethiopia's seaborne trade. The country is heavily dependent upon foreign aid.

In June 2000, the Government of Djibouti signed a 20 year agreement with the Dubai Ports Authority for the management of the port. Plans are well advanced for the construction of new and additional port facilities at Dooraale, just to the west of Djibouti. It is hoped that this will provide significant additional employment in the construction sector in the years ahead.

The relative prosperity of Djibouti compared to the neighbouring countries of Ethiopia, Eritrea and Somalia has over the years attracted a large number of economic migrants to the city. Most of these were rounded up and expelled from the country towards the end of September.

Following a period of slow growth in the early 1990s, Djibouti's GDP contracted sharply in 1995 and 1996, a crisis bought on by an accumulation of structural problems in the economy and the increased military expenditures during a period of internal conflict from 1991–1994. To resolve these problems Djibouti has, with assistance from the IMF and World Bank, implemented a series of structural adjustment programmes, beginning in 1996. These have involved reforms to public finances, social security, public enterprises, and education and health services.

The effect has been to help reduce the budget deficit (to 2.1% of GDP in 2001), to reduce inflation (to 2%; 2002 estimate) and – together with the greater activity in the port and the increased foreign

military presence – to help re-start GDP growth (2.13%; 2003 estimate). Improvements in these macro-economic indicators have not however been accompanied by any reduction in overall poverty. The next phase of structural adjustment, expected to run for three years from Nov/Dec 2003, will therefore focus on reforms that it is hoped will encourage further economic growth and job creation in the private sector that will reduce the level of poverty in Djibouti.

There is considerable uncertainty as to the population of Djibouti. There has not been a census since 1983, and recent estimates are mostly extrapolations based upon relatively high rates of population growth. Most estimates are in the range of 600,000–700,000 for the country as a whole (with the UN estimate for 2003 being 702,000), of whom 65%-80% are thought to be resident in Djibouti Ville. This would put the population of the city – before the recent expulsions – at between roughly 400-550,000. Subtracting the number of people expelled suggests that the population of the city might now be in the range 350–450,000.

Djibouti has a national HIV/AIDS prevalence rate of 2.9%, which is very low by the standards of sub-Saharan Africa. There is hope that the spread of the disease can be contained, since the numbers affected are low, and the government and international community are committed to tackling the problem.

### 1.3 Assessment Results

**Zoning:** The city is divided into five districts or *arrondissements*, each of which is divided into a number of *quartiers*. Most - but not all – *quartiers* are further sub-divided into *secteurs*.

*Arrondissements* 1 to 3 make up the older part of the city, north of the Ambouli River. Balbala (*arrondissements* 4 and 5), south of the river, includes most of the poorer areas. It was developed in the 1980s and 1990s to accommodate an increasing city population and incomers from the rural areas. Settlement in most of Balbala has been relatively ad-hoc. Most people do not own the land they have settled on and essentially live in temporary housing constructed of a wood frame with corrugated iron walls and roofing.

The 91 *quartiers* of the city were classified into five different wealth classes; Very Poor (12% of *quartiers*), Poor (33%), Mixed (26%), Middle (13%) and Rich (15%). The results of this exercise confirmed what is already well known; that the 1<sup>st</sup> *Arrondissement* is in general the wealthiest, followed by the 2<sup>nd</sup> and 3<sup>rd</sup> *Arrondissements*, with Balbala the poorest area of the city. However, within each *arrondissement*, a range of types of *quartier* are to be found.

Since the focus of the current assessment was on the food and livelihood security of the poorer sections of the community, none of the *quartiers* classified as ‘Rich’ was included in the sample. The 28 *quartiers* visited were divided roughly in proportion to the total number of *quartiers* falling into each of the other wealth categories. The sample was also divided between the *arrondissements* roughly in proportion to estimated population.

**Wealth Breakdown:** Based upon the information provided at community level, five different groups of *households* were defined, each with an associated level of income (see table).

Type of Household	Income (FD per household per month) <sup>1</sup>	Type of <i>Quartier</i>	
		Very Poor/Poor <i>Quartiers</i> (% of households)	Middle/Mixed <i>Quartiers</i> (% of households)
<b>Very Poor</b>	15 - 25,000	20 – 30%	5 – 15%
<b>Poor</b>	25,000 - 40,000	30 – 40%	25 – 35%
<b>Lower Middle</b>	40,000 - 80,000	25 – 35%	25 – 35%
<b>Upper Middle</b>	80,000 - 150,000	5 – 15%	20 – 30%
<b>Better-off</b>	>150,000	0%	5 – 10%

Note: The income ranges presented represent average figures for the 12 month period, October 2002 – September 2003.

<sup>1</sup>The exchange rate in October 2003 was 177 FD per US dollar.

Results are presented separately for two groups of *quartiers*, Very Poor/Poor and Middle/Mixed. Not surprisingly, most households in the Very Poor/Poor *quartiers* were classified as either 'very poor' or 'poor', while most households in the Middle/Mixed areas were classified as 'middle' or 'better-off'.

**Sources of Income:** Most households in Djibouti Ville generate income from four broad categories of activity; casual labour, petty trade, salary/pension or business/commerce. Casual labour (an activity for men) and petty trade (an activity for women) are primarily activities of the 'very poor', 'poor' and 'lower middle' groups, while business/commerce is the preserve of the 'upper middle and 'better-off'. Salaries cover a wide range, and households with a salary can fall into any of the groups, although few fall into the 'very poor' – since most workers, with the exception of cleaners, watchmen and domestic workers, earn more than 25,000 FD per month, the cut-off between the 'very poor' and 'poor' categories. Other sources of income for a minority of households in the 'middle' and 'better-off' groups include rental income and remittances. Child labour is not common for any of the groups.

In general the opportunities for casual labour in Djibouti are fairly limited, with port work, building construction and market portering the main types undertaken. There is not a great deal of construction work available, which means that any major construction project is especially significant. The social housing project at Hoden (for the construction of 1000 houses) is an important current source of work, and there are hopes that the construction of the new port facilities at Dooraale will likewise generate significant demand for casual labour in the future.

Quite where a household falls on the 'wealth scale' depends not only upon the types of activity undertaken, but also the number of people engaged in income generation (typically 1-2), and the level of activity. Petty trade, for example can generate an income of anywhere between 500 and 1300 FD per day, depending upon the items traded (with petty trading in *qat* - the mild stimulant leaf from Ethiopia that is chewed by many Djiboutians each afternoon - generating more income than petty trading in bread or prepared foods).

**Sources of Food:** There are only two sources of food for the majority of households in Djibouti; purchase and gifts. The results of the current analysis indicate that all five wealth groups have, on average, been able to access 100% of their minimum food needs over the last 12 months. In the case of the 'very poor', however, this was only possible because of the gifts, usually of cooked food, that they received from relatives and neighbours. These gifts make up 15%-20% of the intake of the 'very poor'.

**Expenditure:** Given their very limited incomes, the 'very poor' and 'poor' purchase little more than the essentials required for survival. 'Very Poor' households spend less than \$US 4 per day for a family of 7. Total expenditure on food accounts for roughly 60% of income, with the majority of this used to purchase basic calories in the form of cereals, oil and sugar. After food, a substantial proportion of remaining income is spent on three basic items; water, kerosene and education. The 'very poor' and 'poor' are not in a position to afford electricity, and expenditure on medicine is insignificant. The 'poor' spend about 10% of income on *qat*. The 'very poor' do not purchase *qat*, but may receive it in the form of gifts.

**Water:** Access to water is limited in terms of supply and affordability, especially in those parts of the 4<sup>th</sup> and 5<sup>th</sup> arrondissement that rely upon water tankers. Water provided by tankers is eight times more expensive than water provided through the piped water system, and the 'very poor' and 'poor' groups supplied by tanker can only afford to purchase water in quantities that would be regarded as barely adequate in an emergency situation, even without taking into account the extreme heat, and therefore increased water requirements, at certain times of year in Djibouti. Many water tankers also fail to reach minimum standards of health and safety.

**Education:** Access to education is a high priority and a universal concern for all wealth groups in Djibouti. There are problems both in terms of the availability of education and in terms of access/affordability. There are not enough intermediate and secondary school places to meet demand, and many children are unable to find a place at these levels. Although in theory education is free, there are a number of significant 'hidden' costs associated with education in Djibouti, such as

textbook fees, stationary, travel costs and ‘pocket money’<sup>2</sup>. These form an additional barrier as far the poorer wealth groups are concerned and help explain the lower rates of school attendance for these groups, especially among girls.

**Health and health services:** Although detailed information on health and health services was not collected during the current assessment, it is clear from the expenditure information that access to health care is limited for the poorer wealth groups by a lack of money, especially for the purchase of medicines. Expenditure on medicines is something that increases rapidly with increasing wealth. Average monthly expenditure on medicines by the ‘very poor’ is approximately 270 FD (\$1.5) per household per month. The ‘lower middle’ spend more than twice this amount while the ‘upper middle’ spend 7x more.

**The Expulsion of Foreign Migrants:** The expulsion of foreign migrants took place just before the current assessment. The effects noted so far have been:

- Reduced competition for low-paid employment (e.g. domestic work) and for casual labour – payment rates for these activities have increased.
- Reduced demand for goods and services, including petty trade, small restaurants and minibuses
- Loss of rental income

The net effect of the expulsions will vary by wealth group. The overall effect on the ‘very poor’ and ‘poor’ is probably not all that great, since any loss of petty trading income has in general been offset by an increase in the earnings from casual labour. Those ‘upper middle’ households running small restaurants and minibuses have probably been most affected by the migrant expulsions.

**Hazards:** Poor households in Djibouti are vulnerable to a number of hazards.

*Fire and flood:* The hazards most often referred to in community level discussions are fire and, in those areas bordering the Ambouli River, flood, following heavy rainfall. Fire is an especial hazard in the poorer *quartiers*, where most houses are constructed of wood and corrugated iron. It tends to be a seasonal phenomenon, linked to the *khamsiin* winds that blow from July to September. The main effects of both fire and flood are loss of life and loss of property, especially the destruction of buildings that the poorer groups find difficult, if not impossible, to replace.

*A failure of livestock and/or crop production in the areas supplying Djibouti* is another natural hazard that can seriously affect poorer households. The main problem is that of drought affecting the supply of livestock from Djibouti, Ethiopia, Eritrea and Somaliland, and sorghum, vegetables and *qat*, mainly from Ethiopia. Although Djibouti can access alternative sources of supply, prices will increase, with negative effects on the food security for ‘very poor’ households in particular. These effects are explored in greater detail in the scenarios section of this report, section 8.3.

*Changes in government policy* can be either positive or negative, affecting:

- **Levels of government employment, salaries and pensions.** Structural adjustment policies have had significant effects on government employment and salary levels. Further changes are likely to result from the ‘privatization’ of the public sector (begun with the port and airports).
- **The cost of food items.**
- **The cost of non-food items (water, kerosene, electricity, schooling, etc.).** The cost of water, kerosene, electricity and transport are directly controlled by government, and changes in these will have significant effects on the food security and living standards of the poor. The cost of education and health services are also under government control.

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<sup>2</sup> The fourth cost, ‘pocket money’, may at first sight seem a relatively insignificant item, both in terms of the amount of money required (20 – 100 FD per child per day), and in terms of its necessity. However, not having pocket money is something that marks a child out from the crowd, and can eventually lead to the child dropping out from school.

- **Migration into the city.** The recent decision to expel foreign migrants has had a number of economic effects, some positive, some negative. Any change in policy will tend to reverse these.

*Changes in activity in the port and construction sectors* represent a significant hazard for the poorer wealth groups that rely heavily on casual labour in these sectors for their income.

**Response Strategies:** A limited number of options are available to urban households when faced with either a reduction in income or an increase in prices:

- They may **reduce expenditure**, or switch expenditure to cheaper goods, which is obviously easier for wealthier households. One undesirable response for poorer households is to reduce expenditure by withdrawing a child from school.
- They may **seek additional gifts**, largely in the form of cooked and dry food from relatives and neighbours.
- They may **take credit**, but this is a limited option mainly for relatively better-off households that can offer the collateral, usually land, to secure the loan.
- They may seek to **diversify and increase their income**, perhaps by sending additional household members out to work, or by initiating new income generating activities (such as petty trade for a family not currently engaged in this activity). However, this is obviously not a viable strategy for the majority of households if there is a general downturn in the urban economy.

#### 1.4 Conclusion

The results of the current assessment clearly demonstrate that **a substantial proportion of the population in Djibouti lives in relative poverty by local standards, and extreme poverty by international standards**, subsisting on a total income of less than 40,000 FD (\$US 225) per household per month, or <200 FD (about \$US 1) per person per day. Although incomes are higher in absolute terms than in any of the neighbouring countries, the cost of living is relatively high in Djibouti, and differences in living standard are much less clear cut. Comparing Djibouti with Hargeisa, for example, the poorer groups in Djibouti are *in real terms* no more than 20%-35% better-off than the same wealth groups in Hargeisa (i.e. once differences in living costs are taken into account).

The government of Djibouti's vision is for a modernised economy, with a skilled and well educated workforce. One of the major challenges for the future is to ensure that the benefits of future economic growth filter down to the large unskilled labour force that currently makes up the bulk of the poorer sections of the Djibouti population. This requires that due attention and priority be given to labour intensive projects as and when these are possible.

**A further aspect of this extreme poverty is the relative vulnerability of the poor – especially the 'very poor' – to any outside shock or hazard.** Two examples have been analysed in some detail in this report; the effect of an increase in the price of an important non-food commodity (kerosene) and a drought affecting Djibouti and neighbouring areas of Ethiopia, Eritrea and Somaliland. Although in each case the shock was relatively modest, the impact on 'very poor' households was considerable, with a sharp deterioration in food security projected in both the scenarios examined (see main body of report).

Given this vulnerability, it is important that monitoring information be collected on a regular basis on the most important economic hazards, and their possible effects on income and expenditure for different wealth groups. This will facilitate the type of impact analysis outlined in the scenarios section of the current report.

#### **Recommendations for What to Monitor:**

- *Government Policy*, and its effects on salaries, pensions, the cost of food and non-food items, and migration into the city
- *Port Activities*, e.g. the number of the ships, dock labour statistics etc., since this is an important source of labour for the poorer wealth groups.

- Activity in the Construction Sector, another important source of labour and employment for the poorer groups.
- Livestock and Crop Production in Areas Supplying Djibouti Minimum Expenditure Costs, i.e. movements in the cost of the expenditure basket of different wealth groups.

Suggestions as to data source and frequency of monitoring are contained within the main body of the report.

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**Acronyms:**

FEWS NET	Famine Early Warning System Network (USAID)
FSAU	Food Security Assessment Unit for Somalia (FAO)
SC-UK	Save the Children (UK)
FD	Djibouti Franc (currency)
DINAS	<i>Direction Nationale de la Statistique</i>

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It was decided to focus initial activities on Djibouti Ville since an estimated 65% - 80% of the national population lives in the city. The exercise was expected to produce three **results**:

1. An urban-wide food economy zoning and complete urban baseline for Djibouti Ville, with detailed FEWS NET livelihood profiles giving critical information on each category of household.
2. Recommendations for a future livelihoods monitoring framework, highlighting which indicators should be monitored to provide an early indication of declining access to food and cash income, and the timeframe for monitoring them; and
3. A short final report and briefing for the Djibouti authorities, USAID and FEWS NET of results, conclusions and recommendations.

The main **activities** were:

1. Carry out primary and secondary data collection in Djibouti Ville to develop a baseline for early warning and monitoring activities
2. Liaise with, collaborate with and report back to relevant government departments and other potential FEWS NET partners.

### **3 BACKGROUND**

#### **3.1 Djibouti**

Djibouti's strategic location is the main economic asset of a country that is mostly barren. It occupies a key position controlling access from the Indian Ocean to the Red Sea, Saudi Arabia and the Suez Canal. As well as being an important transit port for the region and an international trans-shipment and refueling center, Djibouti also hosts important military and naval bases for both France and the United States. This helps ensure a steady flow of foreign assistance that is essential to help support the balance of payments and to fund development projects. The economy is based on service activities (81% of GDP in 2001), with the bulk of this derived from the servicing of the port and railway to Ethiopia, and from the military garrisons. A further 16% of GDP is accounted for by industry (most of which is construction, supplemented to a small extent by the production of mineral water and salt), and only 4% by agriculture.

Djibouti shares borders with Eritrea, Ethiopia and Somalia, and lies opposite Yemen on the Arabian Peninsula. Two-thirds (or more) of the inhabitants live in the capital city, the remainder living in smaller towns or as nomadic herders. Scanty rainfall limits crop production to fruits and vegetables, and most food must be imported.

Although GDP per capita (\$890 in 2001) is high compared to its neighbours, Djibouti ranks only slightly above them in terms of the UNDP Human Development Index (which takes into account GDP, literacy and life expectancy). Djibouti ranks 149<sup>th</sup> out of 173 countries, only slightly above Eritrea (157<sup>th</sup>) and Ethiopia (168<sup>th</sup>).

The country has two main ethnic groups, the Issa who are ethnic Somalis, and the Afar of Ethiopian and Eritrean origin. Somali domination of the government has in the past fuelled Afar resentment, and in November 1991 this spilled over into overt conflict in the traditional Afar territories in the north of the country. Although a power-sharing deal brought the main faction of the Afar Front for the Restoration of Unity and Democracy (FRUD) into government in 1994, hostilities with a radical faction of FRUD continued until 2000.

**Port Activities:** Djibouti is a major container transshipment point for ICL, with containers being transferred from larger to smaller vessels for onward shipping to the east coast of Africa and the Arabian Peninsula. Djibouti is also an important seaport for Ethiopia (with which it is connected by both road and rail), and which is the destination for over 75 per cent of the containers dealt with at the port. Since the conflict between Ethiopia and Eritrea (1998-2001), and Ethiopia's loss of access to Asab, Djibouti has handled the bulk of Ethiopia's sea-borne trade. These activities generate significant revenue in the form of transit taxes and harbour fees.

## TIMELINE OF EVENTS AFFECTING THE ECONOMY OF DJIBOUTI

Year	Month	Event
1998		May: Re-routing of Ethiopian trade from Asab to Djibouti, following war between Eritrea and Ethiopia
1999		Oct: Second phase of structural adjustment initiated (Oct 1999-Jan 2003)
2000		Feb: Peace accord signed ending internal conflict in north of the country that began in Nov 1991 Jun: Agreement signed with Dubai Port Authorities for management of port Oct: Djibouti ratifies trade accord with COMESA, ending tariffs and trade barriers
2001	Jan Feb Mar	
	Apr May Jun	↑ <u>Djibouti closes border with Somaliland</u>
	Jul Aug Sep	
	Oct Nov Dec	Return of Djiboutian refugees from internal conflict
2002	Jan Feb Mar	German and Spanish warships arrive in Djibouti to patrol Red Sea shipping lanes in support of US actions in Afghanistan.
	Apr May Jun	↓ Agreement signed with Dubai Port Authorities for management of airport
	Jul Aug Sep	Approximately 900 US troops arrive to establish base for anti-terrorist activities
	Oct Nov Dec	↑ <u>Tightening of border controls by Ethiopia</u>
2003	Jan Feb Mar	Multi-party elections
	Apr May Jun	
	Jul Aug Sep	Foreign migrants told to leave Djibouti  70,000 – 100,000 foreign migrants expelled to Ethiopia, Eritrea and Somalia

In June 2000, the Government of Djibouti signed a 20 year agreement with the Dubai Ports Authority for the management of the port. Since then, the main task has been to bring port operation practices up to international standards, and to increase transparency and efficiency. The new management have identified significant over-manning at the port, but hope, as new business is found, that excess staff can be redeployed to new activities rather than laid off. Another development has been the creation of a new free trade zone close to the old port.

