THE IMPACT OF HIGH PRICES ON FOOD SECURITY IN LIBERIA

JOINT ASSESSMENT – JULY 2008

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The views herein reflect the authors' point of view and do necessarily reflect the position of the United Nations or the government of Liberia. The errors and omissions contained in this report are the responsibility of the assessment team alone. Please contact claudia.ahpoe@wfp.org, niels.balzer@wfp.org, and jean-martin.bauer@wfp.org for comments on this report.

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Acronyms

ACF :	Action Contre la Faim
CERF:	Central Emergency Response Fund
CBL :	Central Bank of Liberia
CFSNS:	Comprehensive Food Security and Nutrition Survey
CFW:	Cash for Work
CRS :	Catholic Relief Services
CWIQ:	Comprehensive Welfare Indicator Questionnaire
CWW :	Concern World Wide
DRC:	Danish Refugee Council
ECHO:	European Commission Humanitarian Office
FAO :	Food and Agriculture Organization
FOB:	Free on Board
FFW :	Food for Work
FSLI:	Food Support for Local Initiatives
GAA:	German Agro Action
GDP:	Gross Domestic Product
GNF:	Guinea Franc
IDP:	Internally Displaced Person
ILO:	International Labour Organization
IMF:	International Monetary Fund
IPD:	Import Permit Declaration
LACE:	Liberian Agency for Community Empowerment
LD:	Liberian Dollar
LISGIS:	Liberian Institute for Statistics and Geospatial Information
LMR:	Liberia Market Review
MOA:	Ministry of Agriculture
MOHSW:	Ministry of Health and Social Welfare
MCI:	Ministry of Commerce and Industry
Mt:	Metric ton
RRR:	Road Reconstruction and Rehabilitation
SC UK:	Save the Children United Kingdom
STCP:	Sustainable Tree Crop Programme
ToT:	Terms of trade
UNDP:	United Nations Development Programme
UNICEF:	United Nations Children's Fund
UNMIL:	United Nations Mission in Liberia
USD:	United States Dollar
VFW:	Voucher for Work
WB:	World Bank
WHO:	World Health Organization
WFP:	World Food Programme

Executive Summary

Background and scope of assessment

Since the Accra Peace Agreement which marked the end of 14 year of conflict in 2003, substantial work on recovery has been ongoing. Liberia is a least-developed, low-income and food-deficit country. Extreme poverty – inability to meet the cost of food providing 2,400 kcal/person/day - affects 56 percent in the rural population and 29 percent in the urban population.

Liberia is particularly vulnerable to the global food and fuel prices' increase as it relies heavily on imports to meet its needs. It is estimated that Liberia requires 332,000 tonnes of rice, the country's main staple, every year but the national production meets only one quarter to third of the national requirements for rice. About 60 percent of rice consumed is imported. In Greater Monrovia it is 99 percent.

Purchase is the main food source for obtaining rice for both rural and urban households. The high rates of poverty, food insecurity and malnutrition mean that the poorest would have difficulty coping with the shock.

The Government of Liberia has formulated a strategy aiming at i) ensuring adequate supply of rice, ii) increasing food production and iii) protecting vulnerable groups. Some priority actions include the reintroduction of school feeding in Greater Monrovia, expansion of nutrition interventions, and cash/food employment project for vulnerable urban youth.

To support the design of appropriate and proportionate programs, a rapid assessment of the impact of rising prices on household food security was carried out. This joint UN survey (FAO, UNDP, UNICEF, WFP, and UNMIL) was implemented in partnership with the Government (MOA, MCI, LISGIS), Action Contre la Faim, the Danish Refugee Council, Concern, German Agro-Action and Save the Children UK. The analysis is based on primary data collected through a survey of 266 households in 8 deprived areas of Greater Monrovia and focus group discussions. Focus group discussions took place in rural areas to capture the effect of the shock on livelihood groups. Interviews were conducted with traders and other key informants in Monrovia and other urban centres across the country.

The price of rice in Monrovia has increased 40 percent in US dollar terms in the past year. It nonetheless remains below international and regional levels due to the elimination of import tariffs in March 2008 and the fact that a high level of imports was purchased before the brunt rise earlier this year. The rise in rice price is of particular concern in light of a World Bank study (CWIQ, 2007) which found that a 20 percent increase in rice price would lead to an increase in the poverty rate by four percentage points from 64 to 68 percent.

Rice purchased by cup is 32 percent more expensive than by bag, which provides an extra burden to poor households that cannot afford the purchase by bag. In terms of inter-regional price differences, rice is 56 percent more expensive in the South-East due to high transport costs. At Nzerekoré (across the Guinean border) in May 2008, a 50 KG bag cost USD47 compared to USD31 in Greater Monrovia, an indication that world market prices have not yet fully passed through to the consumer. The price differences also provide a strong incentive for cross-border trade and smuggling.

Consumer price inflation is high and increasing. It is forecasted at 13.4 percent in 2008. Liberia's trade balance is highly vulnerable to the price shock. The IMF estimates that, 'with unchanged volumes, the trade balance would deteriorate in 2008 by 16 percent of

GDP due to higher food and fuel prices, making Liberia sub-Saharan Africa's single most-affected economy.

Impact of rising food prices

Urban areas (Greater Monrovia represents about 30 percent of Liberia's total population): The rate of severely food insecure households in poor neighbourhoods has increased from 4 percent in December 2006 to 8 percent in June 2008. During the same period, the proportion of people with good food consumption patterns has dropped from 64 to 40 percent. To guarantee the consumption of basic staple food commodities, households are restricting their consumption of high quality food commodities, in particular protein sources and vegetables, which leads to decreased dietary diversity.

Some 9 of 10 respondents reported increasing expenditure for food and transport in the 12 months prior to the survey. Expenses on higher quality food commodities such as meat, eggs, vegetables, has dropped. Also expenses on education and health have declined. Households are substituting rice with less preferred and cheaper food commodities, consume fewer meals, reduce size of meals, give preference to children and purchase food on credit. The proportion of urban households engaging in agricultural production of cassava, leaves and greens, vegetables and fruits has increased, which could be a mitigation strategy to higher food prices.

It is estimated that 48,000 people living in Greater Monrovia have poor food consumption and are therefore highly vulnerable to increasing food prices. They have more limited income sources and rely more on loans and credit to purchase food. They own few assets. Children under 5 in households with poor food consumption eat only one meal per day. The access strategies of this group may be reaching their limit, which translates in declining food consumption.

Households and individuals will be mostly at risk of food insecurity and malnutrition in the June to October 'rainy season', when income earning opportunities will be limited in urban areas. This corresponds with the agricultural lean season in rural Liberia.

Rural areas: Through rural Liberia was is more deprived in terms of poverty and food security, there is indication that rural groups have thus far been less affected by the price increases. Some livelihood groups such as gold miners, hunters, fisher folk, palm oil producers and charcoal burners may benefit from stable or improved terms of trade. Rubber tappers and casual labourers are experiencing a decline in their terms of trade in some areas while the outlook for cocoa and coffee growers will depend on the market trends for these goods later in 2008. All livelihoods groups are resorting to coping strategies, in particular eating less preferred food, substituting rice by cassava, and looking for additional income generating activities.

Markets and traders: There are only three major importers in Liberia. Wholesalers interviewed reported a supply problem. The quantity of supply they can buy from importers is limited and involves long waiting times. In rural Liberia, traders complained about lower demand because of increasing prices, very high transportation costs and no access to credit and banking facilities. As the Government tries to guide the price at wholesale level, margins for importers and wholesalers in the rice business are becoming less and less attractive.

Although, supply of rice has worsened, the most likely scenario is that new imports will be arranged prior to the depletion of in-country stocks. Traders will have to import rice at higher prices than previously caused by the substantial price increase that took place since the beginning of this year. This will result in higher prices for households. Based on different scenarios, the price could rise from currently US$32 to a range of US$39 to US$52 per 50KG bag within the next months.

