



Vulnerability and Food Insecurity in Three Urban Areas of Burundi

An Assessment of the Impact of High Prices on Households in Bujumbura Mairie, Ngozi and Gitega Cities



UN World Food Programme
July 2008

Table of Contents

Acknowledgements	3
Map of Burundi	4
1.0 Background and Objectives.....	5
2.0 Context of Burundi	6
3.0 Methodology	7
3.1 Sampling.....	7
3.2 Limitations of the Study.....	8
4.0 Markets and Prices	9
4.1 Bujumbura Mairie	10
4.2 Gitega	10
4.3 Ngozi	10
5.0 Findings by Urban area	11
5.1 Household demographics.....	11
5.2 Housing and amenities	11
5.3 Asset wealth	11
5.4 Urban Agriculture	12
5.5 Livelihoods	12
5.6 Expenditures.....	14
5.7 Household Food Consumption	15
5.8 External and internal support and borrowing	16
5.9 Seasonality.....	17
5.10 Shocks and Coping	17
6.0 Household Vulnerability Analysis and Food Security Classifications.....	21
6.1 Highly food secure.....	23
6.2 Food secure.....	24
6.3 Moderately food secure	24
6.4 Vulnerable	24
6.5 Chronically food insecure	25
7.0 Conclusions and Recommendations.....	26
References	28

Acknowledgements

The mission team would like to thank the WFP Burundi Country Director and Representative, Mr Jean-Charles Dei, and the whole Country Office Team especially the Programme/VAM Team, and the Drivers for the excellent guidance, organization, commitment and support to this urban assessment. Thanks also go to Institut des Statistiques et des Etudes Economiques du Burundi (ISTEEBU) for support provided during sampling and data entry. The mission extends its warmest thanks to the households that took the time to respond to the questionnaires as well the enumerators that administered the interviews.

For additional information concerning this study, please contact:

Jean-Charles Dei, WFP Country Director

Jean-Charles.Dei@wfp.org

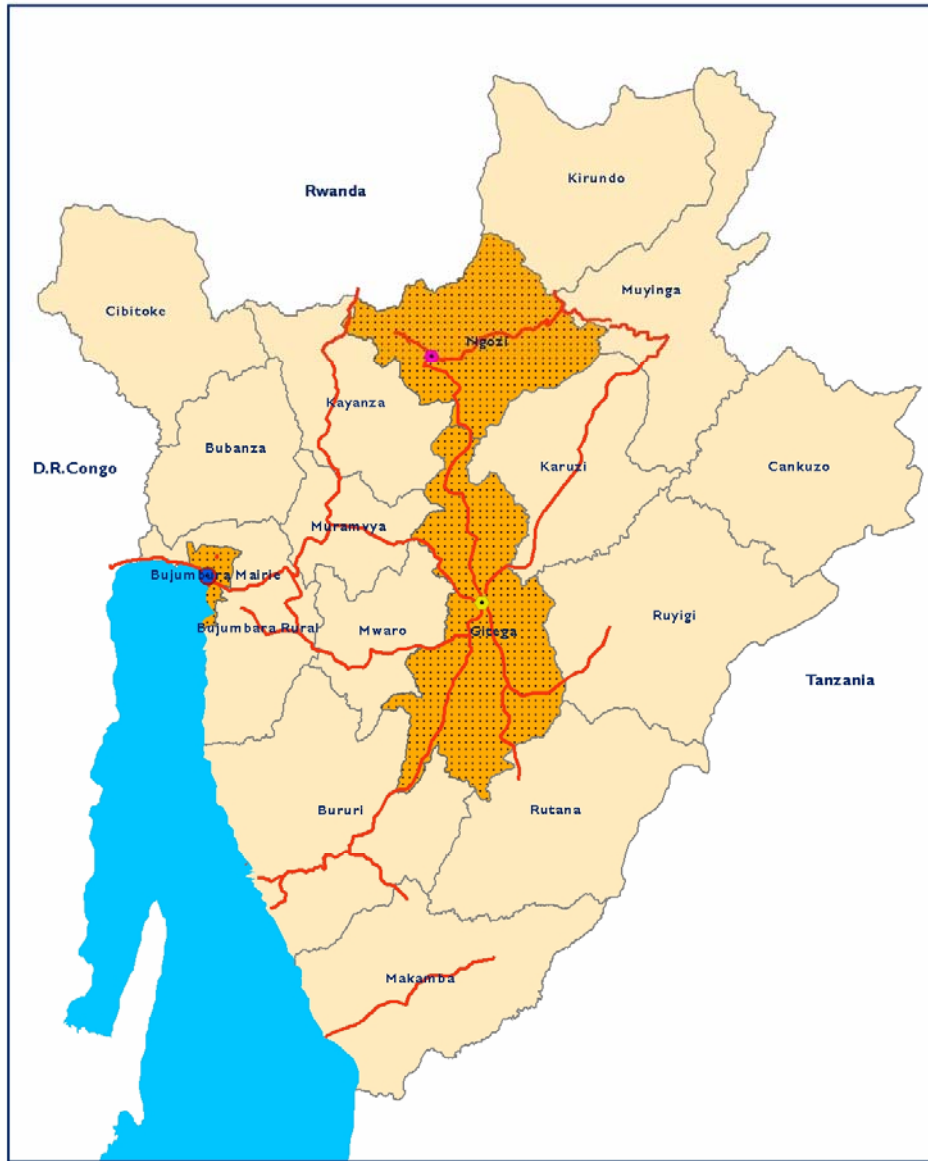
Eric Kenefick, Regional VAM Advisor, WFP Johannesburg

Eric.Kenefick@wfp.org

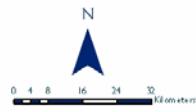
Daphine Hunter, Regional VAM Officer, Kampala

Daphine.Hunter@wfp.org

BURUNDI



- Legend**
- | | |
|------------------------------|--------------------------|
| Sampled Urban Centres | Sampled Provinces |
| ● Bujumbura | ■ Other Provinces |
| ● Gitega | ● Capital City |
| ● Ngozi | — Major Road Network |
| | — Lakes |
- Only Urban Centres within these Provinces were visited



Map Produced by VAM-Unit OMJ
Urban Assessment 2008

Spatial Files from Global Discovery Digital
Mapping by Europa Technology LTD 2001

July 2008

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

1.0 Background and Objectives

Recent increases in food and fuel prices are likely to increase both the incidence and depth of household food insecurity. Higher prices may also translate into increased expenditure on food to the detriment of other household needs (e.g. education, health) and an even poorer diet, as families shift from energy-dense cereals to less energetic/micronutrient-rich but cheaper food products. While everybody is affected by food price rises, the most affected households are likely to be net food buyers and households that are already vulnerable to food insecurity.

Burundi has been no exception to effects of global rising food prices. According to FAO, several provinces saw major rises in prices of staple foods. Prices of local major foods such as beans, cassava, sweet potatoes and rice rose over 20% in major markets in Bujumbura between April 2007 and April 2008. The poorest urban households reported a major increase in price of a basic low quality meal from 150 Burundian Francs (USD 0.15) to 450 Burundian Francs (0.45 USD). In addition to substituting for cheaper food items, households were also reducing the number of meals per day which will have a negative impact on their nutrition and consequently their overall food security.

Given the already very high food insecurity in Burundi the high food prices and the impacts of increasing fuel prices are expected to have a major impact: About 90% of the population is dependant on subsistence agriculture which has also reduced, 50% already eat inadequately and around 34% consume less than 1,400 kcal per day per person. In addition, during the harvest season, people still depend to 40% upon the local market¹. Against this background, WFP Burundi with support from the Regional Bureau, OMJ conducted an assessment to understand the impact of prices on households and markets in three major urban centres; Bujumbura Mairie, Gitega and Ngozi.

The Urban assessment aimed at:-

1. Analyzing/understanding current and future outlook of food prices in the selected urban areas;
2. Assessing the impact of rising prices on the urban populations of Bujumbura Mairie, Gitega and Ngozi;
3. Analyzing immediate, mid-term and long-term response options.

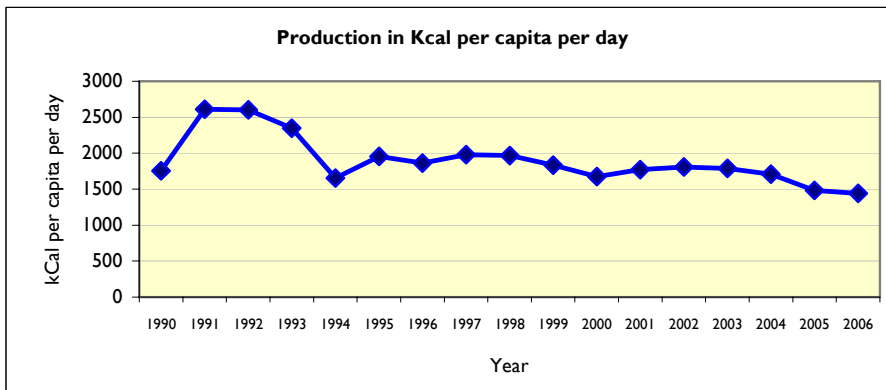
2.0 Context of Burundi

Burundi is a landlocked, resource-poor country that is slowly emerging from decades of conflict and institutional neglect. The population of Burundi is estimated to be 8.3 million with a growth rate of 3.5% (2007 estimate). This equates to a population density of 250 - 300 people per square kilometre, second only to Rwanda in Africa. Only 9.6 percent of Burundians live in urban areas, which is one of the lowest levels of urbanization in Africa² but this is gradually changing as the economy slowly recovers from the disastrous effects of twelve years of war. Burundi is one of the poorest countries in the world, ranking 167 out of 177 in the 2007/8 United Nations Development Program's Human Development Report.

GDP grew around 5% annually in 2006-07. Political stability and the end of the civil war have improved aid flows and economic activity has increased, but underlying weaknesses - a high poverty rate, poor education rates, a weak legal system, and low administrative capacity - risk undermining planned economic reforms. Resorting to financing public debt through expanding the money supply, the resulting inflation has increased the prices of goods and chipped away at the real incomes of Burundians.³ Peace and stability in the country remains fragile and food insecurity pervasive caused by multiple and cumulative factors such as population pressure on scarce land resources, lack of access to basic services, land degradation and increased environmental hardships, plant diseases and limited access to non-farm income generation opportunities. The country has experienced high inflation over the past three years due mainly to the decline in domestic food production. According to the Economist Intelligence Unit, consumer price inflation (driven mainly by price of food commodities) shot up from -1.4 percent in 2002 to 16 percent in 2005. This has led to significantly lower purchasing power for the majority particularly those most food insecure.