Plans are well advanced for the construction of new and additional port facilities at Dooraale, just to the west of Djibouti. The plan is for a) an oil and petroleum terminal, b) a container terminal and c) a new free trade zone. Finance has been agreed for the oil terminal, which will be operated by the

Emirates National Oil Company (ENOC), and preliminary construction activities have begun. The first phase of construction is expected to last until March 2005. This is likely to provide an important source of additional employment in the construction sector.

**The Foreign Military Presence:** Djibouti, an ex-French colony, has very close links with France which provides significant amounts of aid and financial support. 2700 French troops remain stationed in Djibouti under agreements signed at independence. As part of the international 'War on Terrorism', Djibouti now also hosts US troops (900 initially, 1300-1800 currently) and is the headquarters for a multi-national Indian Ocean task force.

The presence of the US military brings direct benefits in the form of employment and payments for the use of base facilities. Approximately 500 Djiboutians are employed at the base (in the laundry, as stores assistants, cleaners, masons, carpenters, electricians, etc.) on, by local standards, relatively generous salaries. Skilled workers are paid \$1000 per month, for example, equivalent to roughly three times a typical Djiboutian salary. The US military also pays \$US 22.5 million per annum for the use of the base facilities, much of which is earmarked for improving security in Djibouti.

The French military likewise pays for the use of its facilities (\$US 34 million per annum) – a recent development since the arrival of the US forces. The French military is also a significant employer, and the presence of many French military families generates significant employment off the base for domestic staff, cooks, gardeners and watchmen.

**The Livestock sector:** Djibouti is not currently a major centre for the export of the region's livestock, although there are plans to increase activities in this sector with the construction of a large new holding ground and the establishment of proper systems for health control and certification. If this is successful, it could help generate significant employment locally, since livestock marketing generally involves a lengthy chain of transactions and a variety of support services including water, fodder, transport and veterinary services.

**Structural Adjustment and Economic Policy:** Following a period of slow growth in the early 1990s, Djibouti's GDP contracted sharply in 1995 and 1996, a crisis brought on by an accumulation of structural problems in the economy and the increased military expenditures during the internal conflict from 1991–1994. To resolve these problems Djibouti has, with assistance from the IMF and World Bank, implemented a series of structural adjustment programmes, beginning in 1996. These have involved reforms to public finances, social security, public enterprises, and education and health services.

Salaries account for a major portion of government expenditures, and savings have been achieved in a number of ways; a) through the demobilisation of 5000 former combatants, mainly in 1998-1999, b) through a reduction in the number of employees without official contracts, c) by reductions in recruitment and promotion and d) by a reduction in salary levels. One of the effects of the shortfall in government revenues has been that government salary payments have at times been delayed. Salary payments were as much as 7 months in arrears in 2001, a time when many government employees accumulated debts they have still not paid off. The situation has improved recently; salary payments are now regular, and are only 1-2 months in arrears.

Another component of structural adjustment has been to reduce the level of direct state involvement in the economy. The port has been under independent management since 2000 and the airport since June 2002. There are also plans to 'privatise' the state-owned water, electricity and telecommunication companies. One issue of concern is that this may result in the workforce in these sectors being reduced.

The effect of these measures has been to help reduce the budget deficit (to 2.1% of GDP in 2001), to reduce inflation (to 2%; 2002 estimate) and – together with the greater activity in the port and the increased foreign military presence – to help re-start GDP growth (2.13%; 2003 estimate).

Although there have been significant improvements in a number of macro-economic indicators, this has not been accompanied by any reduction in overall poverty which is closely linked to the high level of unemployment, estimated at 60% for the country as a whole. Unemployment affects especially those

under 30 years of age, many of whom are looking for their first ever employment. A recent assessment<sup>3</sup> linked unemployment in Djibouti with four factors: 1) a lack of economic activity generally, 2) high labour costs compared to neighbouring countries, 3) inadequate levels of education, which prevents many people from exploiting the opportunities that are available, and 4) the influx of migrant workers from neighbouring countries, which increases the competition for available work.

The next phase of structural adjustment, expected to run for three years from Nov/Dec 2003, will focus on structural reforms that it is hoped will encourage further economic growth and job creation in the private sector that will, in turn, reduce the level of poverty in Djibouti. The government has also elaborated, in 2000, an interim poverty reduction strategy, with the following principal objectives: a) restart economic growth, b) develop human resources, c) strengthen social safety nets and d) modernise the functioning of the state and promote good governance.

The intention is to build upon the Djibouti economy's perceived strengths and address some of its known problems. The strengths include a stable currency (the FD is tied to the US dollar<sup>4</sup>), a trustworthy and reliable banking sector and the existence of good communications and other services. The problems include the very high cost of living (electricity especially), the high labour costs locally and the lack of access to credit at affordable rates of interest.

The vision is of a modernised economy, dependent upon a skilled and well educated workforce. This has obvious implications in terms of the need for education and training. One of the major challenges for the future is to ensure that the benefits of economic progress filter down to the large unskilled labour force that currently makes up the bulk of the poorer sections of the Djibouti population. This requires that due attention and priority be given to labour intensive projects as and when these are possible.

### 3.2 Djibouti Ville

In 1888 the French started building Djibouti City on the western shore of an isthmus in the Gulf of Tadjoura, a region that had mostly been settled by ethnic Afar. Djibouti was soon designated the official outlet of Ethiopian commerce, and the French-built Djibouti-Addis Ababa railway, completed in 1917, became – and remains – of vital strategic and commercial importance to both countries.

The city is divided into five districts or *arrondissements*, each of which is divided into a number of *quartiers*. Most – but not all – *quartiers* are further sub-divided into *secteurs*.<sup>5</sup> *Arrondissements* 1 to 3 make up the older part of the city, north of the Ambouli River, and are laid out on a grid pattern. In contrast, the newer area of Balbala (*arrondissements* 4 and 5), south of the river, is laid out in a more haphazard fashion.

Balbala, which includes most of the poorer areas of the city, was developed in the 1980s and 1990s to accommodate an increasing city population and incomers from the rural areas. Settlement in most of Balbala has been relatively ad-hoc. Most people do not own the land they have settled on and essentially live in temporary housing constructed of a wood frame with corrugated iron walls and roofing. Typical plot sizes range from 60 – 120 square meters. The lack of secure land tenure poses significant problems for the residents; temporary structures are more likely to catch fire, and there is always the risk that the inhabitants may be forced to move on to make way for a new road or a new housing development.

Water is a significant problem in most parts of the city, especially in the hot summer months from May to September. Water is supplied by a system of pipes in the older parts of the city and in some recent 'formal' developments in Balbala, but more generally by public fountains and water tankers in

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<sup>3</sup> *Profil de la Pauvreté à Djibouti*, 2002

<sup>4</sup> The exchange rate in October 2003 was 177 FD per US dollar.

<sup>5</sup> The term *quartier* is used throughout the remainder of this document to refer to the level of administrative unit sampled in this assessment. This is not strictly correct as in some cases the lowest administrative unit is the *secteur*, but the term *quartier* is still used, so as to avoid constant reference to the more clumsy '*quartier or secteur*'.

*arrondissements* 4 and 5, the newest parts of the city. Water shortages can be expected to worsen in the years ahead, unless significant steps are taken to develop new water sources for the city.

Electricity is generally available throughout the city, but not in some of the poorest *quartiers*, including PK-12 in the 4<sup>th</sup> *arrondissement* and 8-Metre and Sauvage in the 5<sup>th</sup> *arrondissement*. Electricity production is by diesel generator, and is very expensive.

### **3.3 Foreign Migrants and their Expulsion**

The relative prosperity of Djibouti compared to the neighbouring countries of Ethiopia, Eritrea and Somalia has over the years attracted a large number of economic migrants to the city. Most of these were rounded up and expelled from the country towards the end of September. The migrants were mainly young men and women, some of whom came on a temporary basis, others of whom settled and subsequently had families in the city. They included:

- Domestic workers and Watchmen
- Street hawkers, selling a variety of items including clothes and small household goods
- Workers for street food vendors
- Menial casual labourers (street cleaning, digging, washing cars)
- Shoe shine, refuse disposal (mainly performed by children)
- Skilled labourers, electricians, metal workers
- Sex workers

Most of the migrants were relatively poor. They undertook a number of useful tasks that local Djiboutians were not willing to perform, at least for the payment offered (such as domestic work), but they were also widely blamed for increasing street crime and for a deterioration in the standards of sanitation in the city. For these reasons, the government's decision to expel the migrants has the general support of the population.

### **3.4 Population**

There is considerable uncertainty as to the population of Djibouti. There has not been a census since 1983, and recent estimates are mostly extrapolations based upon relatively high rates of population growth. Government estimates suggest that the population of Djibouti has since 1990 been increasing at the rate of 5.5% per year, half of which is due to natural increase, and the other half to high levels of inward migration. The government's most recent figures, for the year 2000, put the national population at 840,000<sup>6</sup>. Assuming 5.5% growth since then, the population would now be just over 1 million, of which 250,000 would be economic migrants arriving in the country since 1990. This is far higher than the number of migrants recently expelled, estimates for which range from 70–100,000. Various figures for population are available from different sources, not all of which are recent. Most of these are in the range of 600,000–700,000 for the country as a whole (with the UN estimate for 2003 being 702,000), of whom 65%-80% are thought to be resident in Djibouti Ville. This would put the population of the city – before the recent expulsions – at between roughly 400–550,000. Subtracting the number of people expelled suggests that the population of the city might now be in the range 350–450,000.

### **3.5 HIV/AIDS**

Djibouti has a national prevalence rate of 2.9%, which is very low by the standards of sub-Saharan Africa. This figure, derived from a World Bank funded study (sample size 2000) undertaken in 2001, replaces the previous prevalence estimate of 11%, which was based upon poor quality data. Infection rates are very low in the rural areas and are highest in Djibouti Ville, where the high-risk groups are prostitutes (estimated prevalence rate 45% - most of whom were, until the recent expulsions, from Ethiopia), and Djiboutians aged 15-30 years of age (6% infection rate). The spread of HIV/AIDS among young people in Djibouti is apparently linked to changing attitudes towards sexual relations.

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<sup>6</sup> *Annuaire Statistics de Djibouti* (2000)

Clearly, HIV/AIDS in Djibouti has not yet reached a level where it can be having a significant effect on income generation and the economy as a whole. There is also reason to hope that this point may not be reached within the foreseeable future, since the numbers affected are low, and the government and international community are committed to tackling the problem.

## **4 METHODOLOGY**

### **4.1 The Analytical Framework**

The approach used to develop the Djibouti urban livelihoods baseline was the Food Economy or Household Economy methodology. At the core of this approach is a focus on food security, because the poorer people are, the greater is the dominance in their lives of one factor: securing access to essential food. However, the approach is also concerned with the security of livelihoods in general, including household access to water and other non-food needs, and access to education and health services.

The primary purpose of the baseline analysis is to quantify the likely impact of a disaster on food access and other aspects of livelihood. Food access is determined by investigating, first of all for a reference or baseline year, the sum of ways households obtain food — what food they grow, gather or receive as gifts, how much food they buy, how much cash income is earned in a year, and what other essential needs must be met with income earned. Once this baseline is established, then an analysis can be made of the likely impact of a shock in a bad year. This is done by assessing how food access will be affected by the shock, what other food sources can be added or expanded to make up initial shortages, and what final deficits emerge.

The same shock or hazard will not – of course – have the same effect on everybody, and a critical first step – before beginning the analysis of food access – is to divide or stratify the population into relatively homogeneous groups, so that the analysis can be performed for each group separately. The analysis is by household, since the household is the chief unit through which populations everywhere operate for production, sharing of income, and consumption. In general, the stratification is by two factors:

1. Geography – since where a household lives usually determines their options for obtaining food and generating income, and also determines their access to markets. The output from this step in the analysis is a livelihood or food economy zone map – a map delineating geographical areas within which people share basically the same patterns of access to food (i.e. they grow the same crops, keep the same types of livestock, etc.) and access to markets.
2. Wealth – since wealth determines access to the means of production and/or income generation. Wealth groups are typically distinguished from one another by differences in land holding, livestock holding, capital, education, skills, labour availability and/or social capital. The output from this step in the analysis is a wealth breakdown.

In the field, food economists work through two levels of local contact. The first is with **key informants** at national and local level who help give an overview of geography and population, and who can guide the identification of food economy zones where relevant. The second level of contact, to which most time is devoted, is that of the ordinary population. Detailed information is sought from **community key informants**, who can give an overview of the community as a whole, and from **focus groups** representing different levels of wealth.

The food economy analytical framework is both consistent and flexible, i.e. the same basic approach can be used in a wide variety of different settings. In recent years the approach has been used to assess both rural and urban populations, pastoral, agro-pastoral and crop-dependent groups and refugees and the displaced. While the overall objective is the same – namely, to analyse the access that different groups have to food and cash income in relation to their food and non-food needs – the details of the analytical approach usually vary from one context to another. In a rural setting, it is often most useful to focus on access to food and income for different wealth groups. This is because members of a particular wealth group generally share the same level of food security and a similar limited set of

options for obtaining food and income, pursuing much the same strategies at much the same times of year. The relative homogeneity of rural livelihoods makes enquiry into sources of food and income the most efficient way to generate a rapid understanding of food security in a rural context.

The same homogeneity within wealth groups is less striking in an urban setting. Here, one source of food – the market – usually predominates and so the focus of enquiry generally shifts towards questions of cash income and expenditure. In towns, there is often a wider range of income sources for any one wealth group, and earnings may be less regular than in the countryside. However, while incomes tend to be heterogeneous in urban settings, patterns of expenditure do not. Poor families tend to spend similar amounts of money on similar things, so that an enquiry into patterns of expenditure is often the most useful approach for understanding livelihoods in an urban setting. Since urban economies are primarily market-based, and many of life's essentials have to be purchased in the town, it is also especially important for these non-food elements to be incorporated into an urban analysis.

The team undertook the following steps during this study:

- A review of secondary sources<sup>7</sup>,
- A zoning exercise during the initial workshop and with the arrondissement authorities, interviews with 29 groups of community key informants to establish a breakdown of households by wealth and income levels and interviews to establish income and expenditure patterns at household level with 75 focus groups at different income levels in 28 *quartiers* of Djibouti Ville<sup>8</sup>.
- Interviews with selected key informants to generate information on relevant related issues, including the status of the macro-economy, access to education and the prevalence of HIV/AIDS.
- Analysis of field data and compilation of the baseline picture,
- Scenario analysis looking at the potential impact of selected hazards, and
- Discussion of a monitoring system.

The assessment aimed to answer basic questions such as: who are the poor, how consumption patterns change as households become poorer, coping mechanisms and capacity, how livelihood strategies have changed following the recent expulsion of migrants, and so on. The assessment also looked in some detail at the questions of access to water and to education, but did not look in any detail at the quality of health care (which only entered into the analysis through household expenditure patterns and gaps in what households can afford).

This assessment focussed on the 12 months before the current assessment, from October 2002 – September 2003, i.e. mainly before the recent expulsion of migrants. While it might have been desirable to establish a post-expulsion baseline, this was not possible, since the expulsions occurred so recently, and it is still too early to establish with certainty their overall effects on the livelihoods of the poor.

## **4.2 Field Method and Sampling**

### *4.2.1 Zoning of the City and Selection of Quartiers*

The first step in the assessment was to prepare a preliminary zoning of the city, dividing the *quartiers* into 5 categories; Very Poor, Poor, Mixed, Middle and Rich. This was done with the assistance of the arrondissement authorities (the *Chef d'Arrondissement* and one or two colleagues). For these purposes, a 'Very Poor' *quartier* was defined as one in which the *majority* of the population can be considered 'very poor' (relative to local conditions), a 'Poor' *quartier* is one in which the *majority* of the population can be considered 'poor', and so on. A 'mixed' sector was one containing a mixture of

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<sup>7</sup> See Appendix 11.1 for a list of documents consulted.

<sup>8</sup> See Appendix 11.4 for a list of interviews (wealth breakdowns and focus group discussions).

different wealth categories, usually ‘poor’ and ‘middle’. The results of this exercise are summarised below, and described in more detail in section 5.1.1.

Since the focus of the current assessment was on the food and livelihood security of the poorer sections of the community, it was decided not to visit any of the *quartiers* classified as ‘Rich’. Given the time and logistical constraints, the assessment team was able to visit a total of 28 *quartiers* (out of 91 in the city), and these were selected roughly in proportion to the total number of *quartiers* falling into the Very Poor, Poor, Middle and Mixed categories (see table). Selection of *quartiers* to visit was purposive, based upon the desirability of visiting a range of different types of *quartier* that could be considered representative of the city as a whole. A *quartier* from the red light district was included, for example, as well as *quartiers* noted for their proximity to the main markets, their access to gardens along the Ambouli River, the number of dock workers, the location of a particular ethnic community, and so on.

#### SAMPLING IN RELATION TO TYPE OF *QUARTIER*

Type of <i>Quartier</i>	No. <i>Quartiers</i> in the City (%)	% <i>Quartiers</i> in the City (excluding rich)	No. <i>Quartiers</i> Sampled (% of Sample)
<b>Very Poor</b>	11 (12%)	14%	4 (14%)
<b>Poor</b>	30 (33%)	39%	10 (36%)
<b>Mixed</b>	24 (26%)	31%	11 (39%)
<b>Middle</b>	12 (13%)	16%	3 (11%)
<b>Rich</b>	14 (15%)	-	-
<b>Totals</b>	91 (100%)	100%	28 (100%)

Another aspect of the sampling scheme was to spread the sample across the 5 *arrondissements* roughly in proportion to estimated population (see table below). This aspect of the sampling was not entirely successful as far as the 4<sup>th</sup> and 5<sup>th</sup> *arrondissements* was concerned, because of the difficulty of locating associations with which to work in this part of the city. However, taking Balbala as a whole there was little problem; 47% of the sample was taken from Balbala, which has an estimated 50% of the city’s population. A full list of the *quartiers* visited is given in appendix 11.3.

#### SAMPLING IN RELATION TO POPULATION

<i>Arrondissement</i>	% City population according to DINAS <sup>[1]</sup>	Number of <i>Quartiers</i> Sampled	% of Sample
<b>1<sup>st</sup></b>	14%	3	11%
<b>2<sup>nd</sup></b>	26%	8	29%
<b>3<sup>rd</sup></b>	10%	4	14%
<b>4<sup>th</sup></b>	30%	5	18%
<b>5<sup>th</sup></b>	20%	8	29%
<b>Totals</b>	100%	28	100%

[1] *Direction Nationale de la Statistique*

#### 4.2.2 Interviews at Community Level

The bulk of the information for the food economy assessment was collected at community level, through two types of interview:

- a) **Wealth Breakdown interviews** with members from one Community Association in each of the *quartiers*. These associations were selected with the assistance of the *arrondissement* authorities according to the following criteria; that they should be active in and knowledgeable of the selected *quartier*.
- b) **Focus Group Interviews** with representatives from the different wealth groups within the community. Typically, interviews were undertaken with a mixed group of men and women from between 4–6 households. Participants in these interviews were selected by those taking

part in the wealth breakdown interview, based upon the descriptions developed for the different wealth groups in the local community. Focus group interviews were organised for later in the day after the wealth breakdown interview (or the following day), to allow sufficient time for the associations to select and make appointments with participants.