Recommendations for interventions

During a stakeholder validation and response options analysis workshop in July 2008, the following recommendations were proposed to mitigate impacts of high commodity prices in the short-to-medium term:

Short term (July - December 2008):

- Take immediate action to arrange for the import of new rice stocks and avoid depletion of stocks
- Scale up nutrition interventions aimed at preventing acute malnutrition and micro-nutrient deficiencies
- Re-introduce school feeding in Greater Monrovia to maintain school enrolment and attendance in the academic school year 2008/09
- Scale up and strengthen interventions aiming at increased national food production focusing on activities with immediate impact on the current agricultural season (pre- and post-harvest interventions)
- Promote peri-urban agriculture
- Pilot conditional cash/food transfers in urban areas
- Implement food complements to cash initiatives in rural areas
- Kick-start national food security and nutrition monitoring system

Medium term (2009/10):

- Continue investments in the food crop sector to decrease Liberia's dependency on food imports and enhance the agricultural value chain
- Assess the feasibility of setting up a cereal buffer stock
- Shift from food for work to food/and or cash for assets with impacts on longer-term food security
- Implement a study on the impact of cash, food and mixed transfers on household food security and market performance
- Conduct regular monitoring activities to continuously assess impacts and trends over time and to provide recommendations to decision-makers for fine-tuning and updating the response strategy and developing exit strategies

1. Introduction

Liberia is particularly vulnerable to recent increases in the cost of food and fuel. The country relies heavily on imports to meet its food needs. Half of the country's imports are for food and fuel. Some 60 percent of rice consumed nationally is imported, in Greater Monrovia it is close to 95 percent. Half of Liberia's imports are comprised of food and fuel, making the country one of Africa's most vulnerable to the macroeconomic impact of higher prices.

These price increases in a fragile post-conflict environment imply a risk of violence. Pre-existing high rates of poverty, food insecurity and malnutrition mean that the poorest Liberians would have difficulty coping with the shock. Indeed, expenditures on food were high prior to the crisis. Purchase is the main food access modality for both rural and urban households.

Higher prices may translate into a further increase in expenditure on food to the detriment of other needs such as health and education, and to an even poorer diet, as families shift their income spent on other foods to purchase rice. The most affected households are likely those most dependent on markets and with weak purchasing power – such as daily wage laborers, palm oil producers, petty traders, the rural landless, the majority of small farmers and the urban poor

Liberia is emerging from a 14-year long crisis that disrupted formal and informal social safety nets. The Government Poverty Reduction Strategy (2008-11) highlights the need to "ensure the well-being of vulnerable households […] by developing a targeted social safety net program". In 2007, the Government developed a National Food Security and Nutrition Strategy. Additionally, the Government is drafting a National Social Welfare Policy.

A Government objective in responding to the food crisis is "Maintaining access to food and improved nutritional well-being for vulnerable households through safety nets". Priority actions include the reintroduction of school feeding in Greater Monrovia, expansion of nutrition interventions as well as cash and/or food programs for vulnerable urban youth. External support will be required to support the implementation of both immediate and longer-term social protection measures.

In order to support the design of these programs, it was decided to carry out a rapid assessment of the impact of rising prices on household food security. The survey was a joint UN survey implemented in partnership with the Government (MOA, MCI, LISGIS), Action Contre la Faim, the Danish Refugee Council, Concern, German Agro Action, Save the Children. Participating UN agencies are FAO, UNDP, UNICEF, WFP, and UNMIL. The mission consulted stakeholders such as Catholic Relief Services, Mercy Corps and the World Bank on response options. The assessment was conducted from 10 June to 12 July 2008.

2. Assessment objectives and methodology

2.1 Objectives

The objectives of the assessment were to:

1. Analyze current and future outlook of food and fuel prices;
2. Assess the current and foreseen impact of high market prices on urban food security, and;
3. Recommend immediate and longer-term response options in urban and rural Liberia.

2.2 Methodology

Primary data collection took place in Greater Monrovia and in selected rural areas in order to produce information that can be compared to secondary data such as the CFSNS and the Liberia Market Review. After the initial consultation process, a half-day instrument design workshop was conducted including technical staff from LISGIS, MCI, MOA, FAO, UNDP, UNICEF, UNMIL, WFP, ACF, GAA, and SC UK. Data was collected by MOA, LISGIS, FAO, WFP, DRC, SC UK and the reporting was done by WFP with support from MOA and FAO – following a half day validation workshop on 10 July with all key stakeholders.

Primary household data was collected from a sample of 266 households from 8 poor neighborhoods within Greater Monrovia, with a focus on petty-trade based livelihoods, petty-trade/fishing based livelihoods, and peri-urban agriculture based livelihoods. Households were randomly selected from a sampling frame provided by LISGIS based on the 2008 census. The same communities were also covered during the Monrovia Comprehensive Food Security and Nutrition Survey conducted in December 2006, which will enable the comparison of key food security indicators with pre-crisis baseline information. As data was collected during different times of the year, seasonality may be an issue, which the reader should keep in mind. However, this constraint is mitigated by the fact that urban households rely on imported rice throughout the year and that data collection in both cases took place during or towards the end of the dry season.

Market data was collected through a trader questionnaire from 6 wholesalers in Gobachop Red Light Market as well as 5 retailers in Central Monrovia markets. The information from the trader questionnaires is meant to triangulate information from other sources and to gain insight into qualitative market trends – they are not meant and should not to be interpreted as a representative sample of Liberian traders.

In addition, focus group discussions took place in north-west, central and south-east Liberia, for rice producers, tree crop producers, palm oil producers, charcoal producers, rubber tappers, cassava producers, hunters, fisher folk and gold miners. Separate focus group discussions took place with men and women to determine the extent to which livelihoods have evolved compared to last year at the same time. The reader is warned that the insights produced through the focus group discussions should not be construed to be anything more than ‘case studies’ of various livelihood groups’ perceptions of higher prices. Statistically representative household food security data will be collected in August 2008

Response analysis involved collection of intervention data from stakeholders, discussion of agency-specific preliminary short-term interventions and responses to higher prices. This process allowed an overview of the national contextto emerge and fed into the response recommendations outlined in the present report.

Assessment schedule:
10 - 14 June: Initial consultations
12 - 19 June: Secondary data analysis / instrument design and field-testing
23 June: Enumerator training
24 June - 2 July: Primary data collection
02 July – 10 July: Data processing and analysis
10 July: Validation workshop
19 July: Finalization of draft report

The reader is reminded that the assessment was meant to produce rapid conclusions to inform the need for an adaptation of programs. As such, research methods that would allow conclusions to be drawn in a short timeframe were favored. It is mandatory to compare these results with those that will emerge from the Liberia food security monitoring system. Weights and measures are not standardized in the Liberian market, introducing an element of uncertainty for price analysis. Where this is the case, a footnote is introduced.