Agricultural production is the primary livelihood in Burundi, both as the primary source of food for most households as well as an important source of revenue.⁴ It is estimated that 90% of Burundi's workforce is engaged in the agricultural sector.⁵ However, as shown in Figure 1 below, agricultural production has not kept up with population growth, having decreased 15% in the last decade.⁶

Figure 1: Production Per capita per day



Source: FAO/ISTEEBU

The major contributing factors to the decline in food production are: insecurity which caused displacements that affected farming; limited or no use of agricultural inputs; climatic related shocks; limited agricultural staff to disseminate new improved methods of farming and raising livestock; and no or limited access to credit. In addition, population growth, combined with traditional inheritance systems and a lack of economic alternatives, has resulted in extremely fragmented agricultural plots which have shrunk to an average size of less than ½ hectare per family⁷.

² United Nations Economic Commission for Africa

³ PRSP

⁴ WFP VAM Study 2004

⁵ Oketch and Polzer (105) put this figure at 90%, Banderembako (3) at 94%

⁶ Banderembako, 4

⁷ Technical Assistance to the US Government Mission in Burundi on Natural Resource Management and Land Use Policy

3.0 Methodology

In order to capture the impact of the current price increases on the urban poor a number of methods will be used. The assessment reviewed secondary data available and then conducted primary data collection in the selected urban areas. The primary data collection comprised of both qualitative and quantitative data collection methods.

Three different data collection approaches were used:

- Community Focus Group interviews
- Household Food security Questionnaire
- Market/Trader questionnaires

Concurrently, secondary data analysis took place, where recent relevant reports relating to urban prices and market information were reviewed. This information was used to both contextualize and triangulate the new information collected through the primary data collection activities.

The Secondary Data provided a brief overview of the socio-economic vulnerability with insights into the country's recent social and macro-economic performance. This analysis also aimed at gaining insights into how the aggregate food availability has evolved over years (domestic production level and variability, public and private import volumes, public and private stocks and food aid).

The Community Focus Group discussions helped to profile the most affected by price rises and to assess the overall magnitude of the shock as well as seasonality. They provided perceptions of vulnerability, including sources of incomes & food; Coping strategies; identification of vulnerable groups. They also guided the discussions on the changes which occurred within the last few months. The Focus group discussions were held in each of the 40 Quartiers⁸ selected in the sample. Combinations of open and semi-closed questions were used to gather information on income sources, food sources, shocks and coping mechanisms.

At Household level, the interviews provided information on: assets, urban agriculture, income sources and trends, consumption and expenditure patterns as well as shocks and household coping mechanisms.

The trader interviews conducted in the markets in each province/Quartier (where applicable) provided information on food access and availability on the different markets in the three urban centres. The traders' questionnaire provided information on food access and availability on the different markets. It also provided information on access to credit for traders as well as their customers. Moreover, discussions with traders helped to better understand how the current market functions and the behaviour of customers in the urban communities.

3.1 Sampling

A sample was drawn from the urban areas (strata) of Bujumbura, Gitega and Ngozi based on zoning by Institut des Statistiques et des Etudes Economiques du Burundi (ISTEEBU). The sample was drawn from the poorest areas of the three urban centres and thus excluded the upper class quarters. Bujumbura, the capital, located at the West of the country, is the most populated city by far with approximately 390 000 inhabitants - nearly 52% of the urban population. The city has 6 large markets of which the central market dominates trade transactions. 200 households were selected randomly from Bujumbura Mairie with specific focus to the poorest areas of the town whose population is estimated at 280,000. In Bujumbura Mairie, the selection of the poorest neighbourhoods was based on level of housing, access to water (inside the house) and electricity, level of income. The areas removed from the sample were mainly areas with middle to upper class housing with higher property and land rates, better access to electricity, water especially inside the house as most of the poorer neighbourhoods use communal taps and level of income and standard of living for most of the residents. In addition, most of the poorer neighbourhoods also have poor sanitation facilities.

Ngozi is the largest province in the country by population size and although the influx of returnees has not been significant, the high population density and the decreasing availability of land seriously affect household food security in the province. The urban area in Ngozi has a population of about 30, 000 and 100 households were selected for the household sample. The middle to upper class is much

⁸ Quartier is the equivalent of a village

small in Ngozi and as such fewer quarters were removed from the sample in order to retain urban/peri-urban areas of the town.

Gitega, located in the central part of the country has an estimated population of 681,000 people with about 37,000 living in the urban areas. The very central geographical situation of the town of Gitega confers an importance not only for the administrative management of the country, but also as a major trade route. 100 households were selected randomly for the assessment. Similarly in Gitega, the middle to upper class is much smaller and as such fewer quarters were removed from the sample in order to retain urban/peri-urban areas of the town using the same criteria described above.

3.2 Limitations of the Study

While rigorous standards were applied to the analytical process, the following must be acknowledged:

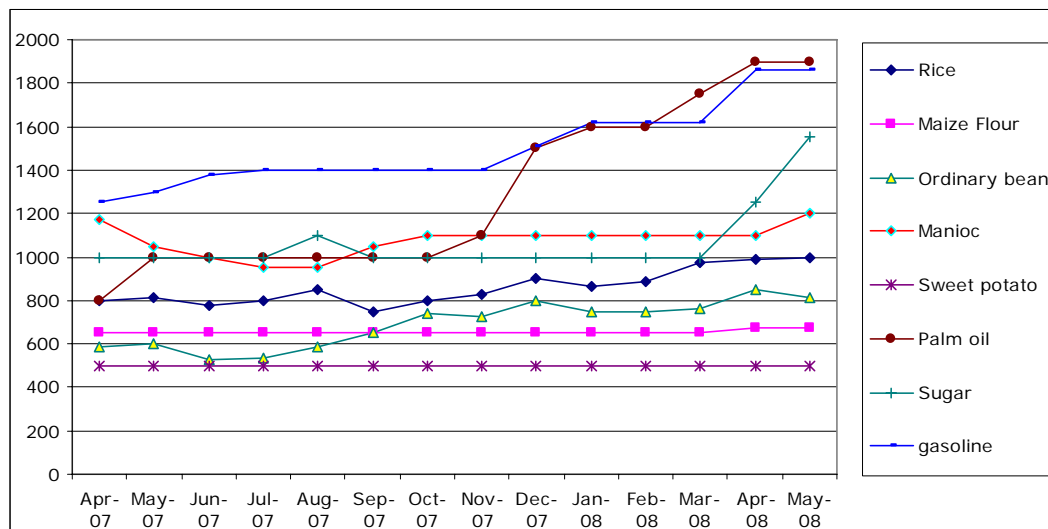
- Threat to external validity: Limitations in the ability to generalize the results from the sample of the general population must be acknowledged. The survey data is designed to represent the situation at a given point in time.
- Threat to internal validity: Incorrect recall and quantitative estimates may affect the validity of the results. The enumerators were trained to facilitate recall and quantitative estimates to improve internal validity. In some cases social desirability, lack of freedom of speech and expectations may have affected the responses and set patterns, especially given that the households may previously have been the object of program-oriented assessments (e.g. food aid) and responses. However, the anonymous character of the survey contributed to mitigate this bias.
- Threat to reliability: Threat to the reliability or repeatability (Kalton et al., 2005) of the results was minimized through the questionnaire design and training of the enumerators. Training in the household questionnaire was conducted to reduce individual variation in how enumerators understood the questions. The questionnaire, although designed in English, was translated into French for the enumerators to use and most cases the interviews were conducted in the local language/dialect.

4.0 Markets and Prices

There are five major marketing regions in the country, namely the north-eastern, north-central, west-central and western regions. Markets in Bujumbura City dominate trade although Gitega and Ngozi have large markets that serve as transit points for food commodities as well as trade centres for their provinces.

Figure 2 below, shows price trends for major trading commodities in Bujumbura. Since April 2007 prices for all commodities have shown an increase except sweet potatoes and maize. However, prices started to stabilize with others showing a downward trend in May 2008. Its worth noting that the harvest season for most of these food commodities starts in May which could explain the stagnation and gradual drop in prices. If this stability or downward trend continues in the next few months, the impact on households could be minimized. The demand for manioc/cassava has increased because it is a cheaper alternative for most households causing continuous prices increases yet supply is still low. Volatility of rice prices could be explained by the fact the most of the rice consumed in urban areas where most of the large markets are located is imported. Price of charcoal which is a major cooking fuel reported in the household interview has risen by 54% between February and May 2008. In addition, nearly all of the households reported an increased expenditure for energy/fuel over the past year.

Figure 2: Price Trend for Major Commodities and Fuel in Bujumbura



Source: FAO Burundi

A total of 25 markets were visited in all three urban centres. Traders reported that selected items were available in the markets with the smaller markets reporting fewer varieties. Major commodities available on the market included maize, rice, beans, cassava sweet potatoes oil and meats. Most of the traders interviewed were mainly trading in beans, rice and maize flour and the rest scattered around the other food items. Most of the mentioned items were either locally produced or bought from other provinces with only rice being reported as an international import. Over 65% reported that availability was lower compared to last year though the price is higher with the exception of cassava. However, as seen in the figure 2 provided above, price of cassava/manioc is on the increase; it was revealed during interviews with traders as well as focus group discussions that this was not a staple food for most households but now its is being purchased as a cheaper option compared to the other food items and hence demand for it is increasing.

All traders reported highest sales volumes in June to August period which is the harvest season and least sales in February to April. Over 70% reported that sales volumes sold have decreased over the last one year mainly due to increase in commodity prices thus constraining customers' ability to purchase. Traders also mentioned that commodity price increases started in early 2007 which were similar to what was reported by the village discussions. In addition to low purchasing power of their customers, they also associated these increases to increase in fuel as well as insecurity in Burundi.

However, a few traders also mentioned that the low sales were also due to the ongoing harvest meaning households are still benefiting from it.

In addition, the traders reported that lean period as the time when there is an increase in requests for credit from their customers. Over 70% of the traders disclosed that they are reluctant to provide credit as consumers are often times not in a position to re-pay and limited investment capital on their part. Further discussions with the traders indicated most households are purchasing cheaper and less preferred commodities such as the mould manioc and the quantities purchased have also reduced.