The objective of the **wealth breakdown interviews** was to obtain an overview of conditions in the *quartier* and to prepare a wealth breakdown for the *quartier* population. The following topics were discussed:

- Characteristics of the principal wealth groups in the *quartier* (sources of income, ownership of assets, access to water, etc.)
- The % of community households falling into each wealth group
- Intra-community support and gifts
- History of the community, including a timeline of recent events affecting the community (e.g. timing of floods, fires, etc.)
- Seasonal variations in income and expenditure
- Linkages with rural areas

Further detail on a number of these questions was collected during the **focus group interviews**, but the emphasis in these interviews was on assessing, over the year as a whole:

- Sources of food and total food access (i.e. amounts of food purchased by a typical household in the wealth group, amounts received as gifts, etc.)
- Patterns of expenditure (amounts spent on food and non-food items, including education and health)
- Sources and amounts of income

The table summarises the types and number of interviews conducted at community level during the assessment. Further detail is provided in appendix 11.4.

#### NUMBER OF INTERVIEWS CONDUCTED AT COMMUNITY LEVEL

Wealth Breakdown	Focus Groups					Total:
	Very Poor	Poor	Lower Middle	Upper Middle	Better-Off	
29 <sup>[1]</sup>	10	25	25	12	3	75

#### Note

[1] 29 wealth breakdown interviews were undertaken in 28 *quartiers*. In one *quartier*, two associations were visited in error – the intention had been to visit a 29<sup>th</sup> *quartier*, but in the event the community association visited belonged to one of the *quartiers* already included in the sample. In the end, the 29<sup>th</sup> *quartier* was dropped.

Since an average of 4-6 households were represented in each focus group interview, a total of approximately 400 households were sampled.

### 4.3 Participants

The current exercise was undertaken jointly with the Government of Djibouti, and three government ministries/departments were represented on the team; the Ministry of the Interior, the Ministry of Agriculture and the Ministry of Transport and Communication (Department of Meteorology). FEWS NET was also fortunate in having the assistance of four experienced field staff from two organizations undertaking similar work in neighbouring countries: a) **FSAU/FAO**, the Food Security Assessment Unit for Somalia, an FAO project based in Nairobi with field staff throughout Somalia, and b) **Save the Children – UK**, which is implementing an early warning and food security surveillance project in the neighbouring Region 5 of Ethiopia.

#### 4.4 Assessment Timeline

Initial set up and planning activities were undertaken by the FEWS-NET Somalia Representative (seconded to the Djibouti exercise), between 18 – 28 September. A preliminary workshop to introduce the approach to government participants and to orient the team as a whole was organized and held from 29 September to 1 October. Discussions included: how urban household food economy work is different from rural, what year to use as a baseline, and the link to future monitoring. In addition, draft interview formats for wealth breakdown and household-level interviews were reviewed and revised.

The field work itself was undertaken over a two week period from 4 – 16 October, which included two days to consolidate information and conduct a preliminary analysis (mainly to identify remaining key questions and gaps). Final analysis was conducted between 17-21 October.

A presentation of findings was made in Djibouti at the Ministry of Agriculture on 22 October, to an audience of about 20 people from various government departments and international organizations.

### 5 THE FOOD ECONOMY BASELINE

#### 5.1 The Urban Food Economy

##### 5.1.1 Results of the Zoning Exercise

With the help of the arrondissement authorities, the city was divided into a total of 91 *quartiers*, classified into 5 wealth categories. Overall, just under half of *quartiers* were classified as either ‘Very Poor’ or ‘Poor’, while about 1 in 6 was classified as ‘Rich’.

The results of this exercise confirmed what is already well known; that the 1<sup>st</sup> Arrondissement is in general the wealthiest, followed by the 2<sup>nd</sup> and 3<sup>rd</sup> Arrondissements, with Balbala the poorest area of the city. However, within each arrondissement, a range of types of *quartier* are to be found. There are, for example, ‘Very Poor’ and ‘Poor’ *quartiers* in the 1<sup>st</sup> Arrondissement (e.g. *Quartiers* 1, 2, 3 and 4), and ‘Middle’ *quartiers* in Balbala (e.g. the ‘housing estates’ of Cité Cheikh Osman and Luxembourg).

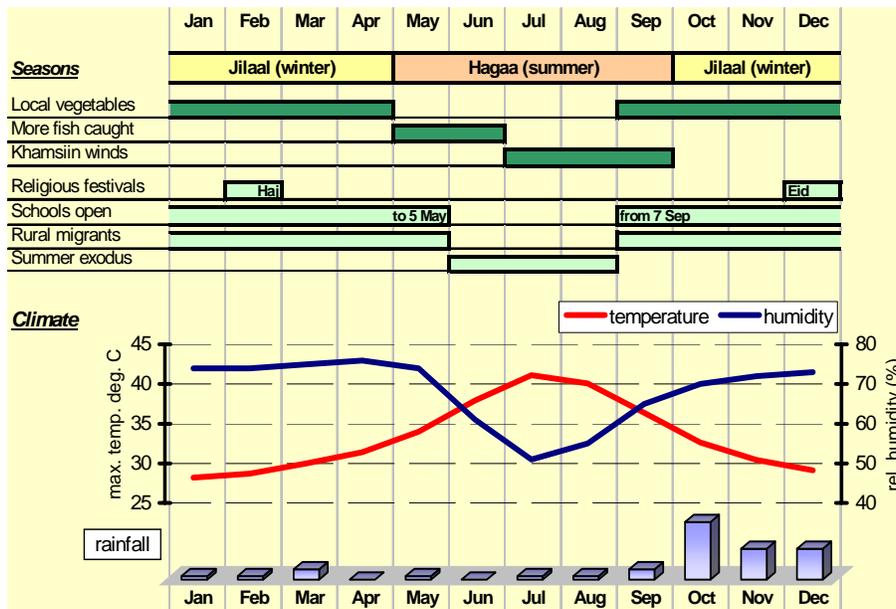
#### RESULTS OF THE ZONING EXERCISE

Type of <i>Quartier</i>	Arrondissement					Total	
	1st	2nd	3 <sup>rd</sup>	4th	5 <sup>th</sup>	<i>Quartiers</i>	%
Very Poor	1	0	0	4	6	11	12%
Poor	3	7	4	6	10	30	33%
Mixed	0	7	7	8	2	24	26%
Middle	2	5	2	1	2	12	13%
Rich	4	7	3	0	0	14	15%
Totals	10	26	16	19	20	91	100%

##### 5.1.2 Seasonal Calendar

High temperatures combined with high levels of humidity are the dominant climatic factors affecting life in Djibouti Ville. The most difficult period is from mid-May to mid-September (the peak of the *Hagaa* or summer season), when maximum temperatures reach 40°C and humidity remains consistently above 50%. Water shortages occur at this time of year, and electricity consumption tends to be high – especially for those fortunate enough to have air conditioning. The schools close, and many people – if they can afford to - leave the city to spend these difficult months elsewhere, including the highlands of Djibouti, Dire Dawa (Ethiopia), Asab (Eritrea) or Hargeisa or Boroma (Somaliland). *Hagaa* is also the time of year when many poorer seasonal migrants from rural areas return home, partly because there are fewer employment opportunities in the city, and partly because rural milk production increases at this time of year.

Rainfall in Djibouti is extremely irregular. There tends to be some rain in November and December each year, but there is very little consistency as far as the other ten months of the year are concerned.



When it does rain, however, it can rain very heavily indeed. Taking the period 1992 – 1997 as an example, rainfall during just 4 of the 72 months accounted for almost two thirds of the total for the whole period, with on each occasion more than 2 meters of rain falling in the space of a week or so. Such heavy rain can cause significant problems of flooding, especially in the *quartiers* along the banks of the Ambouli River. These *quartiers* can also be affected by rainfall and run-off from further inland. Another problem associated with rain in Djibouti is that of malaria, since mosquitoes breed rapidly in the stagnant water that accumulates after moderate to heavy rain.

A more consistent problem associated with the weather is that of fire, which can spread rapidly in the confined poorer areas of the city where most houses are constructed of wood and corrugated iron. Such fires are a seasonal phenomenon, associated with the hot dry *khamsiin* winds that blow from July to September.

The timing of two major religious festivals has a significant effect on the demand for both meat and clothes. One of these, the *Haj*, currently falls at the end of February, while the other, *Eid* (at the end of Ramadhan), currently falls at the beginning of December. These are periods of increased expenditure on clothing - for children, especially - along with the beginning of the school year.

The availability of local fish and vegetables varies seasonally. Fish – which is not in fact eaten regularly by the majority of the population – tends to be plentiful during the early months of the *Hagaa* or summer season. Availability then declines from July to September, as fishing is hampered by the strong *hamsiin* winds at this time of year. Local vegetable production (in the Ambouli Jardins district) is restricted to the *Jilaal* season. While obviously affecting the income of the vegetable growers themselves, this has little impact on the city as a whole, since most vegetables and fruit are sourced from Ethiopia and – to a limited extent – Somaliland, and supply and prices are relatively stable throughout the year.

### 5.1.3 Markets and Market Prices

As a sea port, Djibouti has good access to international markets, which helps ensure a steady supply of basic food commodities such as rice, wheat flour, pasta, sugar and vegetable oil at relatively stable prices. Other food items, such as vegetables, fruit and sorghum come mainly from neighbouring Ethiopia, either by train from Dire Dawa or by road. Vegetables and fruit arrive in the largest quantities each Wednesday, the day of the main vegetable and fruit market. There are four large daily markets in different parts of the city, with little variation in prices between these.

Prices in Djibouti fluctuate in line with production conditions in neighbouring Ethiopia and Somaliland (with drought especially significant, of course), but any effect tends to be buffered by Djibouti's ready access to alternative markets, including Yemen in the case of vegetables, fruit and

even *qat* (the mild stimulant leaf from Ethiopia that is chewed by many Djiboutians each afternoon) and a number of places including the far east in the case of sorghum.

Livestock consumed in Djibouti come mainly from within the country itself or from the border areas of neighbouring states (Somaliland, Region 5 of Ethiopia and Eritrea). Given the lack of water and grazing, few milking animals are kept within reach of the city, and the supply of fresh milk is very limited. Most households therefore purchase whole milk powder.

Rather surprisingly, meat prices do not fall in Djibouti in a ‘bad’ year – which is what would be expected if more and poorer quality animals were coming onto the market. This is explained by two factors; 1) in a bad year livestock, especially weak animals, cannot make the difficult journey into the city on foot due to the lack of water and fodder, and animals have to be brought in by truck (increasing transport costs). 2) Djiboutians traditionally do not like to consume weak animals, and in ‘bad’ years will look further afield in search of better quality meat, often as far away as Burao in central Somaliland. The effect is, obviously, to increase prices.

Prices of a limited number of items are controlled in Djibouti. These are:

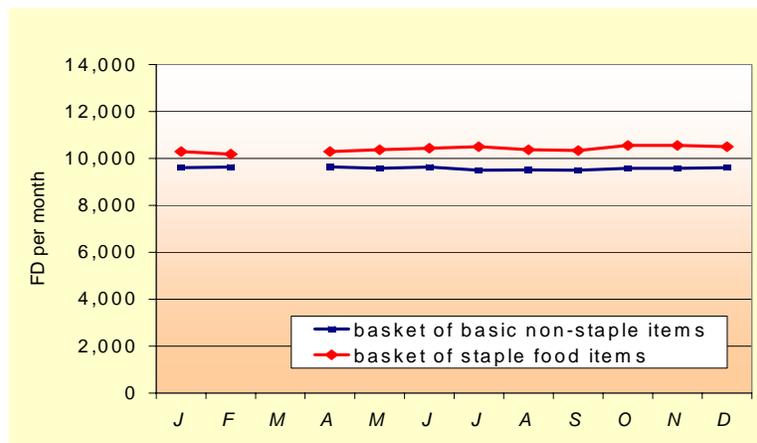
- Kerosene
- Electricity
- Water
- Transport (i.e. minibus prices)

The price of kerosene – an essential commodity for cooking and lighting in many households - has only recently been controlled, and has fallen from 150 FD per liter one year ago to an average of about 80 FD per liter now. The official price is 60 FD per liter. These price reductions are the result of the government removing the tax on kerosene.

In most years, prices for basic food and non-food items are relatively stable, as illustrated by the following graph, which shows monthly variations in the price of two baskets of basic items purchased by the ‘very poor’ in Djibouti, taking 2002 as an example. These two baskets are:

- a) A basket of basic staple food items including rice, pasta, wheat flour, oil and sugar, in the quantities typically purchased by the poorest households.
- b) A basket of other basic items, including kerosene, soap, meat, vegetables, tea, salt, etc., once again in the quantities typically purchased by the poorest households.

### **SEASONAL VARIATIONS IN THE COST OF BASIC ITEMS PURCHASED BY VERY POOR HOUSEHOLDS IN DJIBOUTI, 2002**



Data Source:

Expenditure baskets: This assessment

Market prices: DINAS

Details of the composition of these baskets, which were derived from the results of the current assessment are provided in Section 5.5 and Annex 11.5.

#### 5.1.4 Links with Rural Areas

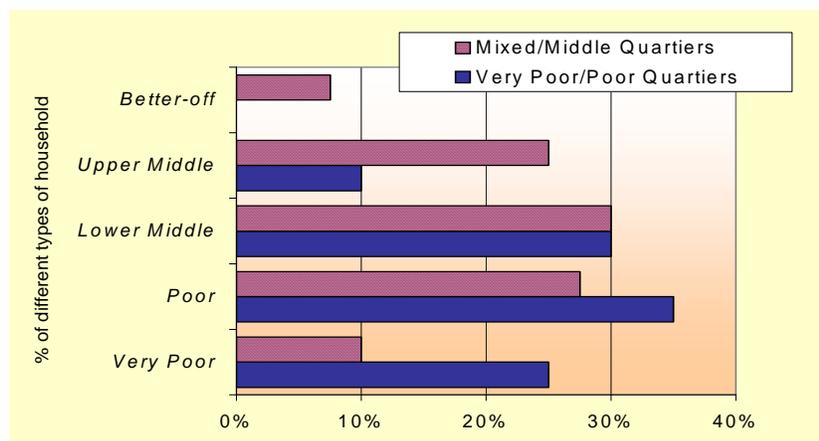
The older parts of the city are occupied by an urban population of long standing that has relatively few links with the rural areas of Djibouti. The links are somewhat stronger in Balbala that has been partly settled by relatively recent incomers from the countryside. The flow of assistance is almost entirely from the town to rural areas, with gifts of food and money being relatively common. Another frequent type of assistance is for an urban household to take in one or more rural relatives so that they can attend school in the city.

There is also a regular pattern of seasonal migration into Djibouti, mainly of young men looking for casual work in the winter months. These migrants tend to evacuate the city in the summer, partly because less work is available, and partly because milk production improves in the rural areas at this time of year. These seasonal movements are intensified in 'bad' years, when larger numbers come into the city looking for work or simply seeking assistance.

## 5.2 Wealth Breakdown

Based upon the information provided at community level, five different wealth groups were defined, each with an associated level of income (see table). It should be noted that the definitions are those provided by the communities themselves, i.e. they are relative to local conditions, and reflect local perceptions of poverty. Results are presented separately for two groups of *quartiers*, Very Poor/Poor and Middle/Mixed.

**WEALTH BREAKDOWN BY TYPE OF *QUARTIER***  
**DJIBOUTI VILLE**



Type of Household	Income (FD per household per month)	Type of <i>Quartier</i>	
		Very Poor/Poor <i>Quartiers</i> (% of households)	Middle/Mixed <i>Quartiers</i> (% of households)
<b>Very Poor</b>	15 - 25,000	20 – 30%	5 – 15%
<b>Poor</b>	25,000 - 40,000	30 – 40%	25 – 35%
<b>Lower Middle</b>	40,000 - 80,000	25 – 35%	25 – 35%
<b>Upper Middle</b>	80,000 - 150,000	5 – 15%	20 – 30%
<b>Better-off</b>	>150,000	0%	5 – 10%

Not surprisingly, in the *quartiers* classified as Very Poor/Poor, a majority of households (approximately 60%) fall into ‘very poor’ and ‘poor’ categories. In these *quartiers*, the remainder of the population is considered ‘middle’ and none as ‘rich’. In the Middle/Mixed *quartiers*, on the other hand, the picture is reversed, with roughly 60% of households in the ‘middle’ and ‘better-off’ categories, and about 40% in the ‘very poor’ and ‘poor’. The relatively large numbers of ‘poor’ households in these *quartiers* is explained by the fact the most of the *quartiers* included in the sample were Mixed rather than Middle.

It was not possible to generate an overall wealth breakdown for the city of Djibouti, because this would require detailed information on population by *quartier*, which was not available to the assessment team.

### 5.3 Income

Most households in Djibouti Ville generate income from four broad categories of activity; casual labour, petty trade, salary/pension or business/commerce. Casual labour (an activity for men) and petty trade (an activity for women) are primarily activities of the ‘very poor’, ‘poor’ and ‘lower middle’ groups, while business/commerce is the preserve of the ‘upper middle and ‘better-off’. Salaries cover a wide range, and households with a salary can fall into any of the groups, although few fall in the ‘very poor’ – since most workers, with the exception of cleaners, watchmen and domestic workers, earn more than 25,000 FD per month, the cut-off between the ‘very poor’ and ‘poor’ categories.

In general the opportunities for **casual labour** in Djibouti are fairly limited, with port work, building construction and market portering the main types undertaken.

The port is an important source of casual labour, not only in the poorer *quartiers* close to the port (such as Arhiba), but also in more distant Balbala. The availability of dock work varies with the number of ships in port, and dockers can expect to work between 1-3 weeks a month. Payment rates vary according to the cargo – with the highest payments being made for the unloading of food aid (for Ethiopia) and other relief goods (approx. 1,500 FD per day).

There is not a great deal of construction work available, which means that any major construction project is especially significant. The social housing project at Hoden (for the construction of 1000 houses) is an important current source of work, and there are hopes that the construction of the new port facilities at Dooraale will likewise generate significant demand for casual labour in the future.

It is no accident that mid- to high-level **salaries** and **business activities** often go together; since it is a salary that often provides the capital required to start-up the business, and to bridge temporary gaps in cash-flow as and when these arise.

Quite large numbers of households have one or more members receiving a **pension**, which is often the only source of income for poorer families in some of the older parts of the city. There are several different types of pensioner:

- Private sector pensioners
- Djibouti government and army pensioners
- French government and army pensioners

Quite where a household falls on the ‘wealth scale’ depends not only upon the types of activity undertaken, but also the number of people engaged in income generation (typically 1-2), and the level of activity undertaken. Petty trade, for example can generate an income of anywhere between 500 and 1,300 FD per day, depending upon the items traded (with petty trading in *qat*, for example, generating more income than petty trading in bread or prepared foods). Further information on the income generating activities of different wealth groups is given the table below and in Appendix 11.5.

Appendix 11.6 contains information on levels of employment in different sectors of the economy.