3. Country context

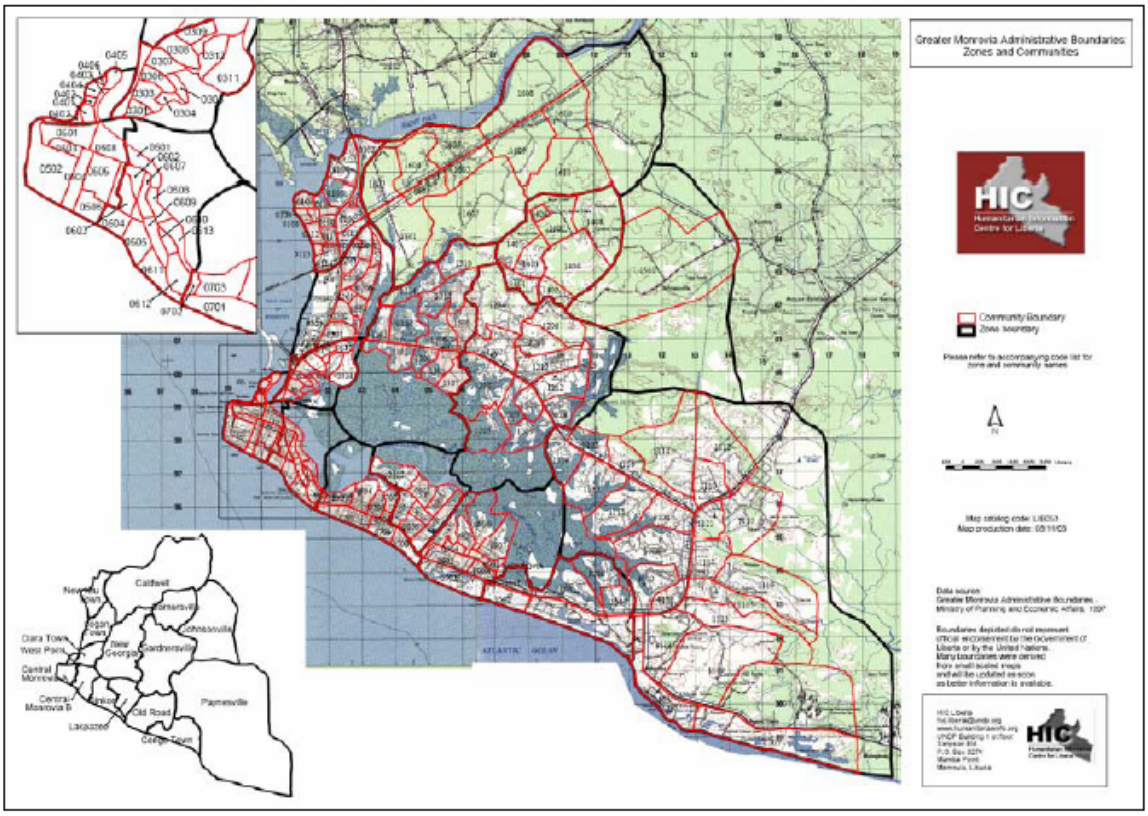
Liberia is a coastal West African country of some 3.5 million people[1], 50 percent of whom are thought to be under 20 years of age. Demographic growth is 2.1 percent per annum. GDP per capita, as USD 135 per annum, is one of the lowest in the world[2]. The 2007 Core Welfare Indicator Questionnaire (CWIQ) estimates that 68 percent of rural and 55 percent of urban households live below the poverty line[3]. According to the same survey, 56 percent of rural and 29 percent of urban households live below the extreme poverty line[4].

In the past decades Liberia went through a conflict that lasted until 2003, causing the death of some 270,000 Liberians, massive population displacement and a breakdown of government as well as social safety nets. According to the CFSNS, some 86 percent of Liberians were displaced at least once since 1989.

Access to health and education remains poor. According to UNICEF child mortality is 235 per 10,000 one of the highest in the developing world[5]. Chronic malnutrition affects 39 percent of children 6 months to 5 years of age. Global acute malnutrition – while below the 10 percent emergency threshold – should be monitored, affecting 7 percent of Liberian children in the same age category[6].

One third of the Liberian population lives in urban areas, defined as settlements with more than 5,000 inhabitants. Provisional results from the 2008 census show that 1 million people live in Greater Monrovia, which has a population four times greater than the total upcountry urban population. Monrovia receives an average of 4,150 mm of precipitation per year, making it one of the rainiest places in the world. Greater Monrovia is divided into 16 administrative zones[7]. Some outlying parts of Greater Monrovia, such as Gardnersville, Johnsonville and Caldwell, have semi-rural characteristics.

[1] Provisional results from the 2008 census. (LISGIS)
[2] World Bank, World Development Indicators 2007.
[3] CWIQ 2007. Defined as living on less that USD 1 per day. Absolute poverty
[4] Ibid. Defined as not being able to afford a food basket of 2,400 kcal per day per person.
[5] State of the World's Children, 2008 . UNICEF.
[6] CFSNS, 2006
[7] Greater Monrovia CFSNS, 2007.



As shown on the map above, central Monrovia lies on a narrow peninsula. Bridges link the Cape Mesurado peninsula with Bushrod Island, where the port is located. A single road connects central Monrovia to the mainland via Paynesville. The bridges and Paynesville road are choke points in case of security incidents. Among other security incidents that have occurred since the end of the conflict, inter communal Riots took place in Monrovia in October 2004, with the Paynesville area as a key flashpoint.

4. Recent macro-economic performance

4.1 Recent performance

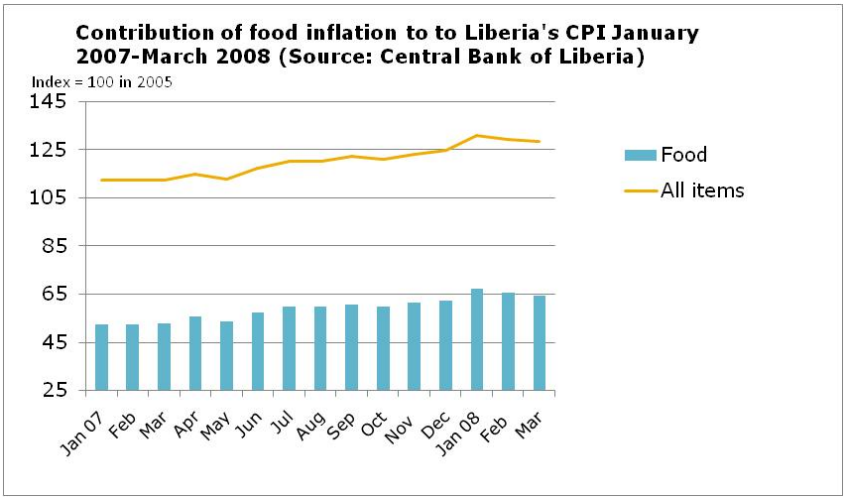
In 2005, Liberia's real GDP was less than half its 1979 level. Liberia's economic performance since 2003 has been marked by high GDP growth due to donor-financed reconstruction. Investments in the iron ore, timber and rubber sectors are expected to lead to a high rate of GDP growth in 2008 and 2009. The economy in Liberia is to a large extent dollarized, with US dollars accounting for 95 percent of the effective money supply[8]. Liberian monetary policy aims to maintain exchange rate stability between the Liberian dollar (LD) and the US dollar (USD). Government policy is to maintain a balanced budget with no borrowing.

Table 1 – selected macroeconomic indicators

	2005	**2006**	**2007**	**2008 (est.)**	**2009 (est.)**
Real GDP growth USD	5.3	7.8	9.4	10.0	10.5
Consumer price inflation (average)	11.1	7.4	11.4	13.0	12.4
Reserves excluding gold (USD m)	25.4	72.0	119.4	n/a	n/a
Exchange rate LD:USD (average)	57.1	58	61.3	63	65

Source: IMF, EIU

According to central bank figures, food and fuel accounted for 49 percent of imports in 2007 (a combined USD 246.9 million in 2007, out of a total import bill of USD 499 million). Consumer price inflation is high and increasing, forecast at 13.4 percent in 2008, mainly due to the higher cost of imports. Data from the central bank of Liberia, below, shows that the higher cost of food is a key driver of inflation. The food component of the CPI has increased by 22 percent in 2007, whereas the general index has only increased by 14 percent. As food accounts for 45 percent of the CPI, increases in the price of food strongly contribute to overall price inflation.



Liberia's trade balance is highly vulnerable to the price shock. The IMF estimates that, 'with unchanged volumes, the trade balance would deteriorate in 2008 by 16 percent of GDP'[9] due to higher food and fuel prices, making Liberia sub-Saharan Africa's single most-affected economy. The IMF nonetheless expects that private and official resources will make up part of the gap.

[8] IMF (2008) The Balance of Payments Impact of the Food and Fuel Price Shocks on Low-Income African Countries: A Country-by-Country Assessment
[9] IMF, ibid, p16

4.2 Food availability

Food production is improving in Liberia following the conflict. According to FAO stat some 200,000 tons of cassava[10] are being produced. Production of local 'country' rice is also increasing and accounts for more than 100,000 tons of milled rice equivalent due to the return of displaced populations and agricultural emergency programs – mainly seed and tool distributions - in rural areas and the consequent resumption of food production activities. Nonetheless Liberia remains dependent on rice and wheat imports. It is estimated that per capita consumption of rice is some 95kg per person. This would imply that Liberia needs 332,000 tons of rice every year, but that local production currently only meets one quarter to one third of this need.