4.1 Bujumbura Mairie

Bujumbura, the capital, located at the West of the country, is the most populated city by far with approximately 390 000 inhabitants - nearly 52% of the urban population. The city has 6 large markets of which the central market dominates trade transactions. The major commodities sold at the central market of Bujumbura are primarily: beans, rice, banana, cassava, sweet potatoes, irish potatoes and maize. Moreover, one notes that while some of these products come from within the country, others such as rice are imported. As mentioned above, the selection of the poorest neighbourhoods for this study was based on level of housing, access to water (inside the house), electricity and level of income. The areas removed from the sample were mainly areas with middle to upper class housing with higher property and land rates, better access to electricity, water especially inside the house as most of the poorer neighbourhoods use communal taps and level of income and standard of living for most of the residents. In addition, most of the poorer neighbourhoods also have poor sanitation facilities.

4.2 Gitega

Gitega province, located in the central part of the country has an estimated population of 681,000 people of which 37,000 live in the urban areas. The very central geographical situation of the town of Gitega confers an importance not only for the administrative management of the country, but also as a major trade route. Agricultural production in Gitega is among the most abundant, though not producing the most nutritious foods - 2007 cassava and sweet potato production were the highest in the country⁹; almost 20% of the households have food stocks and markets offer a wide variety of locally produced and imported nutrient rich foods to choose from.

Gitega has a central market that operates daily and is a major food market in the country thanks to its geographic positioning - it gathers products of its own province and those coming from the provinces of Rutana, northern Makamba, Bururi, Ruyigi, Karuzi and Cankuzo. The variety of food available, given the central regrouping role of the main market in the province, is actually quite vast - locally produced products, such as peanuts, rice, bananas, sweet potato and avocados are available, rice is imported from Bujumbura and Tanzania, palm oil comes from Bururi, and more peanuts from Ruyigi.

4.3 Ngozi

Ngozi province with a population of 735,700 has the highest population density in Burundi, with around 400 people per square kilometre. In addition the amount of land available to households continues to decrease, translating into smaller and smaller plots, which hampers the ability of households to produce sufficient food to meet their needs. However, the province is the largest in the country by population size and although the influx of returnees has not been significant, the high population density and the decreasing availability of land seriously affect household food security in the province.

The market of Ngozi is a major market in the country and is a location for regrouping local produce as well as those from Kirundo, Muyinga and the north of Cankuzo and Karuzi, for their transport towards Bujumbura. Located at the heart of a zone where the density of the population is very strong, it is also a very dynamic market of consumption. The major commodities sold on this market are: Cassava, Sweet potatoes, beans and banana.

⁹ Burundi Secondary Data Analysis 2008

5.0 Findings by Urban area

Three major towns/urban centres were covered namely Bujumbura Maire, Gitega and Ngozi for the urban study. To understand the impact of rising food prices, focus groups discussion and household interviews were held at Quartier level in all three urban centres.

According to focus group discussions held in the urban centres, they indicated that overall households are stressed due the increase in prices. However, during the discussions in all three urban centres, Bujumbura Mairie, Gitega and Ngozi, it was mentioned that price increases were noticed as early as March 2007. Discussions with the communities and traders indicated that since price increases that started early 2007; there have been a few changes in income patterns, economic activities, food sources and coping mechanisms. Overall, discussions in all three urban centres revealed similar patterns in all aspects with no major differences as shown in the next sections.

5.1 Household demographics

For the sample of households, the average household size was 6.3 ranging from 6.1 persons in Gitega to 6.5 persons Bujumbura. For each household, the percentage of dependents was calculated by summing the number of children < 18 years plus the number of adults 60 years or older, divided by the total number of household members. On average, 55% of the members were dependents. Households in Bujumbura tended to have a slightly higher percentage of potential earners than the other two cities.

In terms of headship, 30% of the sample households were headed by women: 24% in Ngozi, 28% in Gitega and 34% in Bujumbura. Few households were headed by persons 60 years or older – only 13% in total. However, 16% of the households in Bujumbura were headed by elderly persons which was higher than the other two cities.

Overall, about one-third of the households were hosting orphans, with no difference between the cities. However, in Ngozi, the sample indicated that 23% of the households reported having a chronically ill adult member which was significantly ($p < 0.05$) higher than the other two cities. They also were more likely to have a disabled member (15%) compared to 11% in Bujumbura and 9% in Gitega. Lastly, only 2% of the households reported the recent death of a member – none in Gitega, 4% in Ngozi and 3% in Bujumbura.

5.2 Housing and amenities

The majority of households in the survey were living in a structure made of bricks with iron or tile roof – a permanent structure. Households in Gitega were slightly more likely to be living in these houses (89%) compared to the others. Only 58% of the households actually owned their homes with the highest being in Ngozi (66%), followed by Gitega (62%) and Bujumbura (52%). Thus, about 37% of the sample households paid to live in their homes, ranging from 43% in Bujumbura, to 37% in Gitega and 24% in Ngozi.

Nearly all households had access to drinking water from public piped system or a community tap. However, 8% of the households in Ngozi were not using drinking water from an improved source compared to only 2% in the other areas. Only about half the sample households had access to good sanitation with the highest being in Bujumbura (63%), followed by Gitega (41%) and Ngozi (38%).

For cooking, most households used either charcoal or wood – about 80% of the Bujumbura sample used charcoal as compared to 79% in Gitega but only 66% in Ngozi. Access to electricity for lighting was also highest in Bujumbura (49%) and Gitega (45%) while only 36% of the sample households in Ngozi had electric lighting.

5.3 Asset wealth

Asset wealth was determined by counting the number of different types of assets a household owned and then creating categories of: asset poor (0-4 different types), asset medium (5-7 different types) and asset rich (8 or more). In all, only 1% of the households were considered to be asset rich with no difference between cities. However, Gitega had more households who were 'asset medium' than the others - 40% compared to 33% in Bujumbura and only 17% in Ngozi. The most commonly owned household assets were a table and chairs, followed by a radio/CD player, sofa set, cell phone/landline, television and iron. Very few households owned cars or motorcycles and around 15% owned bicycles. Households were asked if they had sold any assets in the three months prior to the survey: only 6% in Bujumbura, 2% in Ngozi and no households in Gitega.

Livestock ownership is low, as expected with 11% of the households in Bujumbura owning cattle, goats or sheep as compared to 15% in Gitega and 27% in Ngozi. Ownership of poultry was a bit more equal with 15% in Ngozi, 14% in Gitega and 12% in Bujumbura.

5.4 Urban Agriculture

Although agriculture in Burundi as a whole is reported a major activity through which households meet their needs, medium- to large-scale urban agriculture was not a major activity in most areas. Most respondents reported to have a home garden with the highest in Ngozi (58%) compared to Gitega and Bujumbura at 33% and 17% respectively. However, Bujumbura had more households cultivating other land – 46% compared to 41% in Gitega and only 31% in Ngozi.

In terms of production sold, almost all households that produce (beans and pulses, cereals, roots and tubers) indicated that cultivation is mainly for their own consumption with highest production being beans and pulses. Most households indicated that their production would last an average of 2 months with Bujumbura reporting the lowest at an average of 1.7 months.

Discussions at community level also indicated that agriculture production is mainly for own consumption at household level. Main crops produced were mainly beans, sweet potatoes, and cassava/manioc. Very few households in the urban centres actually produce for sale which explains why household results above show that urban agriculture, though important, is at a small scale. It was repeatedly mentioned during the focus groups that a major obstacle to agriculture is increase in price of agricultural inputs and thus households could not afford it anymore.

5.5 Livelihoods¹⁰

Based on discussions at community level, the main livelihood activities in all three urban areas are agriculture, petty trade, salaries, handicrafts and artisan products as well as wage labour. Agriculture though not at a large scale in the three urban areas was mentioned as the major activity during the focus group discussions. According to the groups, agriculture is mainly for own consumption and not a major source of their income. More groups in Ngozi mentioned agriculture as an activity but it was not widely reported in Gitega and Bujumbura Mairie. This difference between focus group and household results could be associated with the fact that at household level, the question is associated with income and the discussions regarded it as a livelihood activity.

Discussions indicated that since prices started to increase early last year, a number of households are moving away from agriculture to other activities such as petty trade and handicrafts/artisan activities in order to find alternative sources of income. Reasons for the move are because of increasing prices of agricultural inputs (seeds, fertilizers) and also to find alternative income sources. A few people however pointed out that they had attempted to increase agricultural production in order to benefit from the price increase however this was not quickly realised due the fact that demand was not high enough.

Many discussions indicated that wage labour opportunities have decreased as most people cannot afford to pay labourers and in addition, the wage labourers now preferred payments in food and the cash was not enough to cover their expenses any more. It was frequently mentioned in most areas that during the lean season (September – November), households have to adjust their economic activities. For instance, request for wage labour is much lower during the lean season and thus less employment opportunities which put stress on the households at this time.

At household level, households were asked to name up to three most important livelihood activities. In addition, they were asked to estimate the contribution to overall household livelihood for each activity. In terms of activities, the main activities are:

- Salary or wage earner (34%)
- Petty trade (26%)
- Non-agricultural wage labour (13%)
- Handicrafts/artisan (12%)
- Food crop production and sales (10%)
- Agricultural wage labour (10%)

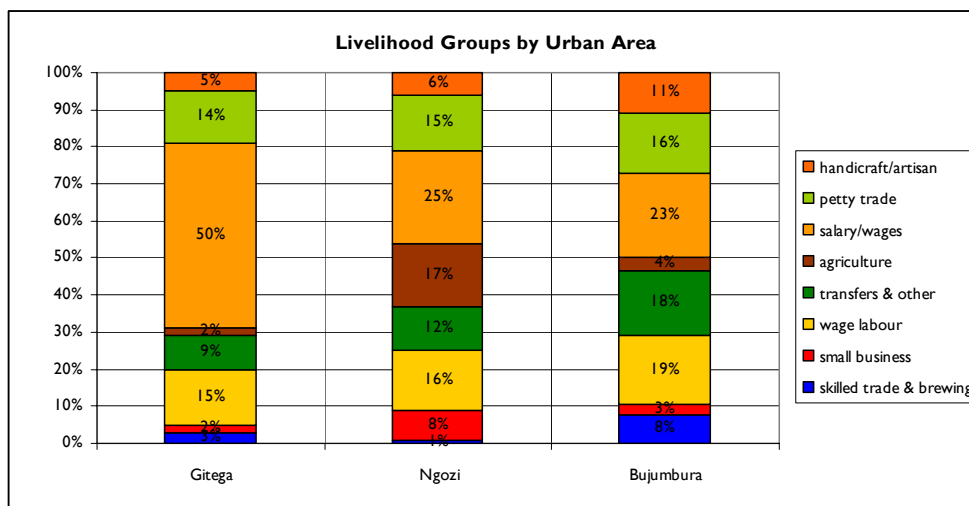
¹⁰This is not a comprehensive livelihood analysis, which includes, but it is not limited to, economic activities. The main goal is to identify and group households based on their relative reliance on common economic activities for risk analysis.