### SOURCES OF INCOME BY WEALTH GROUP, OCTOBER 2002-SEPTEMBER 2003

<b>VERY POOR</b> <i>15 – 25,000 FD per month</i>	<u>1 income source per household:</u> <b>Petty trade</b> - school snacks, bread, prepared foods, vegetables, tea stalls <b>Casual labour</b> - dockers, construction workers, market porters
<b>POOR</b> <i>25 – 40,000 FD per month</i>	<u>1 income source per household:</u> <b>Salary/Pension</b> - cleaners, taxi drivers <b>Petty Trade</b> - <i>Qat</i> , small kiosks, meat sellers <u>2 income sources per household:</u> <b>Petty Trade and Casual Labour</b>
<b>LOWER MIDDLE</b> <i>40 – 80,000 FD per month</i>	<u>1 income source per household:</u> <b>Salary/Pension</b> - many private sector and port employees, non-commissioned officers, assistant teachers, government drivers <u>2 income sources per household:</u> <b>Petty Trade and Skilled Casual Labour</b> - electricians, masons
<b>UPPER MIDDLE</b> <i>80-150,000 FD per month</i>	<u>1 income source per household:</u> <b>Salary</b> - teachers, nurses, port workers, government employees <u>2 income sources per household:</u> <b>Salary and Business</b> - small retail shops and restaurants
<b>BETTER-OFF</b> <i>&gt;150,000 per month</i>	<u>1 income source per household:</u> <b>Salary</b> - senior government employees <b>Business</b> - <i>qat</i> importers/distributors, larger shops, bakers <u>2 income sources per household:</u> <b>2 x Salary</b> <b>Salary and Business</b> - minibuses, medium-sized shops, clothes retailers

**Rent** and **remittances** are two other sources of income for a minority of ‘middle’ and ‘better-off’ households. Rental income was more common before the recent expulsion of migrants. Although a significant number of families have one or more relatives living and working abroad, remittances are a much less significant feature of the Djibouti economy than in neighbouring Somalia, for example.

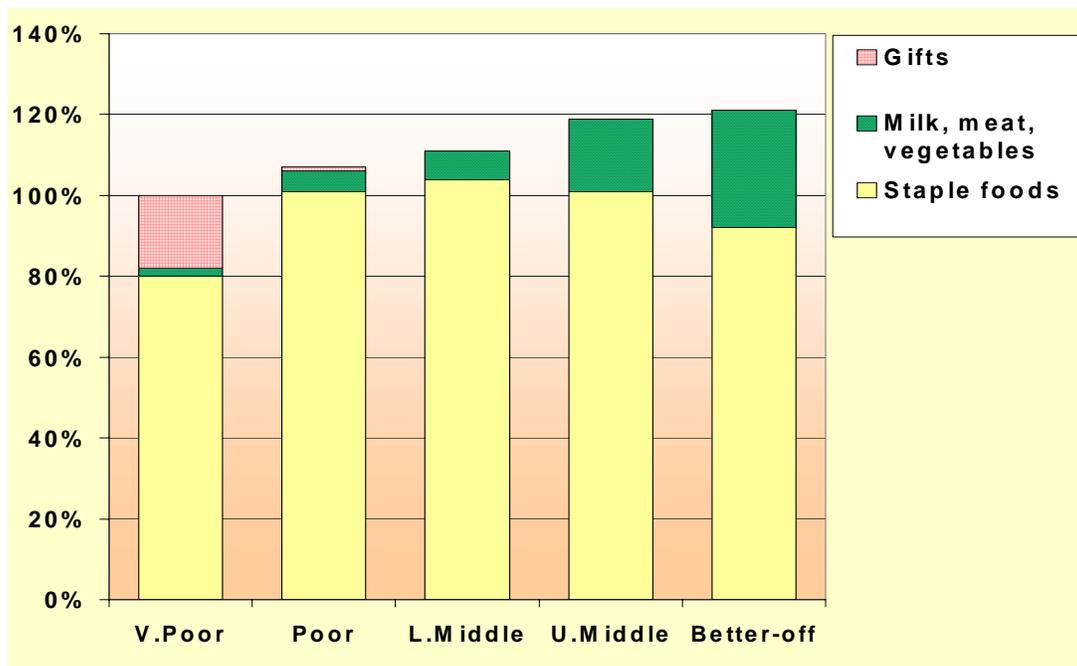
**Child Labour** does not appear to be very common, and is not therefore included among the typical sources of income for any of the wealth groups.

The income ranges presented in the table represent average figures for the last 12 months before the assessment, i.e. October 2002 – September 2003. There is some seasonal variation in income, and this is discussed in section 5.6. The effect of the migrant expulsion on income is discussed in section 6.

## 5.4 Sources of Food

There are only two sources of food for the majority of households in Djibouti: purchase and gifts. The results of the current analysis indicate that all five wealth groups have, on average, been able to access 100% of their minimum food needs over the last 12 months. In the case of the 'very poor', this is only possible because of the gifts, usually of cooked food, that they receive from relatives and neighbours. In fact, so prevalent is the giving of gifts that most 'middle' and 'better-off' households routinely cook more than they themselves will eat, in the expectation of sharing with other less well off households in the neighbourhood.

### FOOD SOURCES OF DIFFERENT WEALTH GROUPS DJIBOUTI VILLE, OCTOBER 2002-SEPTEMBER 2003



Note: In the chart total food access is expressed as a percentage of minimum dietary energy requirements. Middle and better-off households have access to more than their minimum requirement, part of which is given as gifts to neighbours and relatives, and to guests.

Not unexpectedly, total food access increases with increasing wealth, as does the consumption of more expensive items such as meat, milk and vegetables (in the graph purchased calories are divided into two categories; staple foods and milk, meat and vegetables). These latter items contribute negligible numbers of calories to the diets of the 'very poor' and 'poor', but may contribute up to a fifth of calories consumed by the 'better-off'. The implication of this, of course, is that the quality of the diet consumed by the 'middle' and 'better-off' groups is very much better than that of the 'poor'.

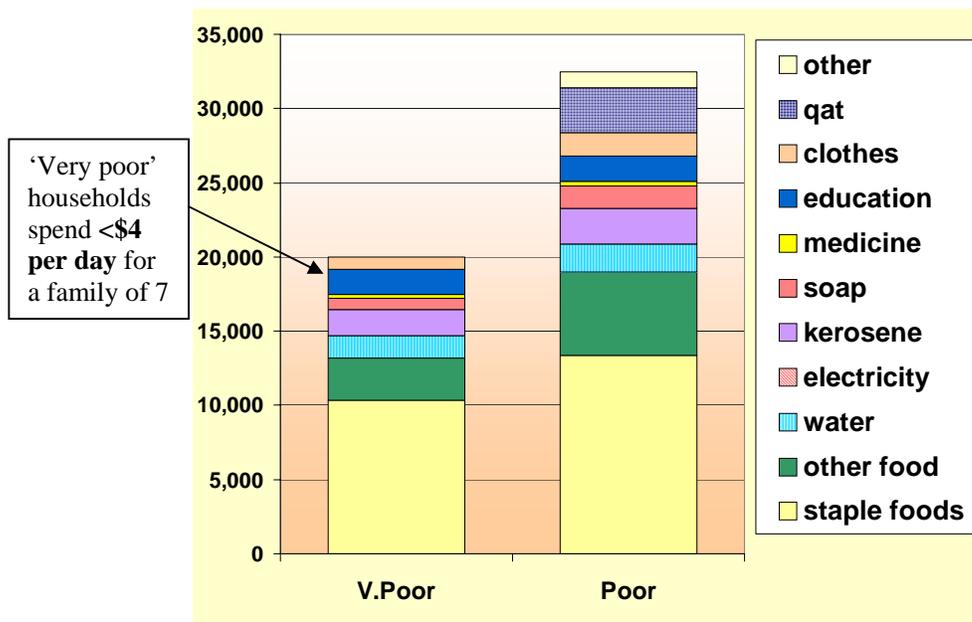
In the case of the 'very poor' and 'poor', almost all the calories consumed come in the form of the basic staple foods: rice, pasta, sorghum, wheat flour, oil, sugar, bread and beans. Of these, oil provides between 10-15% of calories, while sugar, which represents one of the cheapest sources of calories in Djibouti, and is consumed in large quantities, provides 15-20% of calories.

## 5.5 Expenditure

### 5.5.1 'Very Poor' and 'Poor' Households

Given their very limited incomes, the 'very poor' and 'poor' purchase little more than the essentials required for survival. Total expenditure on food accounts for roughly 60% of income, with the majority of this used to purchase basic calories in form of cereals, oil and sugar. In the case of the 'very poor' this level of expenditure is sufficient to cover no more than 80% of minimum food energy requirements (section 5.4).

### EXPENDITURE PATTERNS OF 'VERY POOR' AND 'POOR' HOUSEHOLDS DJIBOUTI VILLE, OCTOBER 2002-SEPTEMBER 2003



Please note that each figure is the mid-point of a range.

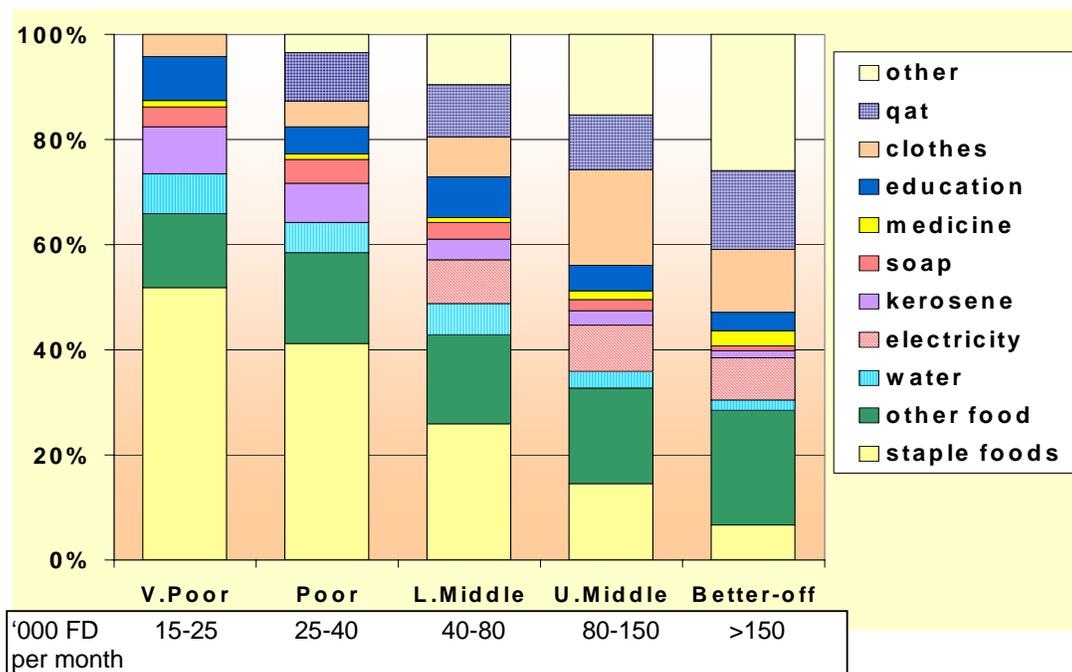
After food, a substantial proportion of remaining income is spent on three basic items; water, kerosene and education. Each of these is discussed separately in later sections of this report. The 'very poor' and 'poor' are not in a position to afford electricity, and expenditure on medicine is insignificant.

For the 'poor', there is one additional significant purchase – *qat*, which accounts for about 10% of income (equivalent to the purchase of 300 FD of *qat* 10 days per month). The 'very poor' do not purchase *qat*, but may receive it in the form of gifts.

### 5.5.2 All Five Wealth Groups Compared

As wealth increases, the absolute amount of money spent on almost all items increases as well. There are, however, striking differences in the overall pattern of expenditure, with basic items such as staple food, water, kerosene and soap accounting for a much reduced *proportion* of total expenditure, while relative expenditure on clothes, medicine and 'other' (e.g. transport, domestic staff, gifts) tends to increase.

**EXPENDITURE PATTERNS OF DIFFERENT WEALTH GROUPS  
DJIBOUTI VILLE, OCTOBER 2002-SEPTEMBER 2003**



Electricity appears for the first time as an item of expenditure for the ‘lower middle’, accounting for roughly 5% of total expenditure of ‘middle’ and ‘better-off’ groups. Items that remain relatively constant in proportion to the total include ‘other food’ (milk, meat, vegetables and fruit) and *qat*, which represents 10%-15% of expenditure for all groups apart from the ‘very poor’.

Further details of the amounts and patterns of expenditure by different wealth groups are given in Appendix 11.7.

### 5.5.3 Water

There are three types of water supply system in the city, a) piped (to individual homes), b) public fountain and c) water tanker. The piped system covers the whole of *arrondissements* 1 and 2 and certain *quartiers* in the other three *arrondissements*. For those areas without a piped system, public fountains are the main source of supply in *arrondissements* 3 and 4, while tankers are the main source in *arrondissement* 5 (the most recently developed part of the city). In some of the *quartiers* bordering the Ambouli River there may also be access to water from local wells, although this is often of poor quality. Further details of the water supply system by *quartier* visited are provided in Appendix 11.8.

The main characteristics of each system are described in the table below.

## MAIN CHARACTERISTICS OF THE WATER SUPPLY SYSTEMS IN DJIBOUTI

Type of System	Description	Seasonality of Supply and Payment
<b>Piped</b>	<p>Pipes and taps are provided to individual households. Bills are presented every 2 months.</p> <p>In certain <i>quartiers</i>, very poor and poor households may not have pipes installed, in which case they are either given or buy water from their neighbours.</p>	<p>In theory, water consumption and payment should increase in the summer.</p> <p>In practice, water shortages are common in summer, and households may not be able to access as much water as they would like. Other reasons why bills may not differ between winter and summer are a) a lack of staff to read meters, and b) the poor condition of many meters that no longer work properly.</p>
<b>Public Fountains</b>	<p>There are two types of public fountain:</p> <p>a) Public taps with 'open access' for all.</p> <p>b) The 'plastic-pipe' system. In this case plastic pipes carry water to different parts of the <i>quartier</i>, with each pipe being shared between approximately 10 households</p>	<p>Public fountains often run dry in the summer, and water may only be available for a few hours in the middle of each night.</p> <p>In case a) the only payment is for the watchman, and is typically 500 FD per household per month. There is no seasonal variation in payment.</p> <p>In case b), payment is made for the watchman and for the replacement of the plastic pipes, which is required every few months. Typically, water provided under this system costs between 30-50 FD per 200 l drum. There may be little seasonal variation in expenditure because of the shortage of supply in the summer.</p>
<b>Tankers</b>	<p>Tanker lorries provide water directly to households, who store it in 200 l drums.</p>	<p>Tankered water costs 100 FD per 200 l. Expenditure increases in the summer for those households able to afford additional purchases.</p>

The cost of water varies significantly by system of supply. Water delivered by the tanker system is 8 times more expensive than piped water.

Type of System	Cost per cubic meter
Piped	<p>62 FD (total consumption 0-30 m<sup>3</sup>)</p> <p>102 FD (total consumption 31-80 m<sup>3</sup>)<sup>[1]</sup></p> <p>Minimum charge = 1240 FD per 2 months<sup>[2]</sup></p>
Public Fountains	
a) 'open access' system	100 FD <sup>[3]</sup>
b) 'plastic-pipe' system	300 FD <sup>[4]</sup>
Tankers	500 FD

Notes:

[1] There is a tiered system of charges according to the level of use. These are the two lowest tiers, which most 'very poor' and 'poor' households will pay – provided they have access to piped water. Households pay 62 FD per m<sup>3</sup> for the first 30 m<sup>3</sup> used, 102 FD for the next 50 m<sup>3</sup> used, and so on.

[2] There is a minimum charge, equivalent to 20 m<sup>3</sup> of water, every two months, irrespective of the level of use.

[3] Assuming 5 m<sup>3</sup> of water used per month, and a watchman's charge of 500 FD per month

[4] Assuming 5 m<sup>3</sup> of water used per month, a watchman's charge of 500 FD per month and a charge of 40 FD per 200 l.

The following table summarises levels of water use for 'very poor' and 'poor' households, for the 'plastic-pipe' and tanker systems, based upon the typical monthly expenditure on water reported in this assessment.

## ESTIMATED EXPENDITURE ON WATER AND CONSUMPTION BY THE POOR

	Expenditure FD per month	Consumption	
		m <sup>3</sup> per household per month	Litres per person per day <sup>[1]</sup>
<b>Very Poor</b>			
Public Fountain: 'Plastic-pipe' system	1500	5	24
Tanker	1500	3	14
<b>Poor</b>			
Public Fountain: 'Plastic-pipe' system	1875	6.9	33
Tanker	1875	3.75	18

Notes:

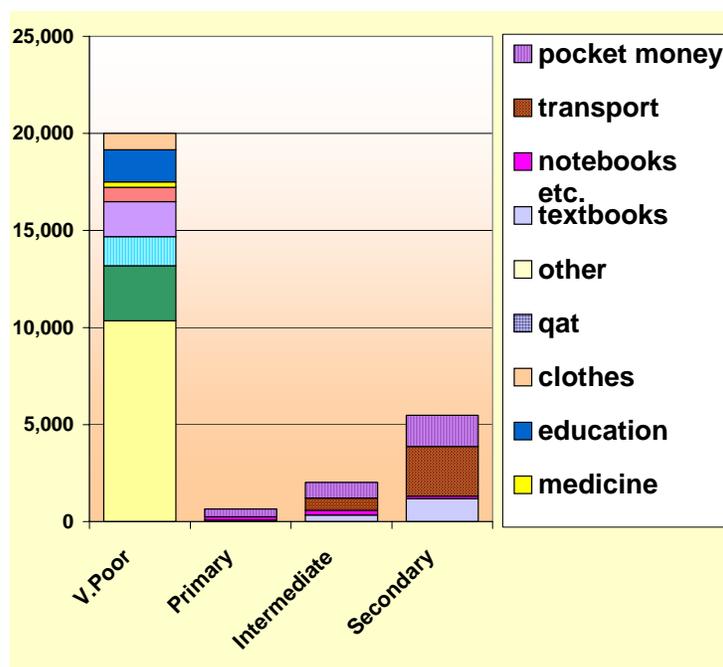
[1] Household size = 7

These figures may be compared to UNHCR's recommendations with regard to water supplies in emergency situations; 'the minimum survival allocation is 7 litres per person per day, which should be increased to 15-20 litres per person per day as soon as possible. Minimum water needs vary: it increases with air temperature and physical exercise<sup>9</sup>.' Bearing in mind the extreme heat in Djibouti at certain times of year, it is clear that the 'very poor' and 'poor' groups are living at or just above the minimum subsistence level as far as water is concerned, especially those supplied by the water tanker system.

### 5.5.4 Education

Although education is, in theory, free, there are in fact very significant 'hidden' costs associated with sending a child to school in Djibouti. These are very keenly felt by all households, but especially by the poor, for whom education is usually the only hope for a better future for their children and for themselves (since it is their children that will care for them in old age).

## THE COST OF EDUCATION COMPARED WITH TOTAL INCOME AND EXPENDITURE OF THE 'VERY POOR' (FD PER HOUSEHOLD PER MONTH)



The costs of education fall into four categories: textbooks, notebooks and pens, transport and ‘pocket money’. These vary between the different types of school, being lowest at primary level and highest for secondary school children. They are compared with the total income and expenditure of the ‘very poor’ in the above figure (all figures expressed in FD per household per month, with total annual education costs averaged over the year as a whole). Further details of these costs are given in Appendix 11.9.

All schools make a charge to cover the cost of replacing **textbooks**, and this is payable at the beginning of the school year in September. In theory text book costs are waived in the case of a family where nobody is employed, and if a *Certificat d’Indigence* is issued by the *Arrondissement*, but the system has been widely abused and most schools no longer accept these certificates. In a very small minority of cases (less than 1%), the school board may waive the text book fees in especially needy cases.