The simplified cereal balance sheet below, adapted from the Bellmon analysis conducted by CRS in Liberia[11], shows the respective contributions of local and imported cereals to overall cereal availability. The figures herein are meant as a broad indication of food availability. Although agricultural production is rising slightly, Liberia as a whole remains dependent on imports to meet some 40 percent of its cereal needs.

Liberia Cereal Balance sheet (2004-2008)

	US FY	2004	2005	2006	2007	2008 (est)
Production, mt (milled cereal equivalent)	Rice	66,000	96,000	84,649	96,000	96,000
	Cassava	226,650	226,650	226,650	226,650	226,650
	Taro	6,360	6,360	6,360	3,741	6,235
	Other	37,001	37,001	37,001	37,001	37,001
	Total	**336,011**	**366,011**	**354,660**	**363,392**	**365,886**
Commercial imports, mt (milled cereal equivalent)	Rice	192,304	225,000	164,966	179,250	200,000
	Wheat	13,000	26,000	32,000	36,000	36,000
	Subtotal	205,304	251,000	196,966	215,250	236,000
Food aid imports , mt(cereals)	Subtotal	61,322	46,856	39,016	26,318	21,428
Total cereal imports, mt	**Total**	**266,626**	**297,856**	**235,982**	**231,568**	**257,428**

Source: adapted from CRS, 2008

4.3 Magnitude of domestic food price changes

In 2008, prices in Greater Monrovia have been increasing for a broad range of goods, including but not limited to food, as made evident in the table below.

Price changes for a sample of goods in Monrovia (Jan-May 2008)

Item	Unit	Price May 2008 (LD)	Price Jan 2008 (LD)	Increase
Butter' rice	50kg bag	1960	1755	12%
Cassava	Small pile	25	10	150%
Dried bonnies	Small pile	25	20	25%
Candles	Pack	65	50	30%
Gasoline	Gallon	265	230	15%
Chloroquine tablets	100 mg	10	10	0%
Concrete	Bag	790	715	10%

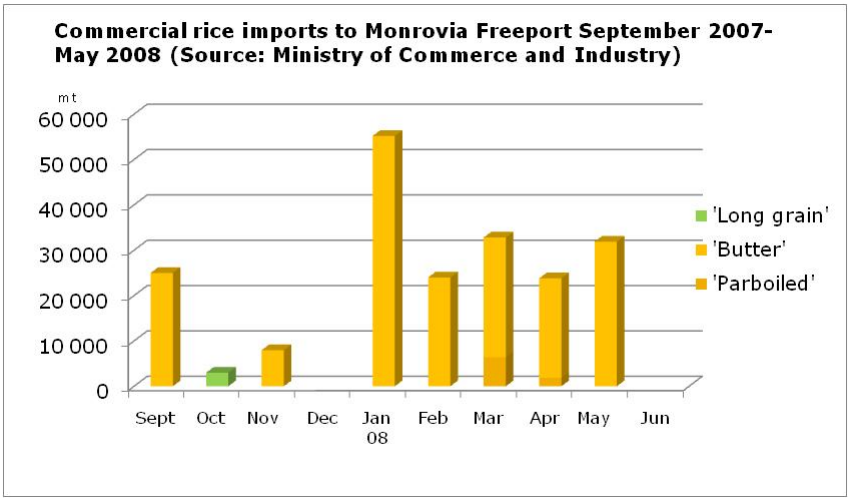
Source: UNMIL Civil Affairs

The main staple food in Liberia is imported rice, believed to account for 60 percent of consumed cereals. Cassava is becoming an increasingly important alternative, especially in rural areas. The most consumed variety of rice is 25 percent broken, short-grain

[10] Cereal equivalent
[11] CRS, 2008 Food commodity market analysis (Bellmon determination)

japonica rice from China, locally called 'butter' rice[12]. This 'butter' rice accounts for over 90 percent of Liberian commercial rice imports. Some quantities of US parboiled rice are also imported to the Liberian market. In 2007, Liberia commercially imported 214,000 tons of rice.

The rise in food and fuel prices has started passing through to Liberia. According to the Central Bank of Liberia, the price of a cup of 'butter' rice has increased 16 percent in nominal terms since May 2007. Taking into account the high inflation, there has been no increase in the real retail price of butter rice in the past 12 months. However, going by the level of the MCI approved wholesale price (graph to the right); the price has increased from USD 22 to USD 30 from May 2007 to May 2008 – an increase of 36 percent in dollar terms. The reason for this discrepancy is not clear, but may be related to the difficulty of monitoring food prices in Monrovia, where weights and measures are not standardized[13]. By any measure imported rice in Liberia remains well below import parity.

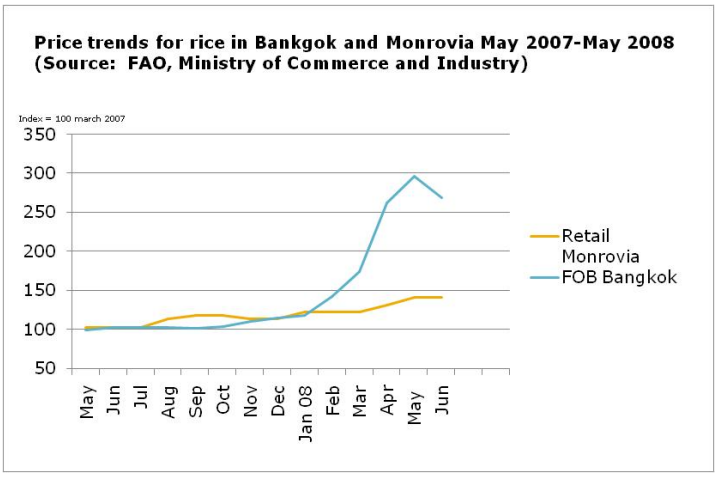


As the graph to the left shows, this is explained by the high level of imports in the first quarter of 2008, purchased prior to the brunt of the rice price increase. The Government suspension of an import tax of USD 2.20 per bag has somewhat limited the domestic price rise. Nonetheless Liberian importers have yet to import at higher prices that reflect the substantial price increases that took place in the spring of this year on international markets.

The rice market in Monrovia is integrated with the world market. There is a 0,87 correlation between the FOB price of broken rice in Thailand and 'approved' retail prices in Monrovia from March 2007 to June 2008. Nonetheless, prices in Monrovia have not risen as fast as international prices, as evident from the graph below which clearly illustrates the 'lag' in the pass through of world prices to the Liberian consumer.

[12] According to lore, a taste test took place to assess the acceptability of japonica rice from China on the Liberian market. Margarine was added to the cooked sample of japonica rice to improve its flavor. The tasters considered this 'butter' rice to be entirely acceptable, thus coining the term for what was to become Liberia's most consumed rice variety.

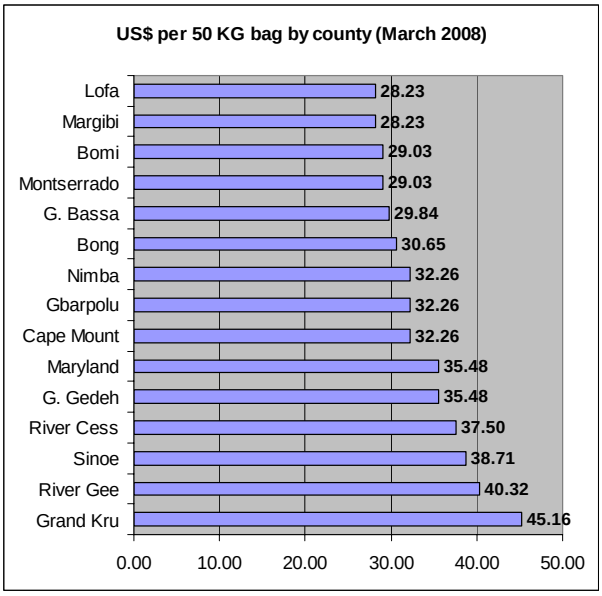
[13] Rice is sold by the 'cup' to consumers. The quantity in a cup varies from vendor to vendor, from market to market and from season to season at the discretion of the retailer. It is possible that as prices increase, the size of the cup is becoming smaller to compensate. If the amount of rice in a cup is not accurately weighed, it would be easy to reach the false conclusion that prices are stable.