Main differences between cities are that in Gitega, more households were earning their livelihoods through salary/wages while there were more agricultural earners in Ngozi and slightly more petty trade livelihoods in Bujumbura.

From the data, analysing the estimated contribution of each activity to total using multivariate techniques, 8 distinct livelihood groups were created:

1. Households relying mostly on skilled trade and brewing
2. Small business
3. Wage labour (agricultural and non-agricultural)
4. Transfers (remittance, gifts, food assistance, pension, etc.) and 'other'
5. Agriculture and livestock
6. Salary/wages
7. Petty trade
8. Handicrafts/artisan

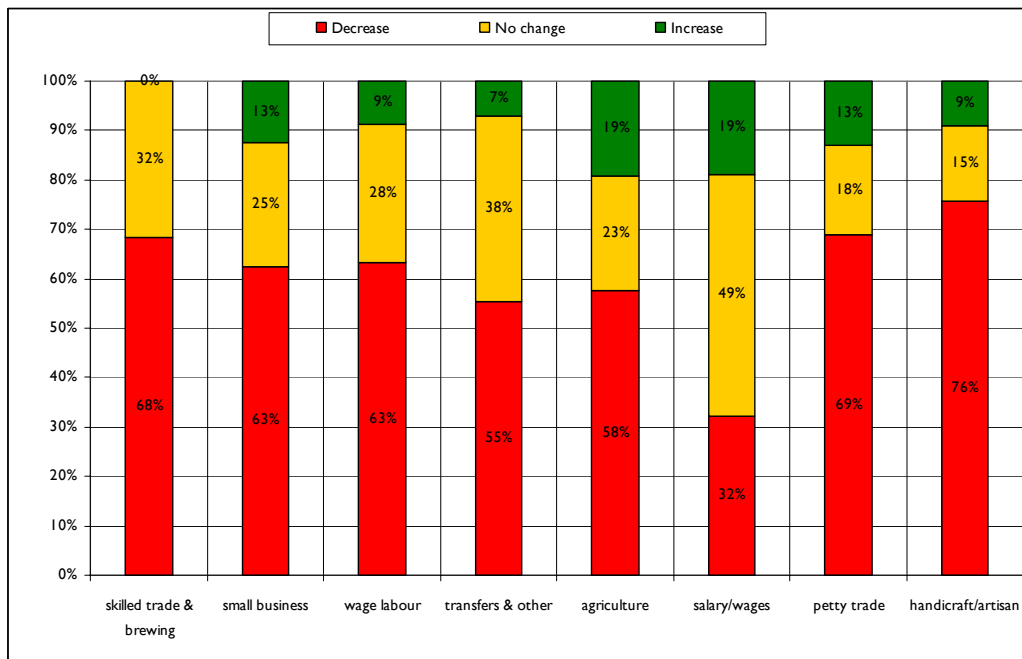
The city samples are described in the chart below by the livelihood groups of the urban dwellers. It is clear here that Gitega has a greater share of households relying in salary/wages for their livelihoods compared to the other cities. However, Ngozi sample has a much higher share of households in the agriculture and small business livelihood groups. Bujumbura has more households in the handicrafts/artisan and transfers/'other' groups and slightly more in the skilled trade/brewing and wage labour groups.



According to the analysis the following are the estimated monthly incomes (per capita) by each livelihood group:

1. Salary/wages: BFU 31,300
2. Small business: BFU 27,600
3. Transfers & 'other': BFU 26,400
4. Skilled trade and brewing: BFU 22,500
5. Wage labour: BFU 18,400
6. Agriculture: BFU 17,600
7. Petty trade: BFU 16,800
8. Handicrafts/artisan: BFU 13,700

Households were also asked if their income changed in the past 6 months. In all, more than half said it has decreased, ranging from a low of 37% in Ngozi, to 51% in Gitega and as high as 65% in Bujumbura. However, 13% of the households indicated that their incomes had increased during that same time period but most were in Ngozi (20%) and Gitega (19%) and only a few (6%) in Bujumbura. The decrease in income based on village discussions could be associated with increased expenditure, less employment opportunities as well as increased commodity prices



However, by livelihood group, the income decreases are notable in almost all groups but highest amongst the handicrafts/artisan group, followed by petty trade while the greatest share of increases are amongst the salary/wage and agriculture groups which make sense due to the recent harvest. In addition, village discussions revealed that more people are moving from agriculture to other activities such as handicrafts and petty trade thus increasing competition which could explain why income in that group has also decreased.

5.6 Expenditures

At village level, it was frequently mentioned that household expenditure has drastically gone up in the last year especially for food. As a result, households have resorted to reducing expenditure on other non-essential items. A few groups mentioned children being pulled out of school, and fewer visits to health centres in order to reduce costs.

During the household interviews, respondents were asked about detailed expenditure information in order to get an idea of the share of monthly expenditure for food and transport in light of higher prices. On average, the households were devoting about 60% of monthly expenditure for food with little variation between the cities. However, share devoted to transport was significantly ($p < 0.001$) higher in Bujumbura (5.1%) when compared to Ngozi (1.8%). Share devoted to transport for Gitega was 3.5 percent.

By livelihood group, per capita monthly expenditure was also highest for the salary/wages group, followed by the skilled trade/brewing group while the lowest was among the agriculture group and the handicraft/artisan group.

Households were also asked if their expenditures had changed over the past year for key expenditure categories.

- For **food**, 95% of the households indicated their food expenditures had increased with no differences between urban areas. By livelihood group, all of the skilled trade & brewing households indicated an increase in food expenditures compared to only 91% of the handicraft/artisan households.
- For **energy** (cooking, heating, lighting), 94% of the households noted an increase. By city, Ngozi had fewer households (88%) experiencing an increase in energy expenditures. All of the skilled trade & brewing and small business households indicated an increase compared to only 88% of wage labour and agriculture households. Furthermore, prices from the UN Food and Agricultural Organization (FAO) that are collected on a weekly basis showed that charcoal

which is a major source of cooking energy has increased drastically over the last one year and has definitely increased household expenditure as reported.

- About two-thirds of households indicated an increase in **transportation** expenditures in the past year but with quite variation between cities: 79% in Bujumbura, 63% in Gitega and 37% in Ngozi. By livelihood group, the small business (81%), skilled trade & brewing (74%), and salary/wages (72%) households were most likely to have increased transport costs as compared to only 46% of the agriculture and 53% of the wage labour households.
- For **health**, about 60% of the households experienced increased expenditures in the past year, ranging from 68% in Bujumbura, to 58% in Ngozi and 46% in Gitega. By livelihood group, the handicraft/artisan group was the most likely to have increased health expenditures (67%) while wage labour were the least likely (53%).
- Only 42% of the households reported that **education** expenditures had increased since the last year – only 29% in Ngozi compared to 50% in Bujumbura. The livelihood groups most impacted are small business (50%) and wage labour (50%) households while the least impacted are the petty trade (31%) and skilled trade & brewing households (32%).
- Lastly, 28% of the sample households reported that **housing** expenditure had increased over the past year- only 16% in Ngozi. The salary/wage earning livelihood group were the most likely to report increases in housing expenditure (35%) while the agriculture group were the least likely (15%).

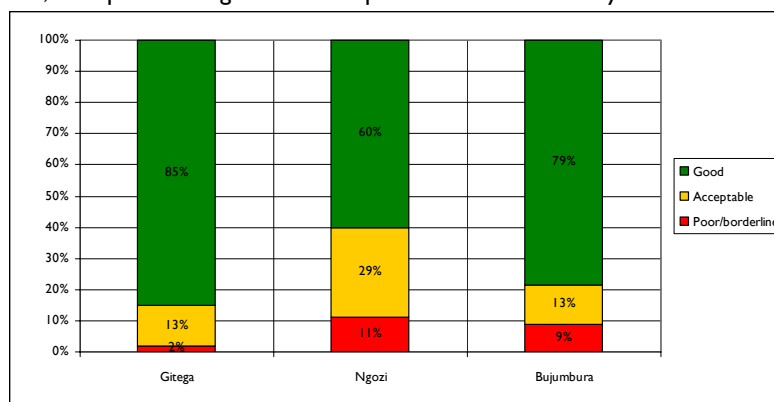
5.7 Household Food Consumption

Based on qualitative information, village discussions indicated that most foods consumed are mainly roots and tubers, beans, cereals and oil (mostly palm oil). Due to increasing prices of some of these items, most discussions reported that a number of households are also opting for manioc/cassava that was previously not very common but is now a cheaper option and more affordable. As indicated earlier in the markets, demand for manioc has increased over the past few months and hence the price increase. Discussions also revealed that vegetables and fish (packed in very tiny quantities and is mainly to make sauce) are also frequently consumed.

At household level, Research has shown that dietary diversity¹¹ and frequency are a good proxy measure of food security. Using a 7-day recall period, information was collection on the variety and frequency of different foods and food groups to calculate a weighted¹² food consumption score. Weights were based on the nutritional density of the foods. Cut-points or thresholds were established to enable analysis of trends and to provide a benchmark for success. Households were then classified as having either 'poor', 'borderline', 'acceptable' or 'good' consumption based on the analysis of the data.

Use of the Food Consumption Score also allows for comparisons of dietary quality and diversity between populations.