The other direct costs of education – **notebooks and pens** – are a regular but fairly minor cost spread throughout the year. The more significant hidden costs are transport and ‘pocket money’. **Transport** is a significant item of expenditure except in the case of primary schooling, since many children do not live close to an intermediate school, and almost all children take the bus to secondary school.<sup>10</sup> The fourth cost, **‘pocket money’**, may at first sight seem a relatively insignificant item, both in terms of the amount of money required (20 – 100 FD per child per day), and in terms of its necessity. However, vendors selling snacks outside schools are a common sight in Djibouti Ville, and children must take a small amount of money with them to buy these snacks. Not having pocket money is something that marks a child out from the crowd, and can eventually lead to the child dropping out from school.

The results of these calculations suggest that sending one child to intermediate school costs very roughly 10% of ‘very poor’ income, with secondary schooling costing twice as much. When viewed in the context of the overall pattern of expenditure (most of which is required for basic items such as food, water and kerosene), it seems unlikely that many ‘very poor’ households can afford to send a child to intermediate school, while secondary school is clearly beyond their means.

To some extent the analysis presented in the above graphic is misleading, in that expenditure is expressed as an average monthly figure, as though it were spread evenly throughout the year. This is not the case, since textbook fees have to be paid in September. Clothing, another hidden cost not included in the above analysis, also has to be bought at the start of the new school year<sup>11</sup>. How these seasonal variations in expenditure are dealt with is covered in the following section.

## 5.6 Seasonal Variations in Income and Expenditure

There are seasonal variations in both income and expenditure that affect the various wealth groups in different ways. On balance, the overall impact on ‘very poor’ and ‘poor’ livelihoods is limited, since reductions in casual labour and petty trading income in the summer are largely offset by reduced expenditure on items such as schooling and clothes. Electricity is the major expenditure item that varies seasonally; this is a significant expenditure item for the ‘middle’ and ‘better-off’ groups, but not the ‘poor’, since they do not have electricity.

### 5.6.1 Income

Opportunities for casual labour and petty trade are likely to decline in the summer, reducing the income of many ‘very poor’ and ‘poor’ households.

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<sup>9</sup> United Nations High Commission for Refugees, *Handbook for Emergencies*, 2<sup>nd</sup> edition, UNHCR, Geneva.

<sup>10</sup> Most of the children in the secondary schools in Balbala are apparently from the centre of the town – they go to Balbala because the schools closer to home are already full.

<sup>11</sup> Although there is no school uniform as such in Djibouti, most children will require new, or at least second-hand, clothes at the beginning of the school year.

**Casual labour** – Little construction work is undertaken in the summer because of the difficult weather conditions. However, summer is also the time of year when seasonal migrants from rural areas return home, so there is less competition for the available work.

**Petty trade** – With the schools closed, there is no opportunity to sell snacks to children at break time. There is also less demand generally, since many people leave the city, and there is less income from casual labour for people to spend. However, demand for other items increases, such as cold drinks and ice, and this tends to offset the seasonal decline in income from petty trade.

### 5.6.2 Expenditure

The main items of expenditure that vary seasonally are electricity, water, schooling and clothing.

**Water** – Seasonal variations in expenditure on water are discussed in detail in section 5.5.3. For a variety of reasons including failures of supply and lack of purchasing power (especially for the ‘very poor’ and ‘poor’), expenditure on water may not vary all that much from one season to another.

**Schooling** – Expenditure on schooling, especially on transport and snacks, tends to be concentrated in the winter months. The summer tends to be a period of saving – where possible – in order purchase stationary for the new term and to cover textbook fees.

**Clothing** – Expenditure on clothing also tends to be concentrated in the winter months, which is when the major religious festivals fall at the moment. Purchase of new clothes for school may be a summer expense, but many people also buy clothes on credit at the end of the summer and repay during the winter months.

**Electricity** – Expenditure on electricity may increase by 25% or more in the summer, even for those without air conditioning. In this case the extra expenditure goes to operate fans and refrigerators. Avoiding these costs is one reason why many ‘upper middle’ and ‘better-off’ households leave the city in the summer. Overall, the net cost of the ‘summer holiday’ may not be great, since the cost of travel is offset by the saving on electricity, and savings are also made on general living costs, given the lower cost of living in towns such as Hargeisa, Dire Dawa and Asab.

### 5.6.3 Credit

A consideration of seasonal variations, and especially the need to cover significant one-off expenditures such as text books or clothing leads on to the question of credit. ‘Very poor’ and ‘poor’ households have no access to formal credit, since they do not have the collateral required to secure a loan. Informal short term credit is available however, e.g. at local retail shops, especially for those with a monthly salary who can reasonably be expected to clear their debt at the end of the month.

It is also quite common to purchase clothing on credit, with repayments spread over a period of several months. This is an important mechanism allowing poorer households to purchase clothing at the beginning of the school year when money is tight. Another way of spreading the cost of education can be to pay textbook fees in instalments over a period of 3 months.

Women involved in petty trade frequently form their own credit/savings groups, often with the assistance of a local community association. These systems work on the basis of each member contributing a small sum every month, with one member receiving in turn the total amount collected for the month.

Land ownership is the basic requirement for securing a bank loan. Borrowing from banks was a common strategy for government employees when salaries were cut and/or delayed in recent years, and many of these loans are still outstanding.

## 5.7 Comparisons with Other Findings

### 5.7.1 The EDAM-IS2 Study

EDAM-IS2 (*l’Enquête Djiboutienne auprès des Ménages*) was a very large World Bank funded study of poverty carried out in Djibouti in 2002. Primary data was collected by household questionnaire

from 16,416 households sampled nationally. There is a broad measure of agreement between the EDAM-IS2 and the current results. Taking Balbala as an example, approximately 50% of households in Balbala were classified as ‘extremely poor’ in the EDAM-IS2 study, which is roughly the same as the number in the ‘very poor’ and ‘poor’ categories in the current assessment. The difference is in the cut-off used. The cut-off for ‘extremely poor’ in the EDAM-IS2 study was roughly 50,000 FD per household per month, compared to 40,000 FD per household per month in this assessment. If the EDAM-IS2 data were re-analysed using a cut-off of 40,000 FD, then fewer households would be classified as poor than in the current assessment, although it is difficult to say quite how large the difference would be.

The EDAM-IS2 study divided the population into 3 classes, according to income/expenditure level; ‘extremely poor’, ‘relatively poor’ and ‘not poor’. The cut-off for ‘extreme poverty’ was 114,096 FD per person per year, equivalent to about 66,500 FD per household per month (household size 7). This result is not directly comparable with the result from the current assessment however, since the EDAM-IS2 expenditure figures include an amount for house rental that is in most cases notional (households were asked to estimate how much rent they would pay if they were not owner-occupiers, which is what most households are in Djibouti). If house rental is removed from the equation, then the cut-off for ‘extreme poverty’ becomes roughly 50,000 FD per household per month. This may be compared with the approximately 40,000 FD per household per month that forms the threshold between ‘poor’ and ‘lower middle’ groups in the current assessment.

The EDAM-IS2 study provides estimates of the percentage of the population falling into the ‘extremely poor’ category for the city as a whole and by *arrondissement* (see table). Direct comparison with the results from the current assessment is difficult, since this assessment did not cover the whole of the city, but focussed instead on the poorer *quartiers*. The figures for *arrondissements* 4 and 5 (Balbala) are of interest, since an almost direct comparison is possible in this case. According to the EDAM-IS2 results, approximately 50% of the population fall into the ‘extremely poor’ category in Balbala. In the current assessment, roughly 60% of households fall into ‘very poor’/‘poor’ categories (of household) in *quartiers* classified as ‘Very Poor’/‘Poor’, compared to about 40% of households in *quartiers* classified as ‘Mixed’/‘Middle’. Since about half of *quartiers* in Balbala are ‘Very Poor’/‘Poor’ and half are ‘Mixed’/‘Middle’, it follows that about 50% of households in Balbala as a whole will fall into the ‘very poor’/‘poor’ categories, i.e. a similar percentage to the ‘extremely poor’ recorded by EDAM-IS2

#### SELECTED RESULTS FROM THE EDAM-IS2 POVERTY STUDY, 2002

	Djibouti Ville	Breakdown of Results by <i>Arrondissement</i>				
		Arr. 1	Arr. 2	Arr. 3	Arr. 4	Arr. 5
% pop <sup>n</sup> extremely poor	35%	12%	23%	28%	56%	45%
% children underweight	21%	18%	21%	20%	20%	22%
% access to drinking water	93%	99%	100%	96%	95%	73%
% access to electricity	45%	63%	63%	43%	23%	24%
% unemployment:						
total	59%	50%	61%	57%	61%	59%
male	58%	47%	55%	54%	56%	58%
female	75%	54%	71%	64%	70%	75%

In other respects the results obtained from the EDAM-IS2 study are similar to those recorded here. The trends recorded in the table above in terms of access to electricity and % unemployment are, for example, consistent with the findings from the current assessment.

Data on expenditure patterns – albeit less detailed than those compiled in the current assessment – were also collected by EDAM-IS2. The expenditure patterns of the ‘extremely poor’ (EDAM-IS2) and the ‘very poor’ and ‘poor’ (current assessment) are similar, once the notional expenditure on house rent is removed from the EDAM-IS2 results (see table below).

## BREAKDOWN OF EXPENDITURE INTO DIFFERENT CATEGORIES (% TOTAL)

Category of Expenditure	EDAM-IS2 Extremely Poor	Current Assessment 'Very Poor'	'Poor'
Food	65%	66%	58%
Water	10%	8%	6%
Education	7%	8%	5%
Health	2%	1%	1%
Electricity	3%	0%	0%
Other	13%	17%	30%
Total	100%	100%	100%

Note: the EDAM-IS2 results have been recalculated to exclude rent – see text for explanation.

It is not possible to say which set of results is more reliable, those of the current assessment or those from EDAM-IS2. Rather, it is more useful to think of them as broadly comparable and above all complementary. In theory, the results of a very large household survey should be superior to those of a rapid assessment such as this, because of the large sample size, and the random sampling procedures used (which should guarantee a result that is representative). In practice – and this is not a specific criticism of the EDAM-IS2 survey – it is very difficult to construct a complete and accurate sampling frame under conditions such as those in Djibouti Ville, and it is also difficult to manage the large number of investigators employed on such an exercise and to ensure consistent data quality. The advantage of a rapid assessment implemented by a smaller number of experienced investigators – such as the current one – is that a great deal can be done to cross-check and validate results in the field, which is rarely possible in a large household survey. The main problem with the rapid approach is the relatively small number of interviews undertaken, and the reliance that is placed on community key informants to estimate the percentage of households falling into the different wealth categories. Perhaps the simplest explanation for the difference in results would be that our community key informants over-estimated the percentage of households falling into the 'very poor' and 'poor' categories of household.

### 5.7.2 Results from Hargeisa

FEWS NET recently assisted with a similar urban assessment of Hargeisa, the capital of neighbouring Somaliland. A comparison of results indicates that, **while absolute cash incomes are higher in Djibouti, much of the difference is offset by the higher cost of living in the city.**

Two tables of results are presented below. The first compares absolute cash incomes of three comparable wealth groups in the two cities, and shows that cash incomes are roughly twice as high in Djibouti as in Hargeisa. The second table compares prices for a range on basic items, as well as the total cost of two basic expenditure baskets bought by 'poor' households in Djibouti (staple foods and other basic items). In both tables, expenditures have been converted into US\$ for comparability (based on US\$1.00 = 177 FD or 6,600 SI\$). Overall, based upon the expenditure basket costs, the cost of living is roughly 50% higher in Djibouti than Hargeisa. Sorghum and meat are very much more expensive, which is understandable since Hargeisa has better access to local sources of supply. Less easy to understand is the higher price of imported commodities such as rice, wheat flour, oil, sugar and soap, which are 25%-50% more expensive in Djibouti, despite the city's better access to these items via its port.

A rough standard of living index can be obtained by dividing income by the cost of the basic expenditure basket. This suggests that standards of living are, for the 'poor' and 'lower middle' groups approximately 30%-35% higher in Djibouti than Hargeisa. For the 'very poor', however, the difference may only be about 20%, given the low absolute cash income of the 'very poor' in Djibouti.

## COMPARISON OF MONTHLY INCOMES: DJIBOUTI AND HARGEISA

Wealth Group	Djibouti		Hargeisa	Ratio Djibouti:Hargeisa
	FD	\$US	\$US	
Very Poor	20,000	113	64	1.77
Poor	32,500	184	97	1.90
Lower Middle	60,000	339	167	2.03

## COMPARISON OF PRICES FOR BASIC ITEMS: DJIBOUTI AND HARGEISA

Item	Price in Djibouti		Price in Hargeisa	Price Ratio Djibouti:Hargeisa
	FD per kg	\$US per kg	\$US per kg	
Rice	80	0.45	0.33	1.36
Flour	80	0.45	0.30	1.50
Oil	200	1.13	0.91	1.24
Sugar	80	0.45	0.36	1.25
Bread	200	1.13	0.72	1.57
Milk powder	1,000	5.65	4.53	1.25
Beans	100	0.56	0.53	1.06
Meat	500	2.82	1.21	2.33
Sorghum	120	0.68	0.18	3.77
Laundry soap (pc)	40	0.23	0.19	1.21
Kerosene (liter)	80	0.45	0.34	1.32
<b>Basic Expenditure basket – Poor Households</b>				
Staple food basket	13,400	75.7	53.8	1.41
Minimum non-staple basket	16,480	93.1	59.6	1.56
Total	29,880	168.8	113.4	1.49

## 6 THE EXPULSION OF FOREIGN MIGRANTS

The expulsion of foreign migrants took place just before the current assessment. It is still too early to say what will be the effects in the long term, but the sudden removal of up to 100,000 people is bound to have had marked effects in the short term. The situation should stabilise over the coming months, as poorer Djiboutians move to fill at least some of the ‘gaps’ created by the expulsions. The effects noted so far have been:

1. **Reduced competition for low-paid employment and for casual labour** (although not in the port, from which migrants were excluded). Payment rates for these activities have increased in the month since the expulsions. Wage rates for domestic workers are reported to have increased from between 6-8,000 FD per month before the expulsions to 10-12,000 FD per month now. And the rate for watchmen has increased from 15,000 FD per month previously to 25,000 FD per month now.
2. **Reduced demand for goods and services.** Income from petty trade, including the sale of *qat* has fallen a little since the expulsions, but the most marked effects have been felt by small restaurants and street food vendors, who report a 20%-30% reduction in income. Minibus owners also report a reduction in business.
3. **Loss of rental income.** A substantial minority of households in the ‘middle’ and ‘better-off’ wealth groups were earning rental income from migrants. They may have divided their house and rented 1-2 rooms, or have had property both in town and in Balbala. In this case, they either relocated to Balbala, and rented the house in town, or constructed temporary housing on the plot in Balbala, while continuing to live in the city.

The net effect of the expulsions will vary by wealth group. The overall effect on the ‘**very poor**’ and ‘**poor**’ is probably not all that great, since any loss of petty trading income has in general been offset by an increase in the earnings from casual labour. And in the longer term, as some of the jobs performed by migrants are taken on by Djiboutians, demand for the goods provided by petty traders should in general increase once again.

Some of the ‘**lower middle**’ will no longer be able to afford a domestic worker, increasing the burden of domestic work on these households. The ‘**upper middle**’ includes those owning the small restaurants and minibus businesses that have most affected by the migrant expulsions. And some members of both middle groups will have experienced a loss of rental income.

## **7 HAZARDS AND RESPONSE STRATEGIES**

### **7.1 Hazards**

Poor households in Djibouti are vulnerable to a number of hazards. The hazards most often referred to in community level discussions are **fire** and, in those areas bordering the Ambouli River, **flood**, following heavy rainfall. Fire is an especial hazard in the poorer *quartiers*, where most houses are constructed of wood and corrugated iron, and the overcrowding means that fire spreads rapidly from one structure to the next. A part of the problem in these areas is that few households own the land they occupy, and as such they are not allowed to construct more permanent fire-resistant brick or stone structures. Fire tends to be a seasonal phenomenon, linked to the *khamsiin* winds that blow from July to September, which speeds the spread of fire once an outbreak occurs. The main effects of both fire and flood are loss of life and loss of property, especially the destruction of buildings that the poorer groups find difficult, if not impossible, to replace.

A **failure of livestock and/or crop production in the areas supplying Djibouti** is another natural hazard that can seriously affect poorer households. The main problem is that of drought affecting the supply of livestock from Djibouti, Ethiopia, Eritrea and Somaliland, and sorghum, vegetables and *qat*, mainly from Ethiopia. Although Djibouti can access alternative sources of supply, prices will increase, with negative effects on the food security for ‘very poor’ households in particular. These effects are explored in greater detail in the scenarios section of this report, section 8.3.

**Changes in government policy** can be either positive or negative, affecting:

- **Levels of government employment, salaries and pensions.** The structural adjustment policies of recent years have had a number of significant effects; reduced rates of recruitment, a freeze on promotions, salary reductions and delays in payment. These have significantly affected both employment and income for a number of wealth groups. Further changes are likely to result from the ‘privatization’ of the public sector (begun with the port and airports), which may result in rationalization and significant reductions in employment.
- **The cost of food items.** These are not at present controlled, but they are subject to the effects of government policy. The government has in recent years resisted any increase in the price of bread, for example. And any change in fuel and transport costs will tend to have a knock-on effect on food prices.
- **The cost of non-food items (water, kerosene, electricity, schooling, etc.).** The cost of water, kerosene, electricity and transport are directly controlled by government, and changes in these will have significant effects on the food security and living standards of the poor (see section 8.2). The cost of education and health services are also under government control.
- **Migration into the city.** The recent decision to expel foreign migrants has had a number of economic effects, some positive, some negative (section 6). There is now less competition for low paid jobs and casual labour, which has increased the opportunities for ‘very poor’ and ‘poor’ Djiboutians, but there has also been a reduction in demand for the goods and services purchased by foreign migrants and therefore a loss of petty trading income and income for some businesses.

Casual labour is an important source of income for ‘very poor’ and ‘poor’ households. Any change in **activity in the port and construction sectors**, where most of this casual labour is found, represents a significant hazard for these groups. **Response Strategies**

A limited number of options are available to urban households when faced with either a reduction in income or an increase in prices:

They may **reduce expenditure**, or switch expenditure to cheaper goods, which is obviously easier for wealthier households. Even poor households in Djibouti have some room to squeeze their non-essential purchases, but it is questionable whether very poor households have. One especially significant area of expenditure reduction is that of education, the effect of which would be to increase the number of children dropping out of school.

They may **seek additional gifts**, largely in the form of cooked and dry food from relatives and neighbours. Gifts of money to cover daily living expenses are not common – these tend to be given to help cover the costs of funerals, births and marriages, and, less frequently, in the case of a prolonged illness.

They may **take credit**, but this is a limited option mainly for relatively better-off households that can offer the collateral, usually land, to secure the loan.

They may seek to **diversify and increase their income**, perhaps by sending additional household members out to work, or by initiating new income generating activities (such as petty trade for a family not currently engaged in this activity). However, this is obviously not a viable strategy for the majority of households if there is a general downturn in the urban economy.