As a consequence of this lag, rice costs less in Liberia that in neighbouring countries. Comparatively low prices for rice in Liberia constitute an incentive to re-export the commodity to neighbouring markets where prices are higher. At Nzerekoré rice cost USD 47 per 50kg bag in May 2008[14]. There seems to be a consensus among key informants that there is some export of rice to Guinea. The magnitude of those flows could not be determined.

Stocks in country at the time of writing, thought to be approximately 50,000 tons, will not last beyond September. Importers and the MIC are discussing options to arrange a new shipment of 80,000 mt of Chinese butter rice in the short term. The very short timeframe suggests that Liberia will be compelled to confirm an order at prices that imply much higher prices for consumers.

Retail prices by county, March 2008 – (Source: FAO and WFP)



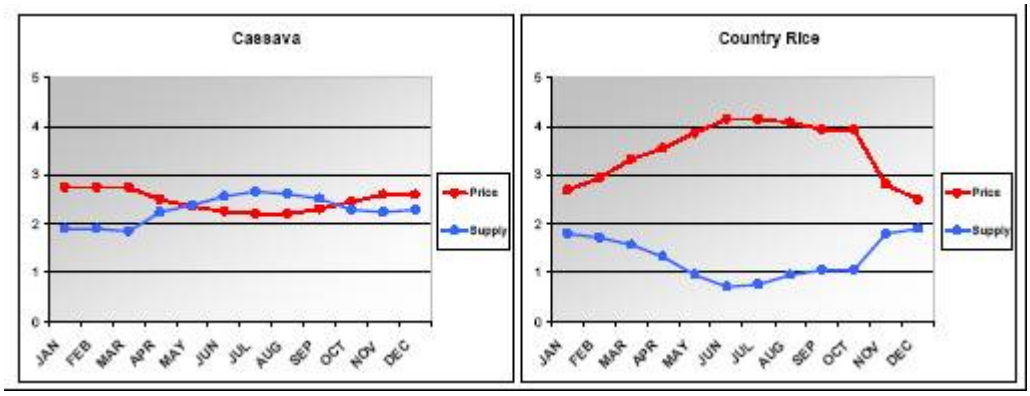
The graph to the left shows prices in Liberian counties in March 2008. The lower prices are seen in the Counties in the vicinity of the Greater Monrovia areas. The highest prices are in the South East, an isolated area where high transport cost limit market access.

These higher prices will affect the consumer during the rainy season, when demand on the market for food is highest, as illustrated in the graphs below. Wholesalers in urban areas have their largest turnover in the May to October rainy season.

Cassava is less subject to seasonal variation as it grows year round, with a supply peak in the rainy season, as shown in the graph below which illustrates relative perceptions of supply and demand for the commodity. The price for cassava seems to have sharply risen in the past year, possibly due to higher transportation costs and labor costs on the supply side, and to increased demand from consumers substituting away from more expensive rice.

[14] RESIMAO. http://www.resimao.org/html/fr/region/market/88. Price quoted is 398 FCFA per kg wholesale in Nzérékoré on May 12 2008(RESIMAO reports prices in FCFA for Guinea, not in the national currency).

Seasonality of supply and demand for cassava and country rice (Source: LMR)



4.4 Market integration

According to the Liberia Market Review (LMR), the 'central belt' of markets stretching from Montserrado to Nimba counties are linked by adequate infrastructure and higher population densities. The South East is the most remote part of the country. Partial price data for butter rice from UNMIL[15] confirms a divide between the degree of price co-variation in markets in central areas and the South East, where integration is much weaker. Indeed, the lowest correlation coefficients for the price of butter rice are found in remote Grand Kru, Maryland, and Sinoe counties. The low correlation coefficients in Margibi County are probably related to the price effects on butter rice caused by the distribution of US parboiled rice to Firestone workers[16].

Correlation coefficients of the price of 'Butter' rice by county (Source: from UNMIL Civil Affairs data)

	Monrovia	Margibi	Bomi	Cape Mount	Gbarpolu	Lofa	Bong	G Bassa	G Gedeh	Grand Kru	Maryland	River Cess	Sinoe
Monrovia		0,35	0,68	0,76	0,82	0,72	0,94	0,81	0,83	0,66	0,56	0,80	0,51
Margibi	0,35		0,80	0,84	0,78	-0,03	0,65	0,89	0,44	0,76	0,70	0,86	0,85
Bomi	0,68	0,80		0,98	0,96	0,54	0,91	0,99	0,86	0,90	0,97	0,97	0,93
Cape Mount	0,76	0,84	0,98		0,88	0,96	0,88	0,85	0,74	0,96	0,74	0,96	0,90
Gbarpolu	0,82	0,78	0,96	0,88		0,69	0,96	0,97	0,91	0,91	0,67	0,95	0,84
Lofa	0,72	-0,03	0,54	0,96	0,69		0,81	0,59	0,70	0,43	0,43	0,66	0,30
Bong	0,94	0,65	0,91	0,88	0,96	0,81		0,91	0,89	0,82	0,91	0,90	0,75
G. Bassa	0,81	0,89	0,99	0,85	0,97	0,59	0,91		0,93	0,77	0,98	0,90	0,93
G. Gedeh	0,83	0,44	0,86	0,74	0,91	0,70	0,89	0,93		0,81	0,48	0,82	0,70
Grand Kru	0,66	0,76	0,90	0,96	0,91	0,43	0,82	0,77	0,81		0,61	0,89	0,88
Maryland	0,56	0,70	0,97	0,74	0,67	0,43	0,91	0,98	0,48	0,61		0,71	0,57
River Cess	0,80	0,86	0,97	0,96	0,95	0,66	0,90	0,90	0,82	0,89	0,71		0,92
Sinoe	0,51	0,85	0,93	0,90	0,84	0,30	0,75	0,93	0,70	0,70	0,57	0,92	

According to the LMR, Liberia has 700km of surfaced roads and 5,600km of unpaved roads. The road network is in disrepair, and access to remote areas is very difficult during the rainy season. Market integration weakens in the rainy season, as cost of transportation to the South East increases. The LMR and subsequent monitoring show that the price of imported rice in the South East is 50 percent above the rates in Monrovia. The South East is also the area with the highest rates of food insecurity according to the CFSNS.

The market chain for imported rice shows that the commodity enters Liberia through the Freeport in Monrovia, from where it is dispatched through the country by road and by vessel to the ports in Buchanan, Greenville and Harper. At the time of the LMR, the

[15] Oct 2006-March 2007, Dec 2007-May-2008 only.
[16] Part of the payment is in-kind in US rice. As butter rice is a substitute, an effect on the price of the latter commodity is to be expected. The low coefficient in the case of Margibi County is not an indication of poor market integration.

South East received some quantities of rice from Cote d'Ivoire. These flows are represented on the map below.

Flow of imported rice (Source: LMR)

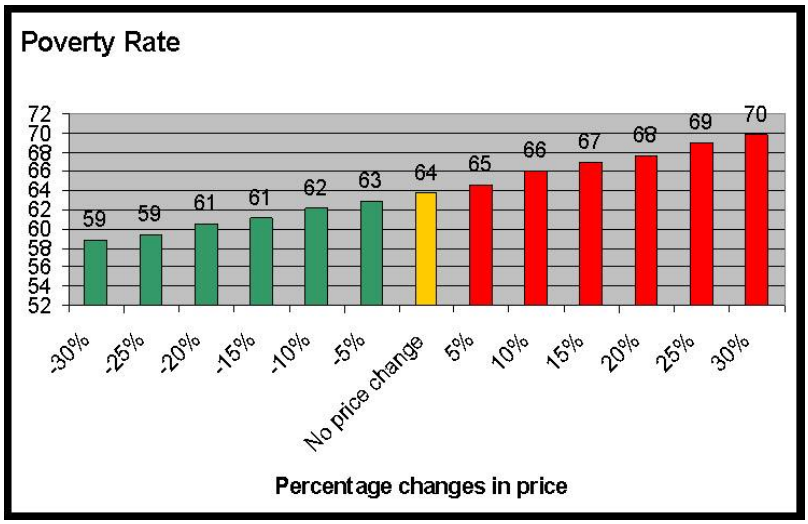
4.5 Socio economic impacts

Liberia's import bill –49 percent of which comes from food and fuel- is sharply increasing due to the price rise. Nonetheless, it is expected that the country can weather the financial implications of the crisis thanks to support from the IMF, which recently signed a USD 391m poverty growth and reduction facility and a USD 561m extended fund facility that can serve to bolster foreign currency reserves. In April 2008 the Paris Club deferred payment of USD 245m in Liberian debt. According to the MOA the suspension of tariffs on imported rice has already implied USD2m in forgone revenue, with a shortfall of USD8.6 million in fiscal 2008/2009. These amounts respectively represent 1 and 3 percent of official government revenue for 2007/2008 and 2008/2009.