Those with 'poor' consumption managed to eat the equivalent of only cereals and vegetables on a daily basis. This is considered a bare minimum and is a sign of extreme household food insecurity. Households with 'borderline' consumption are eating the equivalent of cereals and vegetables on a daily basis plus pulses and oils about 4 times per week. Households classified as having 'good' consumption on average consume: cereals, beans, vegetables, sugar and oil each day. Those with 'acceptable' consumption eat a similar diet but some items less frequently. Focus groups also revealed that most households also consumed lots of roots and tubers in addition to these. However,



¹¹ Dietary diversity is defined as the number of individual foods or food groups consumed over a given period of time

¹² Animal proteins = 4, pulses = 3; fortified blended foods (CSB) = 2.5; cereals, roots & tubers = 2; fruits and vegetables = 1; sugar and oil = 0.5

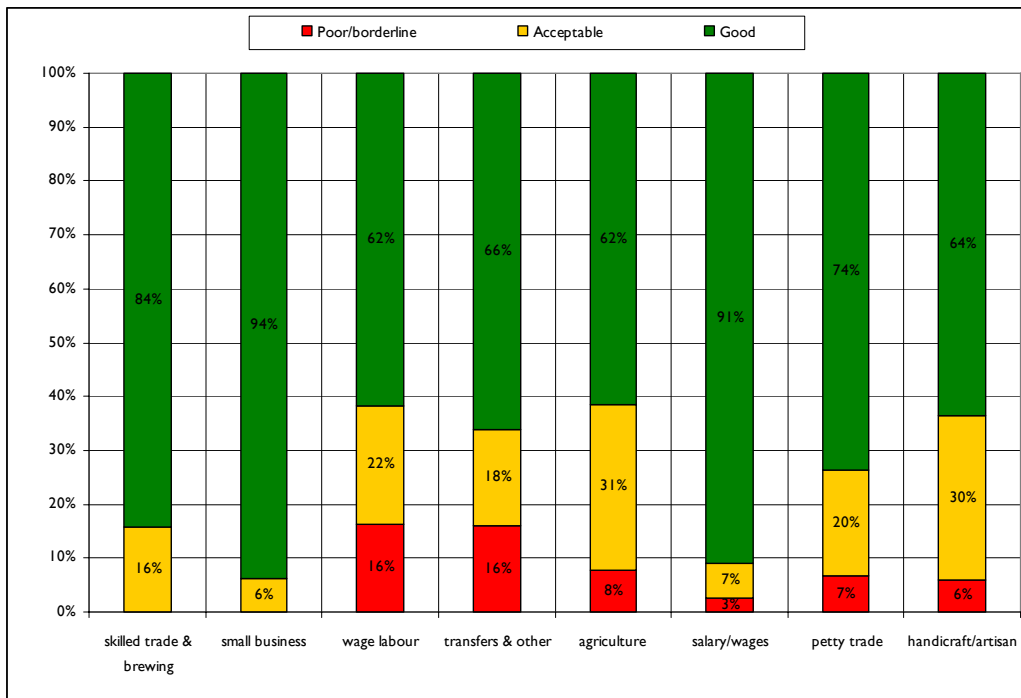
manioc/cassava is one food whose consumption has increased over the last year because it is a cheaper option for most people

The chart above shows that the sample of households in Gitega has the best consumption when compared to the other cities. The lowest levels of consumption are found in the Ngozi sample where only 60% of them had good consumption. In all, the levels of consumption are pretty good in the urban sample. However by understanding the context in which the survey was undertaken in late June/early July and the crops were harvested in May/June, it is expected that households will have pretty good access to food during this time.

Analysis of food sources indicates that around 90% of the food consumed by the households in this sample is purchased at a main market while the rest is either from a vendor (5%) or from their own production (5%). However, when comparing the food consumption groups, those with poor/borderline consumption rely much more on production and vendors than the other groups.

Focus group discussions also showed that as reported above, that the market was a major source of food with only about 20% relying on own production. There were also a few reports of gifts as well as food aid in Gitega. In addition, some reported that they were paid in terms of food for some of the wage labour and thus didn't have to purchase food altogether. According the qualitative information, over the past year, there hasn't been a major change in food sources but it was frequently mentioned that households have reduced the amounts purchased from the market due to increased prices. Similar patterns to support this were also reported by the traders with a lot of purchase on credit.

The chart below shows consumption levels by livelihood groups, illustrating that the wage labour, transfers & 'other', agriculture and handicrafts/artisan households have the worst consumption of all groups. The best levels of consumption are found in the salary/wages, small business and skilled trade/brewing households.



5.8 External and internal support and borrowing

In total, around one-quarter of the sample households reported receiving food or cash support from friends or relatives within the country in the 6 months prior to the survey. Only 7% received the same kind of support from people outside of Burundi. Households in Bujumbura were the most likely to have received external support (28%) compared to Ngozi (21%) and Gitega (17%).

As expected the Transfers and 'other' livelihood group was the most likely to have received external support (41%), followed by the skilled trade & brewing and petty trade groups. The least likely group to have received external support was the salary/wage group.

However, over one-third of the households in the sample are currently supporting relatives with cash or food, with slightly more in Bujumbura (38%) and Gitega (36%) when compared to Ngozi (33%). By livelihood group, the salary/wage group is the most likely to be supporting relatives (51%), followed by small business (44%) and handicraft/artisan (44%). The least likely group to be supporting others is the petty trade (21%) group.

Moreover, qualitative information showed that there has also been an increase in requests for credit some of which has been associated with continued increase in food prices. Traders indicated that more households are now requesting for credit but are not able to pay which constrains their already small business. At village level, they indicated that this has increased because households can't afford to buy with their limited resources due to increasing process. This however is most common during the lean season (September – November).

5.9 Seasonality

Discussions from the focus groups and trader interview disclosed that May to August which is the harvest season is least stressful time of the year for households. In addition, there are more opportunities for employment hence income and traders are also able to sell more. The lean period (September – November) is the most stressful period of the year. During the lean season, employment opportunities are less, household spending reduces drastically due to low purchasing power and there is also limited access to agricultural inputs. Furthermore, the school term usually starts in September so expenditure on education adds to household costs. Traders also reported that that's the same time of year that household requests for credit is highest.

5.10 Shocks and Coping

Village level discussions indicated commodity price increase has been a major shock to most households over the last year. Prices have gradually increased and income has not been able to match the continuous rise. Discussions with both traders and the community mentioned that the price increase was noticed as early as March 2007. A number of traders also revealed that they have been on the receiving end of this shock in that they are obliged to increase prices, however, purchasing power is very low and households find other alternatives or buy fewer quantities. Both focus group and trader discussions showed that as a result of increased prices, a number of traders are closing down as some can't compete anymore. Further discussions also showed that in some places foods stuffs may not be readily available due to increase in transport costs that the traders can't afford. In addition to increase in commodity prices, increase in transport has also affected movement of food stuff to some areas though this could not be substantiated as all markets seemed very well stocked in terms of food items.

Wages and salaries have not increased to keep up with the increasing prices hence households have resorted to buying cheaper foods and also in smaller quantities. Due to decrease in agricultural investment, there has been a decrease in wage labour earnings as well and some household members are migrating to look for work elsewhere.

In a number of villages, it was reported that agricultural output has reduced due to high prices of agricultural inputs (seeds, fertilisers.) that they cannot afford. Trader discussions also supported this indicating that people are buying less of these inputs because they cannot afford them. Some people have also moved from agriculture to other activities such as handicrafts and petty trade, but this has also not worked very well because of low consumer purchasing power which in turn affects their income. There were also reports of reduction in non-food expenditure such as health and education where some discussions noted that some households have pulled children out of school due to increased expenses elsewhere.

In addition, a number of people in the focus groups as well as traders interviewed, mentioned that there have been increases in taxes that affected their earnings. With all the effects high prices have had on household over the last one year, it was revealed that insecurity has also had a part to play in increasing stress at all levels.

When asked about the most affected households most focus groups mentioned low-level civil servants, petty traders, handicrafts and artisan and wage labourers. However, many of the groups were composed of these particular sets of people and therefore responses might have been biased.

At household level, households were asked about difficulties or shocks experienced in the six months prior to the survey. The most commonly reported shock was **unusually high food prices**, which was reported by 83% of the households. This shock was reported less often in Gitega (74%) and most often in Ngozi (89%). About 84% of the households in Bujumbura felt the shock of high food prices. In

addition, traders in Ngozi (75%) report this as their biggest problem which was reported less in Gitega and Bujumbura.

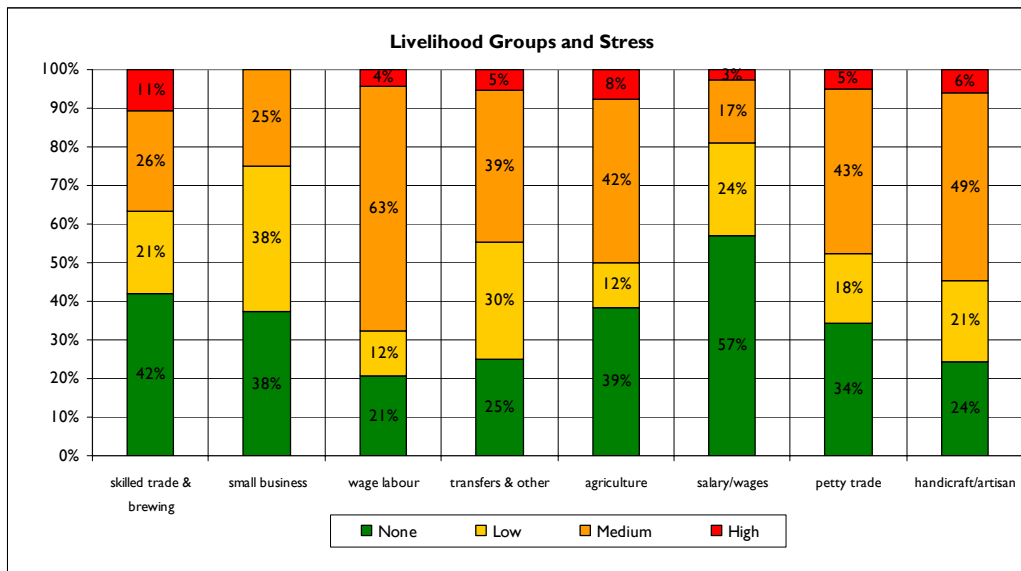
By livelihood group, the group most likely to report high food prices as a shock is agriculture group (96%) while the least likely is the salary/wages group (78%). The rest of the main shocks experienced by households are presented in bullet points below.