## **8 USING THE BASELINE : SCENARIOS**

### **8.1 Introduction**

Food economy baselines are specifically designed to help assess the likely effects of a hazard on food and livelihood security. In this section of the report, the principles of this type of analysis are explained for the urban context, and two hypothetical examples or scenarios are presented. These are:

**Scenario A:** An increase in the price of an important non-food commodity – kerosene, and

**Scenario B:** A drought affecting Djibouti and neighbouring areas of Ethiopia, Eritrea and Somaliland

#### *8.1.1 Principles of Scenario Analysis*

Once the baseline picture has been developed, the process of scenario analysis is relatively straightforward. There are two basic steps in the process:

1. Examine the direct effect that the hazard or shock will have on access to food and income, and on the pattern of expenditure, and estimate the magnitude of any reduction in food access.
2. Consider the extent to which different food and income sources can be expanded or added to make up any reduction in food access, and estimate any final deficit that is likely to emerge.

The necessary calculations require no more than basic maths and can be done on pencil and paper. An example of a scenario calculation sheet (the kerosene scenario for very poor households) is given in Appendix 0.

One key preparatory step before this type of analysis can be undertaken is to re-analyse the baseline expenditure data, dividing total expenditure into three broad categories:

**Minimum Non-Staple Expenditure:** This is the amount of money that *must* be spent to purchase basic food and non-food items *besides* staple foods. It is the level of expenditure that can be considered essential in the context of day-to-day survival and basic access to services. The basic items in the minimum non-staple ‘basket’ can include: a) the minimum of basic food items that are consumed with the staple (e.g. salt, a little meat and some vegetables), b) the basic non-food items that are essential to survival (e.g. water, soap, kerosene for cooking, etc.) and c) basic expenditure on

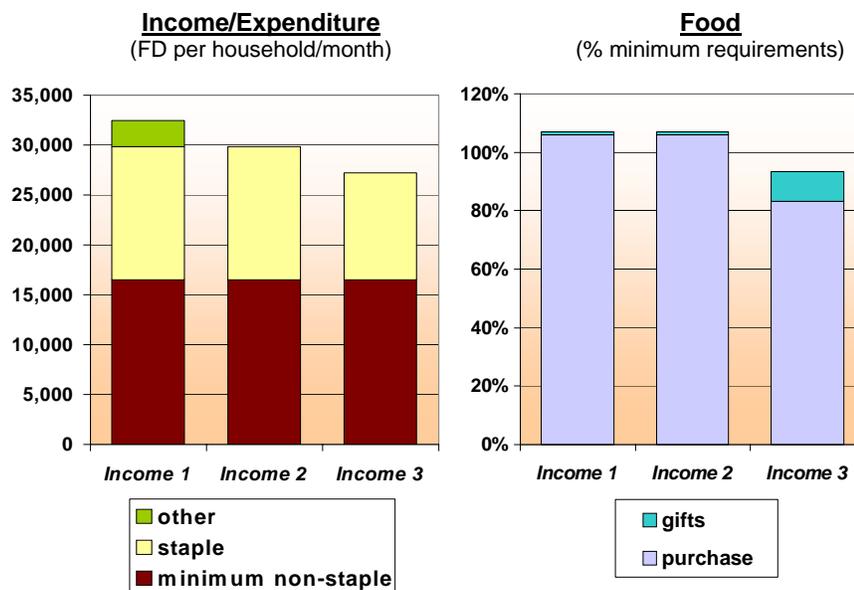
services such as health or education. The composition of the minimum non-staple expenditure basket for ‘very poor’ and ‘poor’ households in Djibouti is discussed in section 8.1.2.

**Staple Food Expenditure:** The amount of money spent on basic staple foods, i.e. those providing the bulk of food energy at the minimum cost. This can be a single staple (e.g. rice), or a basket of staples in the proportions normally purchased by ‘very poor’ or ‘poor’ households (e.g. rice, wheat flour, pasta, oil, sugar, etc.).

**Other Expenditure:** This is the amount of money left over for expenditure on other non-essential or discretionary items, such as more expensive clothes, more than the minimum quantity of meat and vegetables, etc.

The basic principles underlying the process of scenario analysis in the context of Djibouti Ville are set out in the graphic and accompanying text box.

### PRINCIPLES OF SCENARIO ANALYSIS - DJIBOUTI VILLE



#### **Principles of Scenario Analysis – Djibouti Ville:**

**Income 1:** This is the baseline picture for ‘poor’ households in Djibouti Ville. Most income is spent on basic food and non-food items (minimum non-staple and staple), with a little discretionary expenditure left over (‘other’ in the left-hand graph). Under baseline conditions, poor households access just over 100% of their minimum requirements, mostly through purchase (right-hand graph).

**Income 2:** As income falls, expenditure on discretionary expenditure is reduced before other types of expenditure, and expenditure on staple and minimum non-staple remains as before (left-hand graph). The same amount of food can be purchased, and food access remains constant (right-hand graph).

**Income 3:** Once income falls below a critical level, poor households can no longer afford to purchase both their minimum food and non-food needs. If expenditure on minimum non-staple is to remain constant, then expenditure on staple – and therefore food purchase – must decline (right-hand graph).

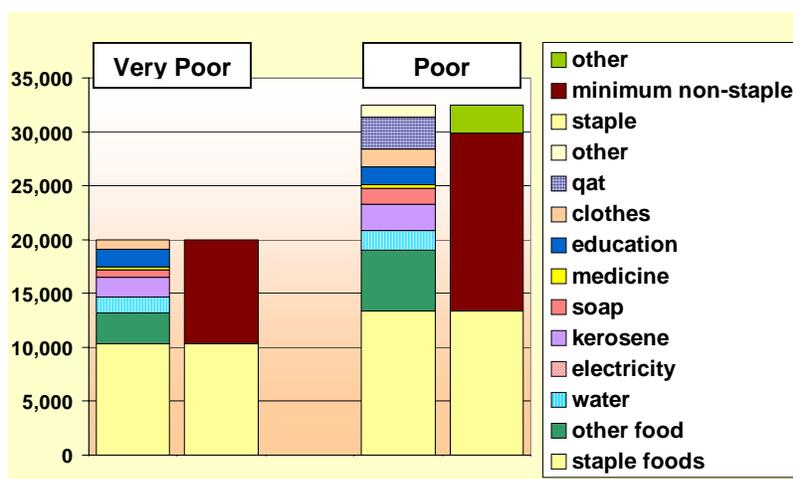
The one source of food that can be expanded – in this example - is gifts. This expansion is shown in the right-hand graph. However, it is unlikely that gifts can expand to fully cover the loss of food purchase, and the conclusion may be that total food access is likely to fall below 100%. This is the point at which an intervention of one type or another may be required.

### 8.1.2 Defining Minimum Non-Staple Expenditure

As far as food energy is concerned, we are fortunate in having an internationally accepted minimum figure for our analysis – 2100 kcals per person per day. There is no such comparable standard for other items, such as soap or clothing, which means that defining *minimum* non-staple expenditure depends upon the judgement of the analyst, ideally in consultation with potential users of the information. In the present case, the minimum expenditure basket was defined fairly arbitrarily, primarily to illustrate the process of scenario analysis. It should therefore be viewed as preliminary.

The division of expenditure between the three categories (minimum non-staple, staple and other) is illustrated in the graphic for the ‘very poor’ and ‘poor’ in Djibouti. In the case of the ‘very poor’, it was decided to include all expenditure other than staple expenditure in the minimum non-staple category. This is because everything bought by the ‘very poor’ can be considered essential, and the amounts spent are minimal and cannot (or should not) be reduced further. In the case of the ‘poor’, most expenditure was included in the minimum non-staple category, and a small amount in ‘other’. One important question that arose was how to treat expenditure on *qat*. Clearly, *qat* cannot be considered essential. However, it is also unrealistic to expect that *all* the money normally spent on *qat* will be readily diverted to expenditure on other items. The solution was to include half of normal expenditure on *qat* in the minimum non-staple category, and half in the discretionary or other category. The practical effect of this is to assume that when a hazard strikes, expenditure on *qat* will be reduced below normal, but not to zero. Full details of the composition of the minimum non-staple expenditure baskets for ‘very poor’ and ‘poor’ households are given in appendix 11.10.

**DEFINING MINIMUM NON-STAPLE EXPENDITURE  
FOR VERY POOR AND POOR HOUSEHOLDS IN DJIBOUTI**



### 8.1.3 Types of Intervention

It should perhaps be noted that the method of estimating food deficits presented in section 8.1.1 appears to make at least one key assumption, that households will purchase items in the minimum non-staple basket before they purchase food, i.e. they are more likely to go hungry than they are to pull their children out of school, or to reduce expenditure on water. Clearly, this will not always be the case. Another problem is that by expressing the result as a food deficit, it may also appear that the only appropriate intervention is one related to food (e.g. a food distribution, or an intervention to reduce the price of food in the market). Both of these problems are more apparent than real, however, provided the food deficit is treated not as a measure of food access alone, but as a measure of the ability to access *both* minimum food *and* minimum non-food needs together – which is in fact what is being calculated. This being the case, it should also be clear that there may be more than one way to

reduce a food deficit. A food intervention is one possibility. But an intervention that reduces the cost of the minimum expenditure basket is another, e.g. measures to reduce the cost of education or kerosene. This is because anything that reduces the cost of the minimum non-staple basket will increase the amount of money available for food purchase and therefore increase food access. This reflects the fact that in an urban setting food security and livelihood security are very closely related, since the market is often the main mechanism through which both are achieved.

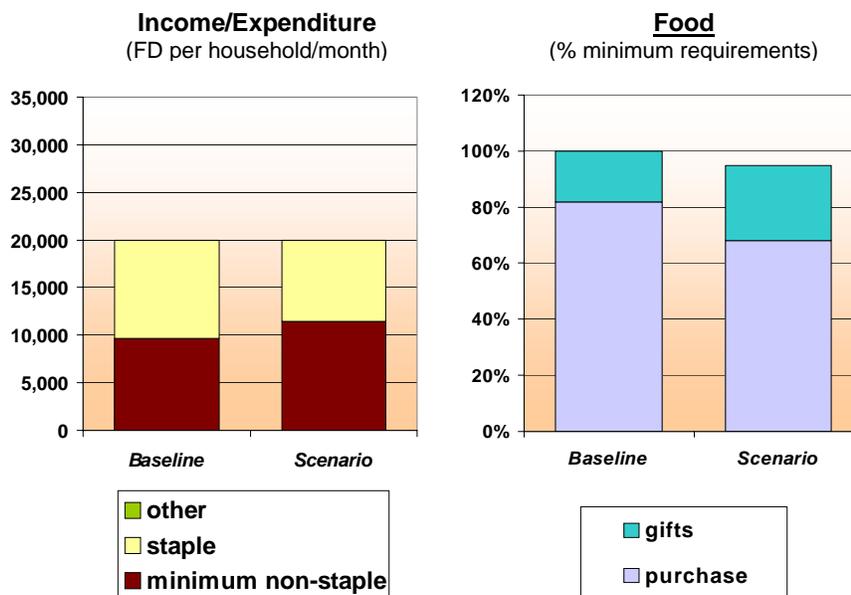
## 8.2 Scenario A: An Increase in the Price of an Important Non-Food Commodity - Kerosene

Water, kerosene and education are all major components of the minimum non-staple basket. This scenario looks at the impact of a change in the price of one of these: a doubling of the price of kerosene. This is of particular interest because the government has recently moved to reduce the price of kerosene, by reducing the level of tax and applying price controls. This analysis effectively looks back to the situation before kerosene prices were reduced, and asks the question what would happen if kerosene prices were increased once again?

### **The Problem:**

A doubling in the price of kerosene

### **EFFECT OF KEROSENE PRICE RISE: THE VERY POOR**

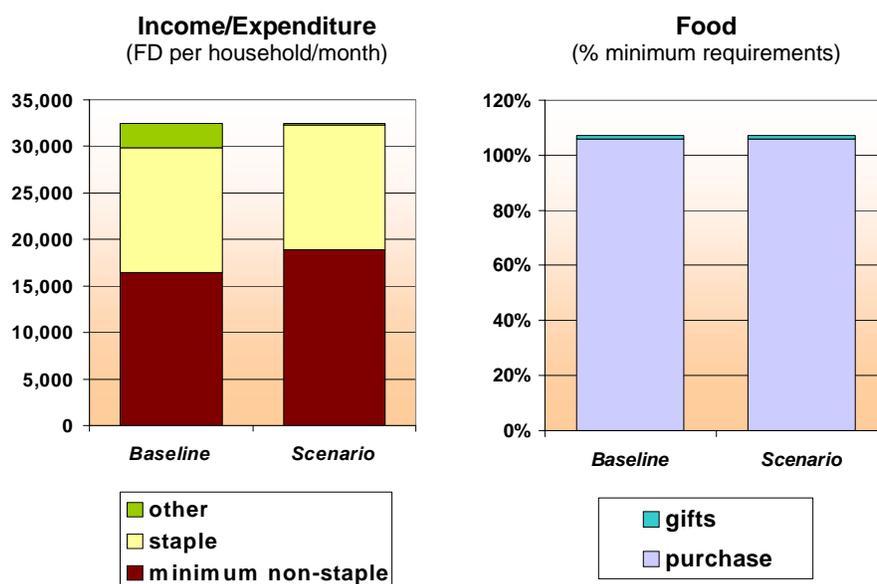


### **Projected Effects of Kerosene Price Rise: Very Poor Households**

- An increase in the price of kerosene will have no effect on income
- Minimum non-staple expenditure will increase, since kerosene is included in the minimum non-staple basket
- Expenditure on staple foods will decline (left-hand graph), reducing significantly the amount of staple food that can be purchased (right-hand graph)

The very poor will become even more dependant upon gifts, which can be expected to increase. However, the 'very poor' could also face a food deficit of up to 10% of minimum food needs

## EFFECT OF KEROSENE PRICE RISE: THE POOR



### Projected Effects of Kerosene Price Rise: Poor Households

- The cost of the minimum non-staple basket will increase, as for the 'very poor'. Expenditure on other discretionary items (including *qat*) would have to decline, so that expenditure on staple foods can be maintained.
- They should not face a food deficit, provided they cut back on *qat* purchases
- The 'poor' are less vulnerable than the 'very poor' to an increase in kerosene prices

**Conclusion:** 'Very poor' households are highly vulnerable to changes in the price of items in the minimum non-staple food basket. A doubling in the price of kerosene could have quite a marked effect on food access for this group, making them more dependent on gifts than at present. The implication is that the government's recent move to reduce and control kerosene prices will have had a significant and positive effect on the food and livelihood security of the 'very poor'.

### 8.3 Scenario B: Drought Affecting Djibouti and Neighbouring Areas of Ethiopia, Eritrea and Somaliland

Sorghum, meat and vegetables are all supplied to the city either from Djibouti itself or from neighbouring parts of Ethiopia, Eritrea and Somaliland. This scenario looks at the effect of a drought affecting these sources of supply, and at the consequences for both 'very poor' and 'poor' households in Djibouti Ville.

#### The Problem:

- 50% livestock and crop production failure in areas supplying Djibouti normally, leading to
- An increase in meat prices (+30%), as weakened animals cannot make the difficult overland journey into the city, and stronger animals are trucked in from further afield.
- An increase in sorghum prices (+15%), as prices in Ethiopia and Somaliland rise sharply, and traders begin to import sorghum from other places, e.g. the Far East.
- An increased in vegetable prices (+10%), as prices in Ethiopia increase and traders switch to importing vegetables from the Yemen.
- An influx of drought-affected pastoralists and others looking for casual labour, resulting in a

~5% reduction in casual labour income for casual labourers in Djibouti. (N.B. A relatively modest reduction in income from casual labour is assumed, given the government's current strict policy on economic migrants coming to Djibouti from outside the country's borders.)

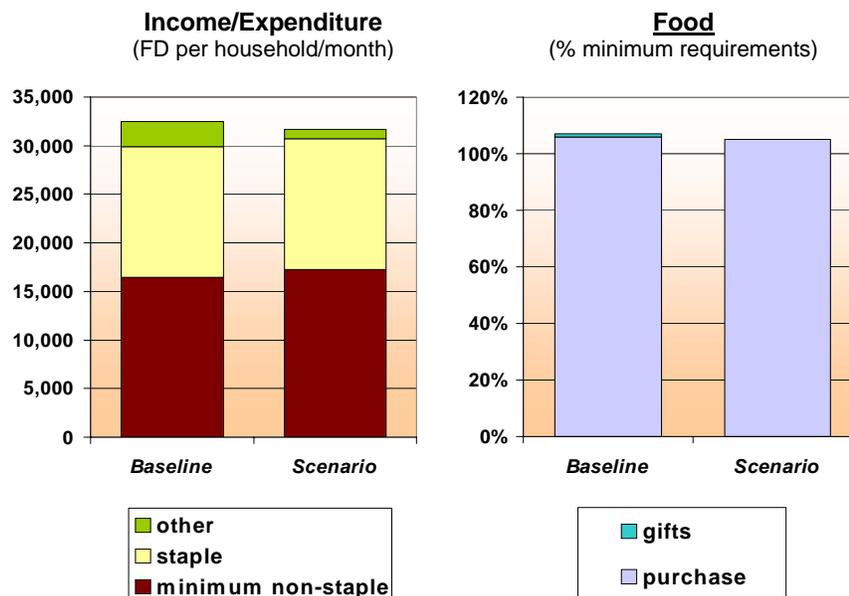
- A reduction in gifts of dry food, as dry food is sent to drought-affected rural relatives instead.

### EFFECT OF DROUGHT: THE VERY POOR

#### Projected Effects of Drought: Very Poor Households

- The 'Very Poor' are relatively vulnerable to a hazard such as drought. The combined effect of several relatively small changes would be a food deficit of 10%-20% (i.e. equivalent to approximately two months food)
- A small reduction in casual labour opportunities will reduce total income slightly (income from petty trade will not be affected)
- An increase in the price of meat and vegetables will increase the cost of the minimum non-staple basket, as defined.
- The effect of these changes will be to reduce the amount of money that can be spent on staple food. At the same time, the cost of staple food will rise (due to the increase in the price of sorghum), and the amount of staple purchased will decline (right-hand graphic)
- Gifts of dry food will decline as these are sent to rural relatives instead.

### EFFECT OF DROUGHT: THE POOR



#### Projected Effects of Drought: Poor Households

- The poor are less vulnerable to a drought hazard, and should not face a deficit given the current drought scenario. The 'poor' will experience the same slight reduction in total income

and increase in the cost of the minimum non-staple basket as the 'poor'.

- However, they should be able to maintain and even increase expenditure on staple foods, by cutting back on 'other' discretionary expenditure, including purchases of *qat*.
- Although gifts will no longer be received, this will have little effect on overall food access, which is expected to remain above 100%.

**Conclusion:** Djibouti's access to alternative sources of supply for sorghum, vegetables and meat tends to limit the effect of drought on the supply and price of these commodities. Nonetheless, 'very poor' households are relatively vulnerable to the cumulative effects of the price changes that are likely to occur. The diversion of gifts away from the urban towards the rural poor will also affect food access for 'very poor' urban households. External food and/or other assistance to 'very poor' urban households may well be justified in a drought.

## 9 MONITORING

One of the reasons for conducting this rapid baseline assessment of urban livelihoods in Djibouti was to provide a basis for suggesting improvements to the existing system of monitoring in Djibouti Ville. This should help ensure that relevant data are available for the type of analysis described in the previous section, should a significant change occur or a hazard strike. The suggestions for monitoring, outlined in the following table, follow naturally from the analysis of hazards (section 7.1) and the likely effects of these (section 8).