The price shock is occurring at a time when the country is recovering from conflict, raising the risk of political instability. Nonetheless, the presence in Liberia of UNMIL peacekeeping contingents is a strong guarantee that large-scale civil unrest would be contained – though a gradual phasing-out is planned to start during the second half of 2008. In October 2004 interethnic riots erupted in Monrovia after a land dispute, requiring UNMIL intervention. It is conceivable that an unexplained or sudden rise in the price of rice could cause similar disturbances in the future. The protests that followed the increase of the price of rice in 1979 are widely seen as the trigger of the political instability that plagued the country in the following decades.

The socio-economic impact of the rise in the price of rice is of concern in an import dependent country with a high incidence of poverty. The World Bank, using CWIQ data, has estimated that the poverty rate in Liberia will increase from 63.6 to 67.9 percent should the price of rice increase 20 percent[17]. The high impact of higher rice prices on poverty are due to the fact that most households are net purchasers of the commodity. Few Liberians households are thought to be in a position to benefit from increased prices due to the low level of food production in the country.

Impact of the increased price of rice on the poverty (Source: World Bank)



[17] 'Rice and poverty in Liberia', World Bank, 2007.

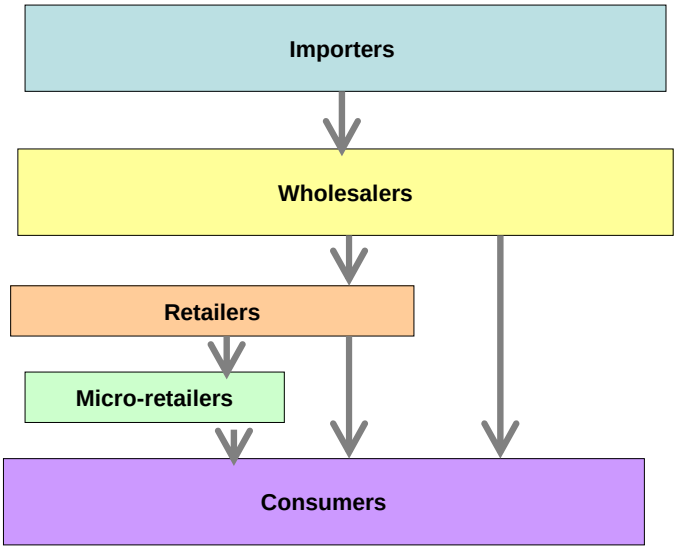
5. Impacts on markets and traders

5.1 Market structure

Three importers account for over three-quarters of rice imports to Monrovia. This high degree of concentration presents an opportunity for collusion or coordination, although there is no evidence available to show that such behavior has occurred. The importers sell in US dollars to bulk-breaking intermediaries located at the Gobachop/Red Light market in Paynesville. Retailers purchase from wholesalers in US dollars and sell in Liberian dollars. The retailers pass on the rice to 'micro-retailers', mainly women who sell rice by the cup to the final consumer. It is the mission's understanding that these 'micro retailers' are not subject to the MCI price ceilings.

The Government keeps a close watch on the imported rice market due to its sensitive and strategic nature. The MCI is involved in market regulation with the aim of keeping prices accessible to the consumer, with two tools. Firstly, importers must acquire an 'import permit declaration' (IPD) before being authorized to import a rice consignment to Liberia. Before an IPD is delivered, the MIC and importer agree to wholesale and retail prices (and margins) that will be applied to the new consignment. Secondly the MCI monitors prices. Some 57 inspectors are tasked with ensuring that the importers and wholesalers abide by the agreed price levels. The graph below outlines the market chain for imported rice. The poor urban consumer purchases rice from 'micro retailers' who are not subject to MCI price controls.

Market chain for imported rice (Source: trader survey, interviews)



5.2 Diminishing margins

Margins for importers and wholesalers in the rice business are becoming less attractive. The MCI's approved price ceilings allow for a fixed margin of USD 1 per bag. As the price of rice rises, the size of this margin diminishes with each upward adjustment in the approved price ceiling: in May 2007, the margin was 4.5 percent. Today it is 3.3 percent and would be smaller still for future consignments sold at higher prices. These smaller margins are a disincentive for importers to continue supplying rice to the Liberian market and may conceivably lead to a reduction imports by commercial traders, who may divert investment to more lucrative businesses (see 5.3 and 8.2). These diminishing margins are not thought to be an issue for the unregulated micro-retailers who sell rice by the cup at consumer markets.

Transaction costs are high for wholesalers as they sell in Liberian dollars and pay their suppliers in US dollars. Many rice wholesalers therefore 'double' as money exchangers, in order to acquire the US dollars necessary to pay their supplier. Wholesalers pay for their supplies in cash and do not obtain credit from their suppliers. The MCI's policy has been to facilitate the delivery of 'import permit declarations'. Nonetheless importers are finding it difficult to obtain letters of credit to purchase rice on the international market. They resort to overseas banks for funding. According to the MCI, importer's financing costs account for some 3 percent of the CIF price of a rice consignment.

In the South East, there seems to be increasing agricultural production. Indeed, during the 2007 LMR, very few commodities for sale in markets of the South East were locally produced. In June 2008 the assessment mission estimated that approximately 50 percent of food on these markets (rice excluded) was produced in Grand Kru or Maryland Counties. There is a high demand for cassava, the main substitute for rice in rural areas.

5.3 Supply crunch?

There is evidence of a supply crunch at wholesale levels. Parboiled rice is no longer available from wholesalers at Red Light market. All of the interviewed wholesalers complained of limits on the quantity of rice they can purchase from importers, and of having to wait for supplies. This is in stark contrast to trader's perceptions of the market a year ago, when supply was plentiful. Retailers selling imported rice also indicated that market supply was not satisfactory.

In the South East, supply patterns for imported rice have changed due, to the 25 percent devaluation of the Liberian dollar against the CFA franc and the increase of the costs of rice in Cote d'Ivoire, making imports from that country uncompetitive. Wholesalers are now importing rice from Monrovia by boat via Harper. Supplies are very irregular, as the boats that ship rice from Monrovia to Harper only travel when there is rubber or other cargo available for the return trip. This makes the South East prone to stock depletion, especially in the rainy season when supplies cannot be brought in by road.

5.4 Impact on cross border trade

The impact of higher prices on cross border trade was assessed through interviews of key informants and with traders and officials in border areas. Higher prices have prompted i) authorities to restrict cross border trade and ii) traders to adapt their supply chain.

Liberia-Guinea
Traders in Ganta (Bong) and Foya (Lofa) districts have reported that commodity flows are disrupted at the Liberia-Guinea border. On the one hand Guinea has an export ban since January 2007, which is reducing the flow of groundnuts, dried peppers and cowpeas to the Liberian market. On the other hand, Liberian authorities had announced an export ban in mid-May, which was quickly repealed. Liberia usually exports palm oil; gasoline and rice to Guinea.

In spite of this repeal the assessment confirms that restrictions on the Liberian side continue to hamper trade. Trucks carrying food can no longer cross the border into Guinea - only head loads of produce are allowed unimpeded into Guinea. Authorities have confiscated and auctioned quantities of rice hidden in Guinea-bound trucks, where rice prices are well above Liberian prices. Export to Guinea may be continuing in smaller loads through bush roads.