- **Unusually high fuel and transport costs** were reported by 32% of the households with no difference between cities. By livelihood group, 50% of the small business households reported being affected by high fuel and transport costs, compared to only 18% of the handicraft/artisan group.
- Nearly 30% of the households reported the **serious illness or accident** of a household member as a shock. There were big differences between the cities with only 15% in Gitega compared to 30% in Bujumbura and 36% in Ngozi. The most affected livelihood group were the agriculture households (46%), followed by handicraft/artisan (35%) while the least affected were the salary/wage earners (20%) and skilled labour and brewing (21%) households.
- Just over 20% of the households reported **reduced income of a household member** as a shock, ranging from 16% in Gitega to 21% in Ngozi and 24% in Bujumbura. The petty trade households were the most affected livelihood group (33%), followed by the agriculture group (27%) while the least affected are the salary/wage earners (12%).
- **Loss of or reduced employment of household members** was felt by only 8% of the households, and it was more common amongst households in Bujumbura (11%). This shock was felt most among the handicraft/artisan (15%) and small business groups (12%) and least from the agriculture group (0%).
- Another 8% of the households felt the impact of **drought/irregular rains or prolonged dry spells** – 12% in Gitega, 9% in Bujumbura but only 2% in Ngozi. The skilled labour and brewing group was most affected (16%), followed by the agriculture group (12%) and the salary/wage earner group (11%) indicating that some crop production or gardening is an activity widely practiced even in urban areas.

In terms of impact of the shocks on key household food security indicators the following are statistically significant:

1. **Unusually high fuel and transport costs:** Households impacted have significantly higher asset diversity ($p < 0.05$) but also have a significantly higher share of monthly expenditure for transport ($p < 0.05$). They also have a significantly higher per capita monthly expenditure ($p < 0.05$) compared to those not impacted by the high prices.
2. **Unusually high food prices:** These households have significantly lower food consumption score ($p < 0.05$). They also have a significantly higher share of expenditure for food ($p < 0.01$) and are using significantly more strategies to cope ($p < 0.05$) than those not impacted. Similarly, during village level discussions, high food prices were frequently reported as one of the major shocks constraining households' already low purchasing power.
3. **Serious illness or accident of household member:** These households also have a significantly lower food consumption score ($p < 0.001$), significantly lower asset diversity ($p < 0.01$) and use significantly more ($p < 0.001$) strategies to cope.
4. **Loss or reduced employment of household members:** These households employ significantly greater number of strategies to cope ($p < 0.05$).
5. **Reduced income of a household member:** These households have significantly lower food consumption score ($p < 0.05$) and using a significantly greater number of strategies to cope ($p < 0.05$).

The graph below shows the levels of stress felt by the households in the various livelihood groups as measured by the number of different coping strategies used by the household over the month prior to the survey as a result of not having enough money to buy food or other essential expenditures.



The households with the least amount of stress are found in the salary and wage earner group where about 80% were classified as having no or low stress. The next least stressed groups are the small business group and the skilled trade and brewing group. The most stressed group of households are the wage labour group with nearly 70% experiencing medium to high stress. The handicraft/artisan and agriculture groups are also experiencing fairly high levels of stress. The chart illustrates that the livelihood groups are not homogenous in all aspects of their exposure to shock and coping capacity.

In terms of coping, the village discussions mentioned that most households are adjusting their expenditure by reducing non essential expenditure such as education and health. A number of people mentioned that a few households had removed children from school and sent them to work in activities such as brick making and masons in order to supplement the household income.

Households eating less preferred foods, and smaller amounts were the most reported coping mechanisms at all levels i.e. focus groups, traders and household level. In addition, some mentioned that they reduced number of meals a day with adults eating once a day and children twice a day. Traders also revealed that households are now buying fewer assets such as animals and land. There were a few extremes reported such as begging and prostitution but this was mainly Bujumbura Mairie, however this could not be immediately associated with rise in commodity prices. There were also some positive coping strategies reported during the discussions such as diversifying their income activities in order to bring in more revenue as well as increased agricultural production.

By livelihood group, the main coping strategies used in response to reported shocks and those that are unique to the group are reported as follows:

- **Skilled trade and brewing:**
 - All households reported eating less preferred / less expensive food
 - 77% limit portion size at meals while 62% purchased food on credit or incurred debts
 - This group was the most likely to sell domestic assets (31%) and to borrow food or rely on help from friends or relatives (46%) and second most likely to reduce expenditure on health care (31%).
- **Small business:**
 - All of these households purchased food on credit or incurred debts.
 - 67% were eating less preferred/less expensive foods while 53% limit portion size at meals
 - These households are among the least likely to borrow or rely on help from friends or relatives, to skip entire days without eating, to reduce expenditure for health care or to seek alternative or additional jobs.
- **Wage labour:**
 - Nearly 90% of the households purchase food on credit or incur debts.

- 86% of households rely on less preferred or less expensive foods and the same percentage limit portion size at meals
- Another 80% reduce the number of meals eaten in a day while 68% restrict consumption by adults in order for small children to eat.
- These households are significantly more likely to seek alternative or additional jobs (63%) when compared to the others.
- **Transfers & 'other':**
 - Nearly 90% eat less preferred/less expensive foods and the same amount limit portion size at mealtimes.
 - 78% reduce the number of meals eaten in a day while 71% purchase food on credit or incur debts.
 - These households are the second most likely group to skip entire days without eating but the least likely to seek alternative or additional jobs.
- **Agriculture & livestock:**
 - All households rely on less preferred / less expensive foods as well as limiting portion size at meals.
 - 82% purchase food on credit or incur debts while 76% reduce the number of meals eaten in a day.
 - These households are also likely to skip entire days without eating (29%).
- **Salary/wages**
 - The most common strategy was to rely on less preferred or less expensive foods (82%), followed by purchasing food on credit or incurring debts (71%)
 - These households were among the least likely to limit portion size at mealtimes (54%), to borrow food/rely on help from family and friends or to reduce the number of meals eaten per day.
- **Petty trade:**
 - Over 90% of these households rely on less preferred or less expensive food while 80% limit portion size at meals
 - 76% purchase food on credit/incur debts while 73% reduce the number of meals eaten in a day.
- **Handicraft & artisan:**
 - 84% rely on less preferred or less expensive foods and the same amount limit portion size at meals
 - 76% reduce the number of meals eaten in a day and 72% purchase food on credit or incur debts.
 - These households are the most likely to skip entire days without eating (44%) or to decrease expenditures for health care (36%) and the second most likely to borrow food or rely on help from friends or relatives

6.0 Household Vulnerability Analysis and Food Security Classifications

In the sample, three urban areas were included: Gitega in the centre of the country, Ngozi in the north-central part of the country, closer to the Rwanda border, and Bujumbura, the capital city, located on Lake Tanganyika, near the border with DRC.

A total of 100 households each in Gitega and Ngozi were sampled and 200 in Bujumbura, representing the poorest urban neighbourhoods in Bujumbura Mairie, for a total urban sample of 400 households.

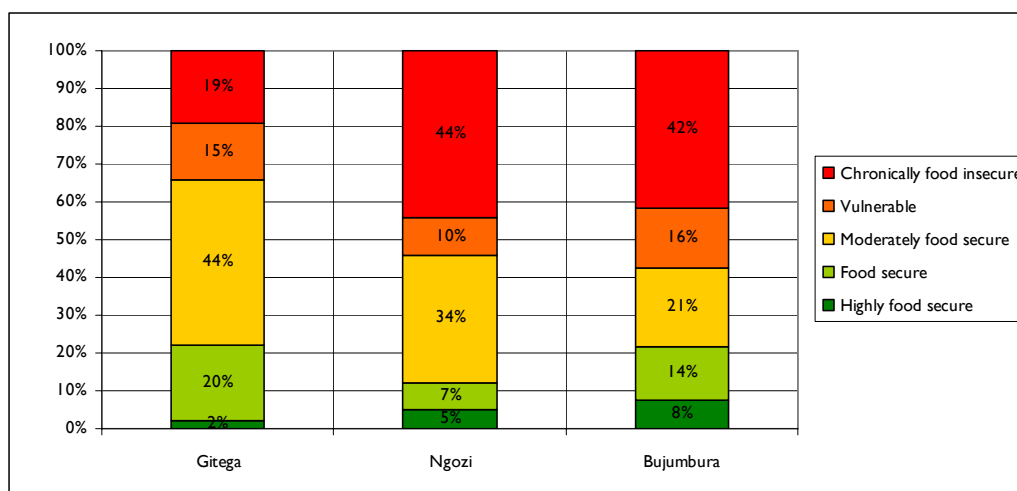
For the vulnerability analysis, four variables were used:

- Food consumption score – represents current consumption/HH food security
- Per capita monthly income (estimate) – represents ability to access food
- Number of different types of assets owned - represents wealth
- Number of different coping strategies used (0-14) in past month – represents stress on HH.

Each variable was treated as a continuous variable in Factor Analysis where 4 factors were requested. The Factor Analysis is used to look at all four variables simultaneously and the four factors produced were then clustered using the 2-step cluster analysis and the software determined the number of homogenous groups based upon the four factors. In total 5 groups were produced with the following summary which is explained in greater detail in the following section.

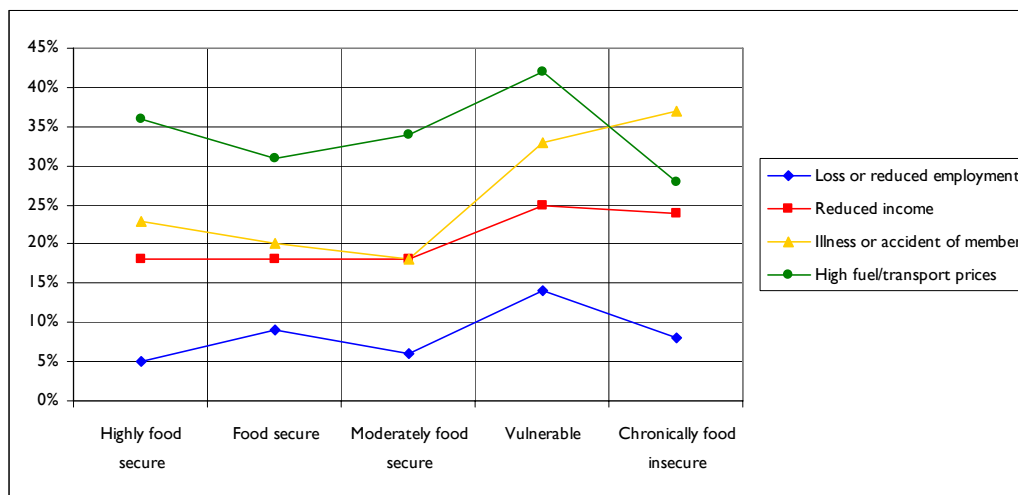
Cluster	N	Monthly income per capita (BFU)	Food consumption		Asset wealth		Coping	
			FCS	% poor or borderline	# assets	% asset poor	# coping strategies	% medium/high stress
Highly food secure	22	115,100	109.0	0	5.7	32%	1.9	18%
Food secure	55	28,500	117.9	0	4.6	42%	2.8	27%
Moderately food secure	120	18,100	67.9	3%	3.4	73%	0.9	0
Vulnerable	57	23,200	72.4	4%	6.3	18%	4.3	53%
Chronically food insecure	146	11,700	50.6	18%	1.6	100%	5.7	80%

The distribution of these households by the three urban areas is found in the chart below. Overall, Bujumbura and Ngozi have much higher percentages of **Chronically food insecure** households, when compared to Gitega. The majority of the households in Gitega are **Moderately food secure** but also with a large percentage of **Food secure** households. The highest percentages of **Vulnerable** households are found in Bujumbura and Gitega.