<b>What to monitor?</b>	<b>Data Source</b>	<b>Frequency</b>
<b>Government Policy</b> , affecting <ul style="list-style-type: none"> <li>- Salaries</li> <li>- Pensions</li> <li>- Cost of food items</li> <li>- Cost of non-food items (water, electricity, schooling, etc.)</li> <li>- Migration into the city</li> </ul>	a) Media ( <i>La Nation</i> newspaper) Government Journal ( <i>Journal Officiel</i> )	2x per week ( <i>La Nation</i> )
<b>Port Activities</b> <ul style="list-style-type: none"> <li>- Number of ships</li> <li>- Number of vehicles in transit</li> <li>- Import/transit statistics</li> <li>- Dock labour statistics</li> </ul>	a) Port Authority b) Dockers Union (numbers employed and labour rates)	Monthly
<b>Activity in the Construction Sector</b>	a) Media – for major new projects b) Construction Companies – ongoing projects (numbers employed and labour rates)	Quarterly
<b>Livestock and Crop Production in Areas Supplying Djibouti</b>	a) IGAD and Early Warning Projects in neighbouring countries <i>already done by MoA Early Warning Unit</i>	Monthly
<b>Minimum Expenditure Costs</b> <ul style="list-style-type: none"> <li>- movements in the cost of the expenditure basket of different wealth groups</li> </ul>	a) Monthly price surveys b) compilation of basket cost <i>a) already done by DINAS/MoA Early Warning Unit</i>	Monthly

## 10 CONCLUSIONS

The results of the current assessment clearly demonstrate that **a substantial proportion of the population in Djibouti lives in relative poverty by local standards, and extreme poverty by**

**international standards**, subsisting on a total income of less than 40,000 FD (\$US 225) per household per month, or <200 FD (about \$US 1) per person per day. Although incomes are higher in absolute terms than in any of the neighbouring countries, the cost of living is relatively high in Djibouti, and differences in living standard are much less clear cut. Comparing Djibouti with Hargeisa, for example, the poorer groups in Djibouti are *in real terms* no more than 20%-35% better-off than the same wealth groups in Hargeisa (i.e. once differences in living costs are taken into account).

A careful examination of patterns of income and expenditure reveals the depth of poverty among the poorer groups in Djibouti. Almost all the expenditure of the 'very poor' goes towards covering the most basic of items required for bare survival; food, water, kerosene for cooking, and – a high priority for poor people locally – education. And even then, the 'very poor' are unable to cover more than about 80% of their minimum food needs. For the balance they must depend upon assistance from relatives and neighbours, most of which comes in the form of cooked food provided freely from within the community. The strength of the intra-community support networks in Djibouti is impressive indeed. The 'poor' are a little better-off – they can afford to purchase the whole of their minimum food requirements, and can spend a little more on the same list of basic items purchased by the 'very poor', but their expenditures are still almost entirely confined to items required for basic survival. The single exception is the approximately 10% of income spent on *qat* by men in this wealth group.

**A further aspect of this extreme poverty is the relative vulnerability of the poor - especially the 'very poor' - to any outside shock or hazard.** Two examples have been analysed in some detail in this report; the effect of an increase in the price of an important non-food commodity (kerosene) and a drought affecting Djibouti and neighbouring areas of Ethiopia, Eritrea and Somaliland. Although in each case the shock was relatively modest, the impact on 'very poor' households was considerable, with a sharp deterioration in food security projected in both the scenarios examined.

Besides food, the poor face significant problems in terms of their access to water, education and health services. **Access to water is limited in terms of supply and affordability**, especially in those parts of the 5<sup>th</sup> *arrondissement* that rely upon water tankers. Water provided by tankers is eight times more expensive than water provided through the piped water system, and the 'very poor' and 'poor' groups supplied by tanker can only afford to purchase water in quantities that would be regarded as barely adequate in an emergency situation, even without taking into account the extreme heat, and therefore increased water requirements, at certain times of year in Djibouti.

The cost of electricity is yet another problem. It is expensive to obtain a connection in the first place and expensive to purchase a supply once connected. **Electricity is beyond the means of the 'very poor' and 'poor' groups, and is barely affordable by the 'lower middle'**, many of whom can afford no more than a fan and a light in just one room of their house.

Access to education is a high priority and a universal concern for all wealth groups in Djibouti. **There are problems both in terms of the availability of education and in terms of access/affordability.** Primary school provision is relatively good, with most children able to attend a local primary school. But there are not enough intermediate and secondary school places to meet demand, and many children are unable to find a place at these levels. The shortage of school places is most severe at secondary level, and entry to secondary school is by competitive exam. Children failing this exam emerge from the system poorly qualified and find it very difficult to secure regular employment. Other problems besides the shortage of school places include a lack of resources generally, inadequately qualified teachers, a lack of textbooks and poor conceived curricula<sup>12</sup>.

The results of the current assessment indicate that there are significant 'hidden' costs associated with education in Djibouti, which form an additional barrier as far the poorer wealth groups are concerned. It is likely that this contributes to low rates of school attendance for these groups, more marked among girls than boys. These 'hidden' costs include textbook fees, stationary, travel costs and 'pocket

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<sup>12</sup> *Profil de la pauvreté à Djibouti, 2002*

money'. Travel is the single most significant cost as far as intermediate and secondary schooling is concerned. This is linked to the shortage of schools overall, and the fact that many are located far from the poorer quarters.

The Ministry of Education, in collaboration with the World Bank, is implementing/planning a number of interventions in Djibouti to reduce school costs. These include:

- The removal of cooperative fees for primary schools outside Djibouti Ville since 2000. The success of this initiative in increasing school attendance will shortly be evaluated, and it may be extended to the city as well.
- The construction of two new intermediate colleges in Balbala. This will reduce transport costs for Balbala children significantly. The plan is also to waive textbook charges for the poorest children attending these colleges.

In addition UNICEF has plans to provide book and pens to primary school children.

Although detailed information on health and health services was not collected during the current assessment, it is clear from the expenditure information that **access to health services is limited for the poorer wealth groups by a lack of money**, especially for the purchase of medicines. Expenditure on medicines is something that increases rapidly with increasing wealth. Average monthly expenditure on medicines by the 'very poor' is approximately 270 FD (\$1.5) per household per month. The 'lower middle' spend more than twice this amount while the 'upper middle' spend 7 times more. One observation by the communities is worth mentioning, and that is the significance of the community pharmacies that have opened in 6 *quartiers*, offering drugs at lower prices than in the private pharmacies.

A number of other issues that were beyond the scope of the current assessment were also raised at community level during the course of the current assessment. These included:

The **lack of access to credit**, which represents a significant impediment to the start-up of small business activities among the poorer wealth groups.

The **poor standards of sanitation** throughout the city, but especially in the poorer areas where poorly protected pit latrines are the norm.

The **lack of any formal system for collecting and disposing of refuse**, so that refuse accumulates in certain parts of the city, posing a significant threat to the health of those living near by.

The **absence of secure land tenure**, which means that people may be forced to move by the local authorities at any time, perhaps to make way for a new housing project or a new road, for example.

## 11 ANNEXES

### 11.1 Documents Consulted

*Annuaire Statistics de Djibouti, Resultats 1992-1999 (2000). Direction Nationale de la Statistique (DINAS), Ministère de l'Economie, des Finances et de la Planification Chargé de la Privatisation.*

*Profil de la pauvreté à Djibouti, Décembre 2002. Ministère de l'Economie, des Finances, et de la Planification, chargé de la Privatisation, et Programme des Nations Unies pour le Développement (PNUD). Resultats de l'Enquête Djiboutienne auprès des Ménages (EDAM-IS2).*

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### 11.3 Results of Zoning Exercise and Sample Selection

Secteur Type	1 <sup>st</sup> Arrondissement	2 <sup>nd</sup> Arrondissement	3 <sup>rd</sup> Arrondissement
<b>Very Poor</b>	<i>Quartier 4</i>	-	-
<b>Poor</b>	<b>Quartier 2</b> Quartier 1 Quartier 3	<i>Quartier 7-Jagabulduq</i> <i>Quartier 6-Secteur 1</i> <i>Quartier 6-Secteur 2</i> Quartier 6-Secteur 5 Quartier 7-Baahanabi Quartier 7- Yousif Kounoun Gobode 1	<i>Phare</i> Pompape Aviation-Caserne Amb. Jardins-Nord
<b>Mixed</b>		<i>Quartier 5-Secteur 1</i> <i>Quartier 7 bis-Karton</i> <i>Arhiba</i> <i>Cité de Stade</i> <i>Quartier 7-Ilot</i> Quartier 5-Secteur 2 Gobode 2	<i>Ambouli-Gachamaleh Amb.</i> <i>Jardins-Sud</i> <i>Djebel-Nord</i> Ambouli-Cheikh Muhammed Amb. Jardins-Centre Ambouli-Cité Brigade Djebel-Sud
<b>Middle</b>	<i>Eingela</i> <i>Plateau du Serpent</i>	<i>Quartier 6-Secteur 3</i> Quartier 6-Secteur 4 Quartier 7-Cité Q7 sud Quartier 7-Cité Boudreale Quartier 7-Cité Chantier	<i>Cité Progres</i> <i>Aquitaine</i>
<b>Rich</b>	<i>Cité Saudienne</i> <i>Commerciale</i> <i>Plateau de Marabout</i> <i>Ilôt de Heron</i>	Quartier 7 bis-Cité Gachamaleh Cité Cooperant Gobode 3 Gobode 4 Gobode 5 Wadajir Cité Maka Al Moukarama	Aviation-Cité Gabode 5 Haramous
<b>Sample size:</b>	<b>3 (out of 10)</b>	<b>8 (out of 26)</b>	<b>4 (out of 16)</b>
Secteur Type	4 <sup>th</sup> Arrondissement	5 <sup>th</sup> Arrondissement	Total Sample:
<b>Very Poor</b>	<i>PK12-Iljano</i> PK12-Cinema PK12-Farahaad PK12-Bandaya	<i>Buula Yaryar-8 Metre</i> <i>Waraabalay</i> Buula Yaryar-3 Metre Buula Yaryar-4 Metre Buula Yaryar-Xariirad Buula Yaryar- Demobilisé	<i>Very Poor Secteurs = 4</i> <i>(out of 11)</i>
<b>Poor</b>	<i>Quartier 9-Pharka</i> <i>Quartier 9-Laangobaale</i> <i>Quartier 12-Bache à Eau</i> Quartier 9- Gerrissa Quartier 11-Bahaash Quartier 11-Qaranil	<i>Sauvage</i> <i>Wadadaabo</i> <i>Xayaablay 2</i> Barwaaqo Laangobaale Sharaf Dhooglay Tuur Cusbo Gacam Macan Dooraale	<i>Poor Secteurs = 10</i> <i>(out of 30)</i>
<b>Mixed</b>	<i>Quartier 1-Cagadheer</i> Quartier 10-Secteur 1 Quartier 10-Secteur 2 Quartier 11-Mijadheer Quartier 12-T3 Quartier 12-Ali Gobe Quartier 12- Diyaaradda Wadadaabo	<i>Nasiibwanaag</i> <i>Cheikh Musa</i>	<i>Mixed Secteurs = 11</i> <i>(out of 24)</i>
<b>Middle</b>	Quartier 9-Cité Cheikh Osman	<i>Xayaablay 1</i> Luxembourg	<i>Middle Secteurs = 3</i> <i>(out of 12)</i>
<b>Rich</b>	-	-	<i>Rich Secteurs = 0 (out of 14)</i>
<b>Sample size:</b>	<b>5 (out of 19)</b>	<b>8 (out of 20)</b>	<b>Total Secteurs = 28</b>

Note: *Quartiers/Secteurs* included in the assessment are shown in bold italics.

#### 11.4 List of Interviews Conducted: Food Economy Assessment

Arr <sup>ment</sup>	Quartier	Secteur	Classification	Wealth Bkdown	Focus Groups				
					Very Poor	Poor	Lower Middle	Upper Middle	Better-Off
1 <sup>st</sup>	Quartier 4		Very Poor	1		1	2		
	Quartier 2		Poor	1		1			
	Eingela		Middle	1			1	2	
2 <sup>nd</sup>	Quartier 7	Jagabulduq	Poor	1		2	1		
	Quartier 6	Secteur 1	Poor	1	1	1	1		
	Quartier 5	Secteur 1	Mixed	1		1	1	1	
	Quartier 7 bis	Karton	Mixed	1		1	1	1	
	Arhiba	-	Mixed	1		1	1		
	Cité de Stade	-	Mixed	1			2	1	
	Quartier 7	Ilot	Mixed	1					
	Quartier 6	Secteur 3	Middle	1			1	1	1
	3 <sup>rd</sup>	Phare	-	Poor	1	1		1	1
Ambouli		Gachamaleh	Mixed	1	1	1	1		
Amb. Jardins		Sud	Mixed	1		1	1	1	
Djebel		Nord	Mixed	1	1	1	1		
4 <sup>th</sup>		PK12	Iljano	Very Poor	1	1	2		
	Quartier 9	Pharka	Poor	2	1	1	4		
	Quartier 9	Laangobaale	Poor	1		1	1		
	Quartier 12	Bache à Eau	Poor	1	1	2			
	Quartier 12	Cagadheer	Mixed	1		1		1	1
5 <sup>th</sup>	Buula Yaryar	8 Metre	Very Poor	1		2	1		
	Waraabalay	-	Very Poor	1		1			
	Sauvage	-	Poor	1	1	2			
	Wadadaabo	-	Poor	1	1	1	1		
	Xayaablay 2	-	Poor	1	1		1	1	
	Nasiibwanaag	-	Mixed	1			1	1	
	Cheikh Musa	-	Mixed	1		1	1		
	Xayaablay 1	-	Mixed	1				1	1
			Totals:	29	10	25	25	12	3

### 11.5 Sources of Income in Detail

Each of the main types of income generating activity can be carried on at two or more levels. These different levels, and the associated amounts of income are described in the table below.

Level	Types of activity	Approximate income per month
<b>CASUAL LABOUR</b>		
1	Dockers, Construction workers	800-1500 FD x 8-10 days = ~10,000 FD
2	Dockers, Construction workers Market porters	800-1500 FD x 15-20 days = ~20,000 FD 500-800 FD x 30 days = ~20,000 FD
3	Skilled workers (e.g. electricians, masons)	2000 FD x 10-20 days = ~30,000 FD
<b>PETTY TRADE</b>		
1	School snacks, bread, prepared foods, vegetables, tea stalls	500-800 FD x 30 days = ~20,000 FD
2	<i>Qat</i> , small kiosks, meat sellers	800-1300 FD x 30 days = ~30,000 FD
<b>SALARY/PENSION</b>		
1	Domestic work Military reservists Watchmen	10-12,000 FD 10-15,000 FD ~25,000 FD
2	Cleaners, Taxi drivers	25,000-40,000 FD
3	Many private sector and port employees, non-commissioned officers, assistant teachers, government drivers	40,000-80,000 FD
4	Teachers, nurses, port workers, government employees	80,000-150,000 FD
5	Senior government employees	>150,000 FD
<b>BUSINESS/COMMERCE</b>		
1	Small retail shops and restaurants	2000 FD x 30 days = ~60,000 FD
2	Minibuses, medium-sized shops, clothes retailers	4000 FD x 30 days = ~120,000 FD
3	<i>Qat</i> importers/distributors, larger shops, bakers, etc.	8000 FD x 30 days = ~240,000 FD

## 11.6 Employment by Sector

	SECTOR		No. Firms	No. Workers
I	TRANSPORT, COMMUNICATION AND SERVICES			
	A <sup>1</sup>	Sea Port & Transport Services	73	1,260
	B	Air Transport/Airlines & Travel Agencies	14	467
	C1 <sup>2</sup>	Road Freight Transport	10	152
	C2 <sup>3</sup>	Road Passenger Transport (Mini-Buses & Taxis)	1,900	4,450
	D <sup>4</sup>	Rail Transport	1	500
	E	Telecommunications	1	547
	F <sup>5</sup>	Other Services	84	1,651
SUB TOTAL (I)			2,083	9,027
II	INDUSTRY & CONSTRUCTION			
	A <sup>6</sup>	Building/Civil Engineering/Building Material Manufacture	127	1,620
	B <sup>7</sup>	Energy Production (Djibouti Electricity Co.)	1	??
	C <sup>8</sup>	Other Industries	58	940
SUB TOTAL (II)			186	2,560
III	TRADE			
	A <sup>9</sup>	General Trade	106	2,315
	B	Petroleum Products	8	285
SUB TOTAL (III)			114	2,600
GRAND TOTAL (I + II + III)			2,383	14,187

Source: Djibouti Chamber of Commerce, except passenger transport sub-sector, where information was obtained from taxi and minibus owners' associations (see detailed breakdown below). The table includes all companies and individual traders employing at least one person in addition to the owner.

### Notes:

- Services conducted by private companies at the ports include; shipping, forwarding, stevedoring, ship's chandlers, maritime surveyors, equipment leasing and goods storage.
- There are only 10 private companies employing 152 persons.
- There are over 1900 minibuses and taxis in the city owned by individuals, and providing income for about 4,500 individuals (see table below).
- Only about 500 of the 2800 workers for the Ethio-Djibouti Railway live within Djibouti Ville.
- Other Services include; international hotels and restaurants, commercial banks and money transfer companies, office services, information technology, media, photographers, lawyers, consultants, commission agents etc.
- Less than 1/6<sup>th</sup> of the firms listed here are engaged exclusively in these activities. The remainder are involved in trading activities as well.
- Number of employees in this firm not found.
- Other Industries include; bakery, jewellery, pharmaceutical, water/soft drinks production, salt production etc.
- Those firms involved in construction as well as general trade are not included in this row.