Liberia-Sierra Leone

In Foya district, trade with Sierra Leone is similarly affected by trade restrictions from Liberian authorities. From the Foya area, cocoa, coffee, rice and palm oil are exported to Sierra Leone. Sierra Leonean traders bring dried bonnie and fresh fruit to Liberia. Traded quantities are smaller due to the restriction on food transportation on trucks.

Liberia-Cote d'Ivoire

The Liberian dollar has weakened against the CFA Franc, currency of Cote d'Ivoire which is pegged to the Euro. Last year it took LD120 to buy 1000 FCFA in the South East. This year LD 50 – that is 25 percent more Liberian currency - are needed to buy the same amount of FCFA. Traders in Pleebo (Maryland) claim that they have stopped buying rice in Cote d'Ivoire due to the high cost. These traders now buy their rice from Monrovia, which also involves high transaction costs. Purchasing in Monrovia has become more expensive due to the higher cost of transport. Rural traders pay cash on delivery to their Monrovia suppliers, forcing some to sell their entire stock before being able to afford to resupply. Traders must exchange their Liberan dollars to the US dollars wholesalers deal in.

As market information systems exist in Cote D'Ivoire, Guinea and Liberia, and as the border areas of these countries are vulnerable to food insecurity; it may be of use to monitor prices at border markets in these countries to assess future prospects for food availability and access.

6. Impact on household food security in the urban and rural context

6. 1 Methodology

Primary data collection at household and community level in Greater Monrovia was comprised of a rapid household survey covering poor neighborhoods and 12 focus group discussions. For the household survey, 8 communities were selected that were also covered under the Liberia CFSNS 2006 for comparison purposes. In each selected community, 35 households were randomly selected from a list provided by LISGIS based on the recently published preliminary results of the 2008 census. In total, 266 households were interviewed.

To compliment the information from the household survey, focus groups discussions were held in one peri-urban and one semi-urban setting in Greater Monrovia disaggregated by sex and age with the following age groups: 18-29, 30-59, 60 plus.

In rural Liberia, 18 focus group discussions were conducted with 9 different livelihood groups across Liberia and disaggregated by sex:

- Rice, cocoa/coffee producers in Lofa
- Rubber tappers in Bong
- Cassava producers in Grand Kru
- Fisherfolk in Maryland
- Hunters and gold miners in Grand Gedeh
- Charcoal and palm oil producers in Bomi

It should be emphasized that a rapid assessment methodology was applied, and that the present report does not replace a comprehensive food security survey which would follow a very rigid sampling design. While interpreting the data, the following limitations should be kept in mind:

- The Greater Monrovia CFSNS data was collected in December 2006, while the present data was collected in June 2008. Though seasonality is not as critical in the current urban context and both surveys were implemented during or towards the end of the dry season, seasonality may have an influence on certain indicators.
- When changes are reported, it will not be possible to determine how much can be attributed to the actual increase in food and other commodity prices. Other factors may also play a role.
- Focus groups in rural Liberia may not represent the entire livelihood groups across Liberia.

6.2 Impact on food security in urban Liberia

Pre-high-food-price situation in Greater Monrovia

Urban Liberia is nearly synonymous with Greater Monrovia. Indeed, the capital area has a population of around one million, which represents nearly one-third of the total Liberian population and 75 percent of the country's total urban population. There are only 17 'urban' areas in Liberia with a population above 5,000 inhabitants. The second largest urban centre (Ganta, in Nimba County) has only just above 40,000 inhabitants; 3 other urban centers have a population in between 30,000 and 40,000

A Comprehensive Food Security and Nutrition Survey was conducted by the Government of Liberia with support from FAO, WFP, WHO in Greater Monrovia in between November 2006 and July 2007, when the report was officially launched. Data collection, which covered 1,255 households, took place in December 2006, prior to the Christmas

holidays. During the survey, the nutritional status of 712 children and their caretakers was determined.

The survey confirmed that households in Greater Monrovia are heavily reliant on imported food for their consumption, especially for rice the main staple in Liberia. Even for cassava and vegetables, in terms of food sources, own production only played a very minor role. This high market dependency makes the urban population particularly vulnerable to price shocks.

In comparison with rural Liberia, households in Greater Monrovia had higher frequencies of food consumption and more diversified diets. Only 3 percent of households had 'poor' and 10 percent 'borderline' food consumption, compared to 14 percent and 36 percent in the rural sample, respectively. The majority of household had either 'fairly good' (20 percent) or 'good' (66 percent) food consumption levels, while only 15 percent in rural Liberia fell into this latter category. Underlying factors for food insecurity in the urban context included illiteracy, unemployment, irregular income sources, low asset ownership, access to credit and lack of access to social networks (social capital). Generally, households headed by women, elderly or disabled were more vulnerable to food insecurity.

Stunting or chronic malnutrition for children under-5 was estimated 27.4 percent, 'poor' according to WHO classification; however this level is lower than in rural Liberia (39.4 percent). Wasting or acute malnutrition was estimated at 7.8 percent - about the same range as found in rural Liberia - and underweight 21.3 percent compared to 26.8 percent in rural Liberia, both 'serious' according to the WHO benchmarks. Child malnutrition was associated with the mother's age (young mothers), educational and employment status, poor water and sanitation environment and prevalence of diseases, poor household food consumption levels as well as low purchasing power.

Based on situation that prevailed prior to the price increase, it can be expected that higher food prices will have a serious impact on household food security levels, which eventually could lead to an increase in child malnutrition rates. The next section will compare trends of key food security indicators in 8 poor communities before and during the high-price context. A recent ACF survey indicates that acute malnutrition rates have already started to increase; these findings will be verified during a joint survey planned for August 2008.

General socio-economic situation in sampled communities

Average household size is 6.6 with an increasing trend (5.8 in the previous survey) and 14 percent of households are headed by women, slightly less than in 2006. Some 76 percent of primary school aged children (6-11) and 72 percent of secondary school-aged children (12-17) attend school. These rates are slightly lower than in 2006, but this could be a seasonal bias as the 2006 data was collected in December and more children are expected to drop-out as the school year progresses. Similarly to the prior survey, main reasons for children not attending school are economic:

- Inability to pay for school fees and other related costs (70 percent)
- Household recently moved (12 percent)
- Distance to school (8 percent)
- Child not interested (8 percent)
- Unemployment (7 percent)
- Illness/disabilities (7 percent)
- Child is working/doing household chores (5 percent)

In the Greater Monrovia sample, the majority of households live in stand-alone dwellings, 24 percent live in a room or several rooms and 2 percent only live in

apartments. About half of the dwellings are primarily built using non-durable materials such as mud, thatch, wood, mats and/or tarpaulins. The majority of households own their dwelling (55 percent), 30 percent are renters, with an average monthly rent of LD 519, 9 percent are squatters and 7 percent are caretakers of a house they do not own. In terms of access to safe drinking water, the situation has slightly improved in the selected communities but only 58 percent of households have access to improved sources: public tap (25 percent), pump with borehole (18 percent), protected well (13 percent) and piped water (2 percent); while 42 percent access unsafe sources from street vendors (21 percent), unprotected wells (18 percent) or open water sources (2 percent).

In terms of external assistance, 29 percent of households reported that they have benefited from external assistance provided by the government, NGOs or UN agencies during the past 6 months. The main interventions were health, school feeding, cash-for-work and skill-training programs. None of the households reported having received support for horticulture or agricultural production.

Health care	14%
School-feeding	8%
Cash-for-work	8%
Skills-training	6%
Nutrition programs	4%
Food-for-work/training	2%
Cash transfers	2%
Micro-credit	1%
Agricultural support	0%

Urban agriculture

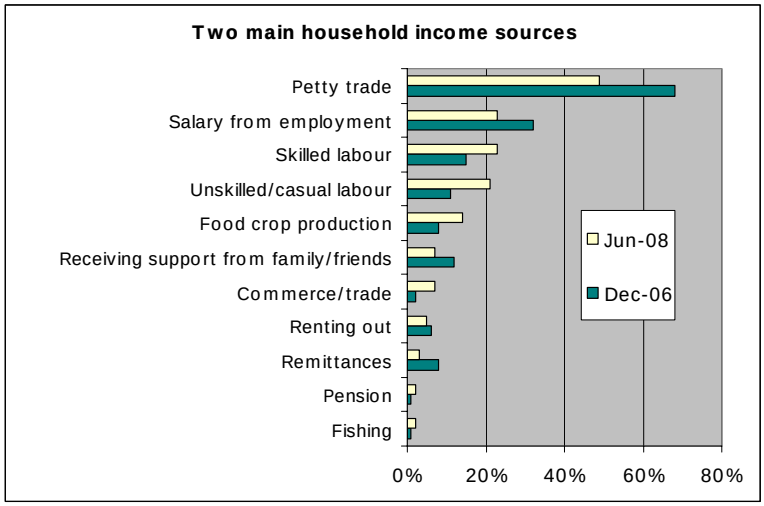
The assessment intended to get a quick overview on urban agriculture, which is presumed to play an increasingly important role in contributing to household food security at a time of increasing food prices.