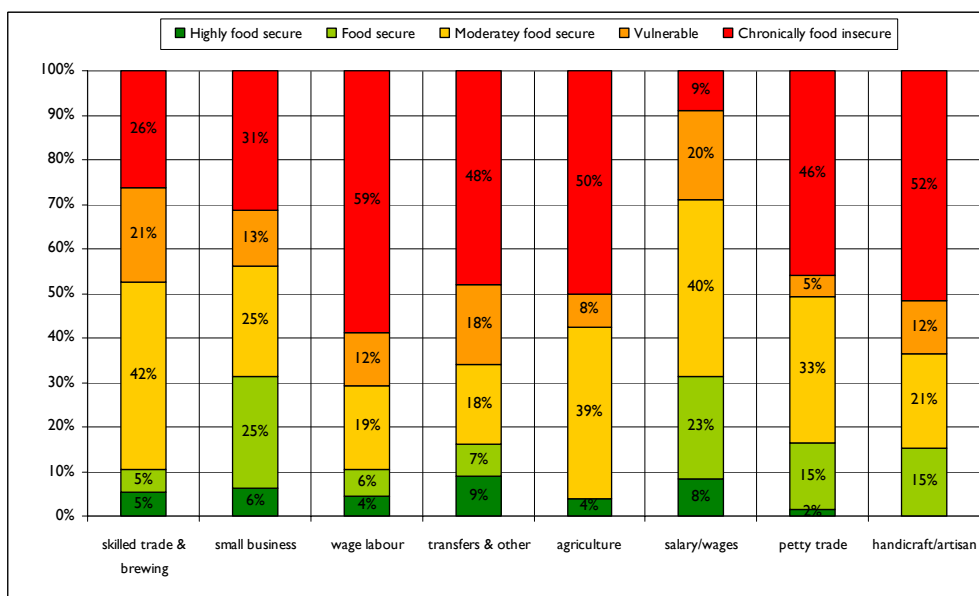


In terms of understanding the contribution of certain shocks to household vulnerability and food security, the percentages of households reporting shocks are investigated. As already mentioned the most common shock reported was the unusually high prices for food. By food security group, between 75-80% of households in the food secure groups were affected by high food prices as compared to nearly 90% of the Vulnerable and Chronically food insecure households.

The chart below outlines the percentage of households experiencing other shocks, by food security classification. It is clear that the vulnerable group is the most highly impacted by all shocks except illness and accident of a household member. This is the group that is most likely to be impacted by increasing food and transport costs.

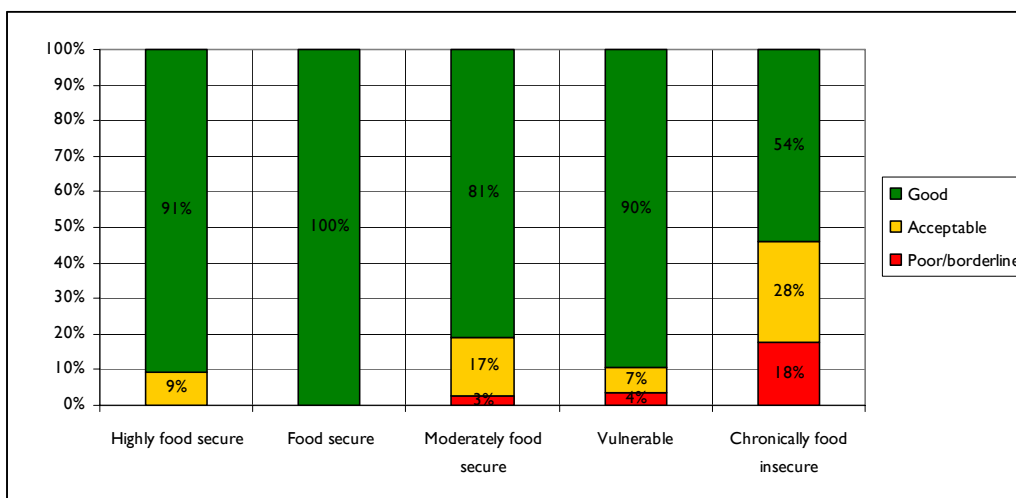


By livelihood group, the highest percentage of chronically food insecure households are found among the wage labourers (59%), followed by the handicraft/artisan (52%) and agriculture (50%) groups. However, the highest percentage of Vulnerable households are found amongst the better-off groups such as the skilled trade and brewing (21%), salary/wage earners (20%), and transfers/other (18%). This also illustrates the heterogeneity within livelihood groups and supports focus group findings that the low level government salary earners are amongst the most impacted by rising prices.

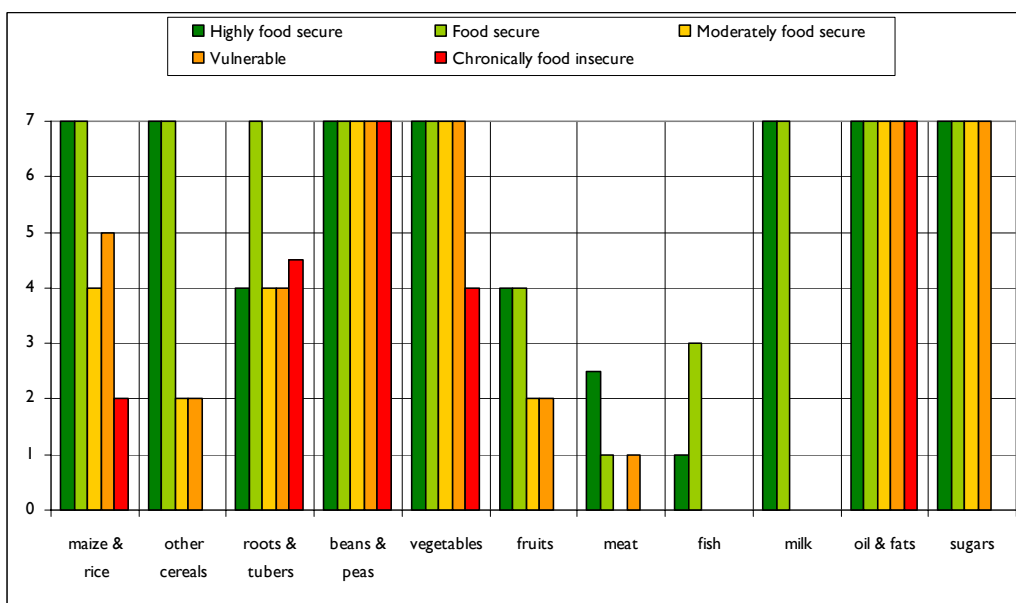


By looking at current consumption alone, it is clear that the Chronically food insecure have the lowest levels of consumption in terms of dietary diversity and food frequency, as indicated in the chart below. Most of the Vulnerable households appear to enjoy 'good' consumption but with a few in the 'acceptable' and 'poor/borderline group' while fewer of the Moderately food secure households

have 'good' consumption. Thus it is important to look at shocks and stress to indicate the potential problem for these households.



When investigating the actual differences in frequency of consumption of the various foods or food groups it is interesting to note that there are few differences between the highly food secure and the food secure households as well as the moderately food secure and the vulnerable households. The chart below shows that the chronically food insecure households tend to eat beans/peas and oils daily while getting their starch from a combination of roots & tubers and maize & rice. The only other food/food group consumed regularly are vegetables, about 4 times per week.



Summaries of food security groups based on Household analysis

6.1 Highly food secure

From the 400 households, 5.5% were classified as being Highly food secure. These households are characterised by having the smallest average size (5.0 persons) when compared to the rest. They are also the least likely to be hosting orphans (18%) yet the most likely to have a member die in the past 3 months (9%). In addition, only 9% of them are headed by a woman, the lowest of all groups. Lastly, the households have the lowest percentage of dependents (by far) of any group (39%) indicating a much larger potential labour force in the household.

In terms of living standards, all of the highly food secure households are living in homes made of brick with a tin or tile roof, all of them are accessing drinking water from improved sources. However, one-quarter of them are not using flush toilets, but this is still much lower than any of the other groups.

They currently access food mostly through purchase (86%) and vendor (9%) with little changes from normal. They have the lowest share of monthly expenditure for food (49%) but the highest for transport (8%). Their per capita monthly expenditure for food is three times more than the other groups except the Food secure group and their total per capita monthly expenditure is double that of the food secure group. Although 27% of the receive cash or food support externally, 73% are supporting other family or friends with the same.

6.2 Food secure

Nearly 14% of the sample households are in the Food secure group. They are characterised as having the second largest household size (6.7 on average). They are less likely to be hosting orphans (27%) when compared to the less food secure groups and have the lowest percentage of households with a chronically ill adult member (5%). Around 9% have a disabled member but no households had experienced the recent death of a member. Nearly 30% are headed by women but only 9% are headed by a person 60 years or older. They have a fairly high percentage of dependents per household (58%) when compared to the rest.

Very few live in poor quality housing and only 2% are accessing drinking water from unimproved sources. However, their access to safe sanitation is low (56%). These households currently have the highest levels of food access from purchase (92%) compared to the other groups with only a bit from vendors, transfers and production. There is been little change in how food is accessed.

Share of monthly expenditure on food is 57% which is similar to the Moderate and Vulnerable groups and they have the second highest share of monthly expenditure for transport (4.8%) which is still much lower than the Highly food secure group. Their per capita monthly food expenditure is half that of the Highly food secure group but nearly double that of the other groups. The same applies for their total per capita monthly expenditure. Only 20% of these households are receiving some external food or cash support while more than half are providing such support to other friends or relatives.

6.3 Moderately food secure

This is the second largest group of households, comprising 30% of the sample. They have the second smallest household size (6.2 persons on average). However, 33% of the households are hosting orphans and 11% have a chronically ill member; 7% with a disabled member. Only 2% of the households had experienced the recent death of a member. One-quarter are headed by women and only 8% are headed by a person 60 years or more. On average about half the members in each household are dependents.