### **Summary of Minibuses & Taxis Operating in Djibouti Ville**

	Category	Specification	No. Vehicle	Ownership status (%)		Number of Dependants				Total
				Owner Driver	Hired Driver	Owners	Owner Drivers	Hired Drivers	Assistants	
I	Mini-Buses	12 seaters	1,000	10%	90%	900	100	900	1,000	2,900
		25-30 seaters	200	10%	90%	180	20	180	200	580
II	Taxi		700	70%	30%	210	490	210	60	970
			1,900			1,290	610	1,290	1,260	4,450

## 11.7 Patterns of Expenditure in Detail

### EXPENDITURE (FD) – VERY POOR (household size = 7)

<b>FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>	<b>% of Kcals</b>	<b>Cost per month</b>
Rice	20 kg	15	1,600
Pasta	7.5 kg	6	900
Sorghum	15 kg	12	1,800
Flour	17.5 kg	14	1,400
Oil	4.5 kg	9	900
Sugar	15 kg	13	1,200
Bread	3 loaves per day = 9 kg	5	1,800
Milk Powder	1 kg	1	1,000
Beans	7.5 kg	6	750
Meat	1 kg	0	500
Vegetables (Tomatoes, onions, potatoes)	2 kg per week = 8 kg	1	960
Tea	5-10 FD per day	0	300
Salt	20 FD per week	0	80
Fruit	None		
Prepared food	None		
Gifts: Meals	75 meals in a month	14	
Gifts: Dry food (e.g. Rice)	5 kg	4	
Other	None		
<b>TOTAL FOOD</b>		<b>100</b>	<b>13,190</b>

<b>NON FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>		<b>Cost per month</b>
Water			1,500
Kerosene	0.75 litres per day @ 80FD/l		1,800
Laundry Soap	6 pcs @ 40 FD each		240
Soap Powder	6 pkts @ 50 FD each		300
Body Soap	4 pcs @ 50 FD each		200
Electricity	Do not have electricity		
<i>Qat</i>	May get as gifts		
Clothes-children			500
Clothes-adults			350
Medicine			270
Gifts			
Domestic Staff			
Transport			
Education	1 child at primary school		650
	0-1 child at intermediate school		1,000
Other (HH Goods etc.)			
<b>TOTAL NON FOOD</b>			<b>6,810</b>

<b>GRAND TOTAL</b>			<b>20,000</b>
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**EXPENDITURE (FD) –POOR (household size = 7)**

<b>FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>	<b>% of Kcals</b>	<b>Cost per month</b>
Rice	22.5 kg	17	1,800
Pasta	12.5 kg	10	1,500
Sorghum	15 kg	12	1,800
Flour	22.5kg	18	1,800
Oil	5 kg	10	1,000
Sugar	20kg	18	1,600
Bread	4-5 loaves per day = 13.5 kg	7	2,700
Milk Powder	1 kg	1	1,000
Beans	12 kg	9	1,200
Meat	3.5 kg	2	1,750
Vegetables (Tomatoes, onions, potatoes)	20 kg	2	2,400
Tea	Purchase every day	0	350
Salt	Purchase every day	0	100
Fruit	None		
Prepared food	None		
Gifts: Meals	None		
Gifts: Dry food (e.g. Rice)	1 kg per month	1	
Other	None		
<b>TOTAL FOOD</b>		<b>107</b>	<b>19,000</b>

<b>NON FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>		<b>Cost per month</b>
Water			1,875
Kerosene	30 litres @ 80 FD each		2,400
Laundry Soap	12 pcs @ 40 FD each		480
Soap Powder	12 pkts @ 50 FD each		600
Body Soap	8 pcs @ 50 FD each		400
Electricity			0
<i>Qat</i>	10 days @ 300 FD per day		3,000
Clothes-children			1,200
Clothes-adults			400
Medicine			375
Gifts			0
Domestic Staff			0
Transport	8 journeys @ 100 FD		800
Education	1 child at primary school		650
	0-1 child at intermediate school		1,000
Other (HH Goods etc.)			320
<b>TOTAL NON FOOD</b>			<b>13,500</b>

<b>GRAND TOTAL</b>			<b>32,500</b>
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**EXPENDITURE (FD) – LOWER MIDDLE (household size = 8)**

<b>FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>	<b>% of Kcals</b>	<b>Cost per month</b>
Rice	25 kg	17	2,000
Pasta	17.5 kg	12	2,450
Sorghum	15 kg	11	1,800
Flour	25 kg	17	2,000
Oil	8 kg	14	1,600
Sugar	22.5 kg	18	1,800
Bread	4-5 loaves per day = 13.5 kg	7	2,700
Milk Powder	2.5 kg	2	2,500
Beans	12 kg	8	1,200
Meat	6 kg	3	3,600
Vegetables (Tomatoes, onions, potatoes)	30kg	2	3,600
Tea	Purchase every day	0	400
Salt	Purchase every day	0	100
Fruit	None		
Prepared food	None		
Gifts: Meals	None		
Gifts: Dry food (e.g. Rice)	None		
Other	None		
<b>TOTAL FOOD</b>		<b>111</b>	<b>25,750</b>

<b>NON FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>		<b>Cost per month</b>
Water			3,500
Kerosene	30 litres @ 80 FD per litre		2,400
Laundry Soap	15 pcs @ 40 FD each		600
Soap Powder	15 pkts @ 50 FD each		750
Body Soap	10 pcs @ 50 FD each		500
Electricity	Annual average		5,000
<i>Qat</i>	10 days @ 600 FD each		6,000
Clothes-children			3,375
Clothes-adults			1,125
Medicine			600
Gifts			2,000
Domestic Staff			0
Transport	15 journeys @100 FD		1,500
Education	1 child at primary school		650
	0-1 child at intermediate school		1,000
	0-1 child at secondary school		2,900
Other (HH Goods, cosmetics, savings etc.)			2,350
<b>TOTAL NON FOOD</b>			<b>34,250</b>

<b>GRAND TOTAL</b>			<b>60,000</b>
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**EXPENDITURE (FD) – UPPER MIDDLE (household size = 8-9)**

<b>FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>	<b>% of Kcals</b>	<b>Cost per month</b>
Rice	25 kg	16	2,000
Pasta	20 kg	13	3,200
Sorghum	12 kg	8	1,440
Flour	22.5 kg	14	1,800
Oil	9 kg	15	1,580
Sugar	25 kg	18	1,550
Bread	6 loaves per day = 18 kg	8	3,600
Milk Powder	6 kg	6	4,680
Beans	15 kg	9	1,500
Meat	10 kg	4	6,000
Vegetables (Tomatoes, onions, potatoes)	75 kg	5	6,000
Tea	1 kg	0	650
Salt	5 kg	0	100
Fruit	6-7 kg oranges	0	1,000
Prepared food	5 meals x 300 FD	1	1,500
Gifts: Meals	None		
Gifts: Dry food (e.g. Rice)	None		
Other	Including 2kg ghee	2	1,000
<b>TOTAL FOOD</b>		<b>119</b>	<b>37,600</b>

<b>NON FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>		<b>Cost per month</b>
Water			3,750
Kerosene	40 litres @ 80FD per litre		3,200
Laundry Soap	15 pcs @ 40FD each		600
Soap Powder	20 pkts @ 50 FD each		1,000
Body Soap	15 pcs @ 50FD each		750
Electricity	Annual average		10,000
<i>Qat</i>	20 days @ 600 FD per day		12,000
Clothes-children			13,000
Clothes-adults			8,000
Medicine			2,000
Gifts			3,000
Domestic Staff	0-1 domestic staff		6,750
Transport	20 journeys @ 100 FD		2,000
Education	1 child at primary school		650
	1 child at intermediate school		2,000
	0-1 child at secondary school		2,900
Other (HH Goods, cosmetics, telephone, savings etc.)			5,800
<b>TOTAL NON FOOD</b>			<b>77,400</b>

<b>GRAND TOTAL</b>			<b>115,000</b>
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**EXPENDITURE (FD) – BETTER-OFF (household size = 9-10)**

<b>FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>	<b>% of Kcals</b>	<b>Cost per month</b>
Rice	25 kg	14	2,000
Pasta	20 kg	12	3,200
Sorghum	12 kg	7	1,440
Flour	22.5 kg	13	1,800
Oil	9 kg	14	1,580
Sugar	25 kg	17	1,550
Bread	6 loaves per day = 18kg	7	3,600
Milk Powder	10 kg	8	7,800
Beans	6 x 2.5 kg tins = 15 kg	8	1,500
Meat	22.5 kg	8	13,500
Vegetables (Tomatoes, onions, potatoes)	120 kg	7	9,600
Tea	1 kg	0	650
Salt	5 kg	0	100
Fruit	30-35 kg of various fruits	0	5,000
Prepared food	10 Meals x 300 FD	2	3,000
Gifts: Meals	None		
Gifts: Dry food (e.g. Rice)	None		
Other	Including 2.5 kg ghee	4	15,000
<b>TOTAL FOOD</b>		<b>121</b>	<b>71,320</b>

<b>NON FOOD</b>			
<b>Item</b>	<b>Quantity per month</b>		<b>Cost per month</b>
Water			4,750
Kerosene	45 litres @ 80 FD each		3,600
Laundry Soap	15 pcs @ 30 FD each		450
Soap Powder	25 pkts @ 40 FD each		1,000
Body Soap	20 pcs @ 30 FD each		600
Electricity	Annual average		20,000
<i>Qat</i>	30 days @ 1250 FD per day		37,500
Clothes-children			20,000
Clothes-adults			10,000
Medicine			7,500
Gifts			7,500
Domestic Staff	1 domestic staff		13,500
Transport	Own vehicle		18,000
Education	1 child at primary school		650
	1 child at intermediate school		2,000
	1 child at secondary school		5,800
Other (HH Goods, cosmetics, telephone, savings etc.)			25,830
<b>TOTAL NON FOOD</b>			<b>178,680</b>

<b>GRAND TOTAL</b>			<b>250,000</b>
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**PRICES USED IN ANALYSIS (FD per kg, except where noted)**

<b>Item</b>	<b>Very Poor/Poor</b>	<b>Lower Middle</b>	<b>Upper Middle Better-off</b>	<b>Notes</b>
Rice	80	80	80	
Pasta	120	140	160	Price varies according to quality
Sorghum	120	120	90	1 kg = 120 FD 50 kg bag = 3500 FD (70 FD/kg + 20 FD/kg milling costs = 90 FD/kg)
Flour	80	80	80	
Oil	200	200	175	250 g = 50 FD 3 kg tin = 500 – 550 FD (175 FD/kg)
Sugar	80	80	64	1 kg = 80 FD 50 kg bag = 3200 FD (64 FD/kg)
Bread	200	200	200	1 x 100 g loaf = 20 FD
Milk Powder	1000	1000	780	50 g plastic bag = 50 FD 2.5 kg tin = 1950 FD
Beans	100	100	100	
Meat	500	600	600	1 kg beef or mutton = 500 kg 0.1 kg of mince beef = 50 FD
Vegetables	120	120	80	250 g tomatoes, onions or potatoes = 30 FD (120 FD/kg) 1 kg tomatoes = 100 FD 1 kg onions = 80-100 FD 1 kg potatoes = 60-70 FD
Salt				1 kg = 20 FD
	<b>Very Poor/Poor</b>	<b>Lower &amp; Upper Middle</b>	<b>Better-off</b>	
Laundry Soap	40 FD/piece	40 FD/piece	30 FD/piece	1 piece = 30–40 FD 1 carton (100 pcs) = 2800 FD (28 FD/piece, rounded up to 30)
Soap Powder	50 FD/pkt	50 FD/pkt	40 FD/pkt	1 packet = 50 FD 1 carton (60 pkts) = 2600 FD (43 FD/piece, rounded down to 40)
Body Soap	50 FD/piece	50 FD/piece	30 FD/piece	1 piece = 50 FD 1 carton (72 pcs) = 1900 FD (26 FD/piece, rounded up to 30)

Note: The 'poor' and 'lower middle' groups typical buy retail, while the 'upper middle' and 'better-off' can buy in bulk. This explains the lower price for some items purchased by these latter groups.

### 11.8 Water Supply System by *Quartier* Visited

Type of <i>Secteur</i>	<i>Quartier/Secteur</i>	Type of Water System
	<b>1<sup>st</sup> Arrondissement</b>	
Very Poor	Quartier 4	Pipes
Poor	Quartier 2	Pipes
Middle	Aingela	Pipes
	<b>2<sup>nd</sup> Arrondissement</b>	
Poor	Quartier 7-Jagabuldhug	Pipes
	Quartier 6-Secteur 1	Pipes
Mixed	Quartier 5-Secteur 1	Pipes
	Quartier 7 bis-Carton	Pipes
	Arhiba	Pipes
	Cité de Stade	Pipes
	Quartier 7-Ilot	Pipes
Middle	Quartier 6-Secteur 3	Pipes
	<b>3<sup>rd</sup> Arrondissement</b>	
Poor	Phare	Fountains
Mixed	Ambouli-Gachamaleh	Pipes
	Amb. Jardins-Sud	Wells
	Djebel-Nord	Pipes
	<b>4<sup>th</sup> Arrondissement</b>	
Very Poor	PK12-Iljano	Fountains
Poor	Quartier 9-Pharka	Fountains
	Quartier 9-Laangobaale	Fountains
	Quartier 12-Baach a Eau	Pipes
Mixed	Quartier 1 -Cagadaer	Pipes/Fountains
	<b>5<sup>th</sup> Arrondissement</b>	
Very Poor	Buala Yaryar-8 Mitir	Tankering
	Warabalay	Tankering
Poor	Soofash	Fountains
	Waxlidaab	Tankering
	Xahablay 2	Pipes/Tankering
Mixed	Nasiibulang	Tankering
	Sheikh Musa	Pipes
	Xahablay 1	Pipes/Fountains

## 11.9 Education Costs in Detail

	<b>Primary School</b>	<b>Intermediate School</b> <i>(Secondaire – Première Cycle)</i>	<b>Secondary School</b> <i>(Secondaire – Seconde Cycle)</i>
Age (years)	6-11	12-15	16-18
<b>Item</b>	<b>FD per child per year</b>		
Cooperative (Primary) Textbooks (other)	= 1000	= 3000-5000; avg. 4000	= 11000-17500; avg. 14250
Stationary			
Notebooks	12 x 75 FD = 900	12 x 150 FD = 1800	12 x 250 FD = 3000
Pens	4 per month x 8months x 35 FD = <u>1120</u>	4 per month x 8months x 35 FD = <u>1120</u>	4 per month x 8months x 35 FD = <u>1120</u>
Sub-total:	= 2020	= 2920	= 4120
Transport	Zero	0-80 FD/day x 32 weeks x 6 days = 0 – 15360; avg. 7680	160 FD/day x 32 wks x 6 days = 30720
Snacks	25 FD x 32 weeks x 6 days = 4800	50 FD x 32 weeks x 6 days = 9600	100 FD x 32 weeks x 6 days = 19200
<b>Grand Total per year:</b>	<b>= 7820</b>	<b>= 24200</b>	<b>= 68290</b>
<b>per month:</b>	<b>~ 650</b>	<b>~ 2000</b>	<b>~ 5800</b>

### Notes:

1. The school year runs from the second week of September until the second week of May.
2. Children attend school 6 days a week, 32 weeks of the year. There is one session a day for intermediate school (two bus journeys x 40 FD, where the child takes a bus to school) and two sessions a day for secondary school (four bus journeys x 40 FD)

## 11.10 Scenario Analysis

### 11.10.1 Minimum Non-Staple Expenditure

#### MINIMUM NON-STAPLE EXPENDITURE (FD) – VERY POOR (household size = 7)

MINIMUM NON-STAPLE			
Item	Quantity per month	% of Kcals	Cost per month
Milk Powder	1 kg	1	1,000
Meat	1 kg	0	500
Vegetables (Tomatoes, onions, potatoes)	2 kg per week = 8 kg	1	960
Tea	5-10 FD per day	0	300
Salt	20 FD per week	0	80
Water			1,500
Kerosene	0.75 litres per day @ 80FD/l		1,800
Laundry Soap	6 pcs @ 40 FD each		240
Soap Powder	6 pcs @ 50 FD each		300
Body Soap	4 pcs @ 50 FD each		200
Clothes-children			500
Clothes-adults			350
Medicine			270
Education	1 child at primary school		650
	0-1 child at intermediate school		1,000
<b>TOTAL</b>		<b>2</b>	<b>9,650</b>

#### MINIMUM NON-STAPLE EXPENDITURE (FD) –POOR (household size = 7)

MINIMUM NON-STAPLE			
Item	Quantity per month	% of Kcals	Cost per month
Milk Powder	1 kg	1	1,000
Meat	3.5 kg	2	1,750
Vegetables (Tomatoes, onions, potatoes)	20 kg	2	2,400
Tea	Purchase every day		350
Salt	Purchase every day		100
Water			1,875
Kerosene	30 litres @ 80 FD each		2,400
Laundry Soap	12 pcs @ 40 FD each		480
Soap Powder	12 pcs @ 50 FD each		600
Body Soap	8 pcs @ 50 FD each		400
Clothes-children			1,200
Clothes-adults			400
Medicine			375
Education	1 child at primary school		650
	0-1 child at intermediate school		1,000
<i>Qat</i>	5 days @ 300 FD each day		1,500
<b>TOTAL</b>		<b>5</b>	<b>16,480</b>

11.10.2 Cost of Minimum Staple Calories

**EXPENDITURE ON STAPLES (FD) – VERY POOR (household size = 7)**

<b>STAPLE</b>			
<b>Item</b>	<b>Quantity per month</b>	<b>% of Kcals</b>	<b>Cost per month</b>
Rice	20 kg	15	1,600
Pasta	7.5 kg	6	900
Sorghum	15 kg	12	1,800
Flour	17.5 kg	14	1,400
Oil	4.5 kg	9	900
Sugar	15 kg	13	1,200
Bread	3 loaves per day = 9 kg	5	1,800
Beans	7.5 kg	6	750
<b>TOTAL</b>		<b>80</b>	<b>10,350</b>

Cost of 100% Kcals (HH size 7) =  $100 / 80 \times 10,350 = 12,940$  FD

## Example of a Scenario Calculation Sheet

Steps in the Analysis (see example sheet on next page):

1. Enter baseline information on food, income and expenditure into the 'Baseline' column.
2. Enter estimates of expandability for food and income into the 'Expandability' column. 'Expandability' represents the extent to which a given source of food and income can be expanded in response to a specified hazard. Only gifts are expandable in the case of the urban 'very poor'. These might increase by half compared to the baseline, so that an additional 9% of food could be derived from this source.
3. Leave the row for purchase blank for the moment, as changes in purchase will be calculated from income and expenditure at step 8.
4. Add expandability to baseline access and enter the result in the 'Baseline + Expandability' column.
5. Enter the current problem of access to food and income in the 'Current problem' column. If access to casual labour were half of baseline, then 50% would be entered as the current problem for casual labour.
6. Multiply the figures in 'Baseline + Expandability' by the corresponding 'Current problem' % and enter the result in the 'Final picture' column. Do this for all sources of food and income, except purchase.
7. Enter any change in the cost of the minimum non-staple basket into the 'Current problem' column of Table 3. In the case of the kerosene scenario, the additional cost of purchasing kerosene is 1800 FD per month. Calculate the 'Final picture' for minimum non-staple expenditure, i.e. the revised cost of the minimum non-staple basket, in this case =  $9650 + 1800 = 11450$  FD.
8. Carry total income down from Table 2 to the bottom right-hand cell of Table 3 (i.e. total expenditure). Calculate the amount of money available for staple food purchase. In this case =  $20000 - 11450 = 8550$ .
9. Carry the amount of money available for staple purchase down to Table 4 (cash available). Calculate the amount of staple food that can be purchased, bearing in mind the price of staple food, and any change in this resulting from the hazard.
10. Carry the amount of staple food that can be purchased up to the 'final picture'/purchase row of Table 1.
11. Complete the calculation of total food access and calculate any deficit (Table 1).

## SCENARIO ANALYSIS SUMMARY

Livelihood Zone	Djibouti Ville	Wealth Group	Very Poor
Baseline year/type	Oct 2002 – Sep 2003	HH size	7
Current year/type	Inc. kerosene price	% of community HHs	-

Table 1: Food	Baseline	Expandability	Baseline + Expandability	Current problem	Final picture
Purchase	80%	See below <sup>[2]</sup>			66%
Min.non-staple	2% <sup>[1]</sup>	0%	2%	100%	2%
Gifts	18%	9% <sup>[3]</sup>	27%	100%	27%
Total	100%				95%
Deficit					5%

Table 2: Income (cash)	Baseline	Expandability	Baseline + Expandability	Current problem	Final picture
Casual labour	10,000	0	10,000	100%	10,000
Petty trade	10,000	0	10,000	100%	10,000
Total	20,000				20,000

Table 3: Expenditure (cash)	Baseline		Current problem	Final picture
Minimum non-staple	9,650		+1,800 <sup>[4]</sup>	11,450
Staple food	10,350			8,550
Other	0			
Total	20,000			20,000

Table 4: Staple purchase	Cash available	Price/kg	Kg purchased	% kcals
Rice etc.	8,550	12,940*	*cost of 100% kcals	66%

### Notes:

[1] The minimum non-staple basket contains small amounts of meat and vegetables. These contribute about 2% to baseline calories.

[2] The final picture for purchase is calculated from income and expenditure, Tables 2-4.

[3] Gifts may, at times of hardship, increase by 50% compared to the baseline. This is an estimate based upon information on gift-giving behaviour collected in the field.

[4] The additional cost of purchasing kerosene.