In this group, 12% of the households are living in poor quality housing and 4% are accessing drinking water from unimproved sources. They have the poorest access to safe sanitation with only 43% using flush toilets. Currently, 92% of the food is accessed through purchase and another 5% from production. Compared to normal times, the access from production and decreased and through purchase has increased.

They have the second highest share of monthly expenditure devoted to food (59%) but only 4.4% devoted to transportation. Their monthly per capita food expenditure is similar to the Vulnerable and Chronically food insecure groups while their total per capita monthly expenditure is the second lowest of all groups. Only 20% of these households receive external food or cash support yet 36% of them are supporting outside family or friends.

6.4 Vulnerable

In all, 14.3% of the sample are classified as being 'Vulnerable' in this survey. These are an unusual group and are characterised by having the largest household size (7.6 persons on average) and the second highest percentage of households hosting orphans (37%). They are also more likely to have a chronically ill (18%) or disabled (11%) member while only 4% had experienced the recent death of a household member. One-quarter of these households are headed by women and only 7% headed by a person 60 years or older. About half of the members in each household are dependents.

About 90% live in houses made of brick with iron/tiles roofing and none are accessing drinking water from unimproved sources. About 60% have access to flush toilets. Currently, these households also access about 87% of their food through purchase and another 7% from production – the highest of all groups. There has been little change in food access from normal.

They have the second lowest share of monthly expenditure for food (55%) and only 3.6% of expenditure for transportation. The monthly per capita food expenditure is much lower than the Highly and Food secure groups and about the same as the Moderately food secure households. However, the total monthly per capita expenditure is much higher than the Chronically food insecure households. Only 23% of these households are receiving external food or cash support yet 47% of them are supporting friends and family with food and/or cash – much higher than the Moderately food secure group, indicating an increased caring burden.

6.5 Chronically food insecure

This is the largest group in the sample, making up 36.5% of all households. According to the Burundi Poverty Reduction Strategy Paper (2006), the urban poverty incidence is 41 percent. Although it is not possible to statistically compare the characteristics of these groups from the two studies, comparing the summary attributes of these two groups from the reports suggests that there are strong similarities.

According to the household responses, the chronically food insecure group have the second smallest average household size (6 persons) but are the most likely to be hosting orphans (39%), chronically ill (19%) and disabled members (16%). However, only 2% have experienced the recent death of a member. They are also the most likely to be headed by women (38%) and by elderly persons (20%). The PRSP also indicated the poor households are much more likely to be headed by women or the elderly.

They are the most likely to live in poor quality housing (temporary materials) – 22% of total. They are also the most likely to access drinking water from unimproved sources (6%) and about half don't have access to safe sanitation. Most of their food is currently accessed through purchase and there has been a slight decrease in consumption of food from transfers.

They have the highest share of monthly expenditure for food (67%) and the lowest for transportation (2.5%) Their per capita monthly food and total expenditures are by far the lowest of all groups. However, 36% are receiving external food or cash support and only 21% are providing similar support to family and/or friends. From the PRSP, the causes of urban poverty are a lack of employment and income opportunities.

During the discussions, the focus groups were asked to identify who they thought were the most affected households and most groups mentioned low-level civil servants, petty traders, handicrafts and artisan and wage labourers which are in contradiction to what is reported above. Most groups were composed of these particular sets of people and therefore responses might have been biased.

7.0 Conclusions and Recommendations

Burundi is still slowly transitioning from emergency to development. Peace and stability in the country remains fragile and food insecurity pervasive caused by multiple and cumulative factors such as population pressure on scarce land resources, lack of access to basic services, land degradation and increased environmental hardships, plant diseases and limited access to non-farm income generation opportunities. Though the country has a high population density (250-300 people per km²), it still has the lowest rate of urbanization with only 9.6% of the people living in urban areas. There are numerous parts of the country where urban households are under severe stress and are unable to meet their basic daily requirements especially during the lean season.

7.1 Urban Food Security and Vulnerability

The analysis has shown that the food security situation for urban areas is quite different from rural areas. Although urban agriculture plays a prominent role in the livelihoods of some households, a large percentage of households rely on salaries or wages for income. However, this group is not homogeneous in terms of income levels as some are well off while others are barely surviving. The urban environment offers many opportunities for income generating activities and the results of the survey show that food access is, in general quite good in terms of dietary diversity and food frequency with only 8% of the households with poor or borderline consumption.

From the analysis, the most food insecure groups tend to be households that rely on wage labour, handicrafts/artisans or those engaged in urban agriculture. Although the focus group discussions were not very helpful in identifying the most food insecure households, handicrafts/artisans were frequently mentioned in several villages in all the three urban centres. However, the chronically food insecure households are found in every livelihood group and are most likely also the chronically poor as they have poor purchasing power. However, their situation tends to be exacerbated by illness or accident of household members which reduces income to the household and increases expenditure for health care. The high food prices add to this already existing chronic problem.

7.2 Effects of High Prices

Nearly all of the sample households and all focus group discussions indicated that they had increased food expenditure over the past year. However, the same percentage also reported increased expenditure on fuel/energy while nearly two-thirds reported increased expenditure on transportation and health/medical indicating perhaps overall inflation in urban areas. Similar trends were reported in the village discussions, however, some even eliminated health expenditure altogether in order to spend more on food.

In addition, the most commonly reported shock was **unusually high food prices**, which was reported by 83% of the households. By livelihood group, the group most likely to report high food prices as a shock is agriculture group (96%) while the least likely is the salary/wages group (78%). **Unusually high fuel and transport costs** were reported by 32% of the households with 50% of the small business households reported being affected by high fuel and transport costs, compared to only 18% of the handicraft/artisan group. Although the cost of fuel has gone up in the past year, most traders did not report this as a major problem but rather the increase in prices of commodities which has lowered household purchasing power and in-turn reduced sales and profits of the traders

In terms of impact of the shocks households with **unusually high food prices** have significantly lower food consumption score ($p < 0.05$) and a significantly higher share of expenditure for food ($p < 0.01$) and are using significantly more strategies to cope ($p < 0.05$) than those not impacted.

Those with **unusually high fuel and transport costs** have significantly higher asset diversity ($p < 0.05$) but also have a significantly higher share of monthly expenditure for transport ($p < 0.05$). They also have a significantly higher per capita monthly expenditure ($p < 0.05$) compared to those not impacted by the high prices.

However, though as seen above the situation seems to have a negative impact on households, some discussions with the focus groups mentioned that some people had increased agricultural production while others have tried to find other income generating activities in order to bring in more revenue into the household.

7.3 Groups most affected by the High Prices

As described in Section 6, five different food security/vulnerability groups were identified from the analysis. Three groups (Highly food secure, Food secure, and Moderately food secure) are food secure but to different extents while a fourth group (Vulnerable) is food secure but vulnerable to the high prices for several reasons. They are characterised by having reasonable levels of consumption, asset wealth and income but are under a lot of stress. The further analysis showed that they have 7-8 members on average, plus are likely to have a chronically ill or disabled member or to be hosting orphans than the other food secure households. In addition, they have an added burden of providing external support to relatives outside the home.

The chronically food insecure are a large percentage of poor urban households. They struggle in normal times and are often caring for orphans, chronically ill or disabled members. Illness of members and associated costs in terms of home and health care are a major burden for these households. High food and transport costs are just an additional problem with which they must cope, if possible. Their food consumption, however, in terms of dietary diversity and food frequency is for the most part acceptable for now.

7.4 Role of WFP and partners

As of July 2008, the impact of high food and fuel prices has not yet reached a level in urban areas of Burundi as to warrant an immediate food assistance response. There are a large number of urban poor who are chronically food insecure but who manage to acquire enough different types of foods to have at least acceptable consumption. The vulnerable group are earning income and have a solid asset base but are under a great amount of stress. Based upon the analysis described in Section 6, the table below outlines some estimates of people who are chronically food insecure/poor and those who are vulnerable due to the high food prices.

	Gitega	Ngozi	Bujumbura Mairie	Total
Chronically Food Insecure	7,000	12,900	118,000	137,900
Vulnerable Households	5,500	2,900	45,000	54,400
Total	12,500	15,800	163,000	191,300

In the short- to medium-term, the Government of Burundi, WFP and partners could benefit from more closely monitoring the situation in these urban areas, especially in the poor neighbourhoods using existing systems¹³ at several levels. For example, price monitoring is being done monthly by FAO and this can continue to be used to compare prices to previous years and also the changes in prices of key commodities, especially when entering the 'lean' season. This assessment was carried out during the harvest season and hence household stress levels are minimal so it is recommended that another assessment is done during the lean season (September – November) in order to see how the high food and fuel prices have impacted on household food security during the lean season.

If, through use of these monitoring systems, it is determined that the situation has changed to an extent where an intervention is necessary, the following response recommendations that increase access to food at household level or, in the worst cases, those that increase individual utilization (feeding programmes) could be used to address these needs caused by the high food prices.

1. Under the latest Burundi Poverty Reduction Strategy Paper, the government has committed to supporting vulnerable groups through strengthening social welfare systems. WFP and other partners can explore ways in which they can provide technical support to implement such programmes
2. Through the Ministry of Health, support supplementary feeding centres in the urban areas should there be an unseasonable increase in admissions of young children.
3. Identify existing local support organisations and through consultation and engagement develop their capacity to monitor and if needed directly support, using WFP assistance, households affected by high food and fuel prices For example churches in urban areas often have outreach programmes to support the poor and vulnerable and tend also to have a good idea of the situation on the ground due to their strong social and spiritual networks.

¹³ Such as education, health or religious networks

References

BURUNDI: A Secondary Data Analysis – Consolidating existing information on food security and vulnerability, World Food Programme, Burundi, May 2008

BURUNDI Market Profiling Study, VAM Unit, World Food Programme Burundi, 2007

US Forest Service International Programs, Technical Assistance to the US Government Mission in Burundi on Natural Resource Management and Land Use Policy, 2006

BURUNDI Programme Review Mission, 2008 World Food Programme

UNDP Human Development Report 2007/08

Burundi Comprehensive Food Security and Vulnerability and Analysis Report, 2004

BURUNDI: Poverty Reduction Strategy Paper, 2006

BURUNDI: Rural Livelihoods and Labour Markets in Burundi, World Food Programme, Burundi, May 2007

BURUNDI: The Impact of Rising Fuel and Food Prices - WFP Burundi, May 2008