In Greater Monrovia, every third household has a backyard garden, while every fourth household indicated that they have access to other land. In total, 30 percent of households reported they are producing food crops including vegetables in 2008. In 2005, only 11 percent of households produced crops, an indication for an increasing importance of per-urban agriculture – especially among the urban poor. This could be the impact of horticulture projects implemented by the Ministry of Agriculture, FAO, Concern and others in the past, but also an indication for the increasing need of households to respond to the pressure induced by high food prices. Vegetables are the most widely grown crop (24 percent of households), followed by cassava (23 percent), corn (14 percent), eddoes and other tubers (12 percent). Furthermore 25 percent of households have access to tree or other cash crops, led by mango (26 percent) and coconut (19 percent). Though seasonal, these contribute to the diversification of consumption as well as provide seasonal income sources – particularly for women.

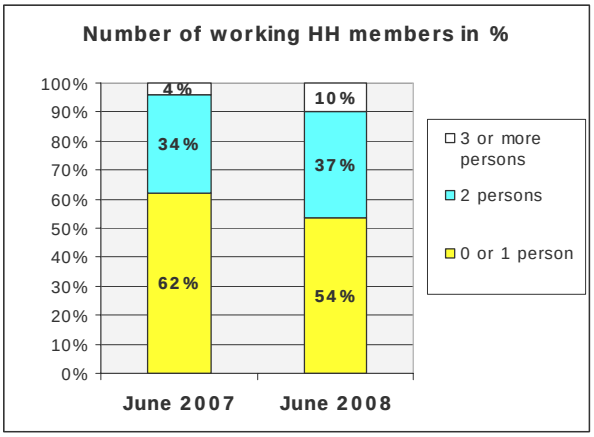
Rank	Vegetables	Other food crops	Tree/cash crops
1	Greens/leaves (20percent)	Cassava (23 percent)	Mango (26 percent)
2	Pepper (12 percent)	Corn (14 percent)	Coconut (19 percent)
3	*Bitterballs* (10 percent)	*Eddoes*/other tubers (12 percent)	Papaya/*pawpaw* (14 percent)
4	Eggplant (7 percent)	Rice (3percent)	Plantain/banana (18percent)
5	Okra (7 percent)	Beans (2percent)	Avocado/*butter pear* (12 percent)
6	Cabbage (2 percent)	Groundnuts (2percent)	Citrus (9 percent)
7	Onion (1 percent)		Breadfruit (8 percent)
8	Tomato (1 percent)		Pineapple (6 percent)

The only important livestock type in the Greater Monrovia sample was and remains poultry with 25 percent of households owning chicken, slightly more than before (23 percent). Households who own poultry on average have 2.7 animals. Only 2 percent own other livestock, mainly pigs and goats.

Change in income sources and level

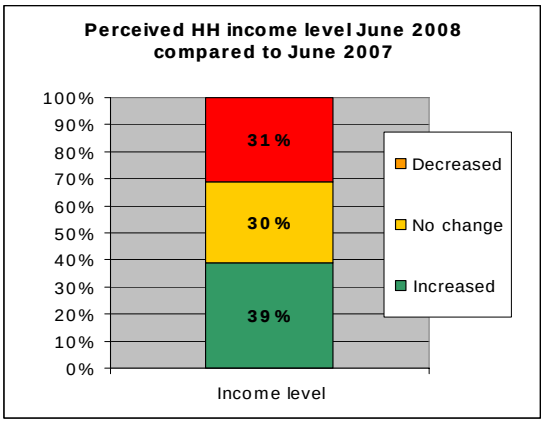


In 2006, households in the Greater Monrovia sample were highly dependent on irregular income sources such as small scale trade including petty trade and street vending. In 2008, petty trade is still the most important income, however to a lesser degree as only 49 percent of households engage in these activities compared to 68 percent in 2006, based on a multiple response analysis. This category includes activities such as selling of 'dry' goods, 'cold' water, prepared food, bread, clothes as well as small-scale money exchange. In general, more households engage in skilled labour (23 percent versus 15 percent), casual labour (21 percent versus 11 percent) and food crop production/gardening (14 percent versus 8 percent). Households relying on support from family and friends as well as remittances as one of their two main income sources are slightly fewer compared to 2006.

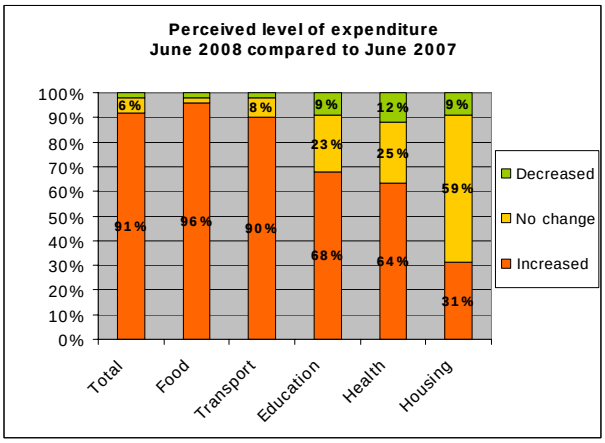


Currently, households in Greater Monrovia have 1.6 working household members compared to 1.4 in June 2007. In June 2008, slightly more than every second household has one working member or no workers at all, compared to 62 percent in June 2007. One year ago, only 4 percent of all households had 3 or more persons contributing to household income, while today it is 10 percent. This is an indication of a positive trend in employment opportunities in the post-conflict recovery period. In the urban context, access to employment is one of the most critical factors for food security (see section 6.1.5)

Similarly, nearly 40 percent of households report that their income level in nominal terms has increased in the past year, though this increase does not necessarily imply an increase in purchasing power in the context of overall price inflation in Liberia and the increasing commodity prices. Nearly one third of households perceived a decrease in their income level and 30 percent reported that there was no change at all.

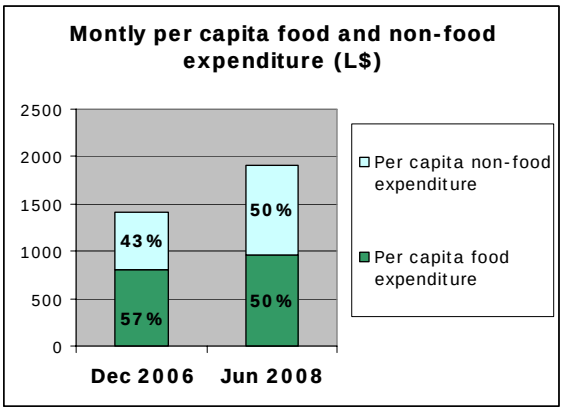


Change in food and non-food expenditures

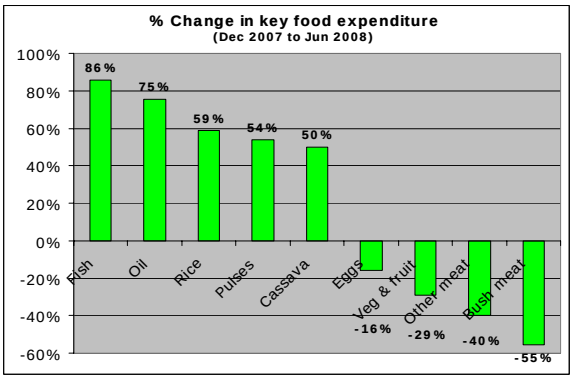


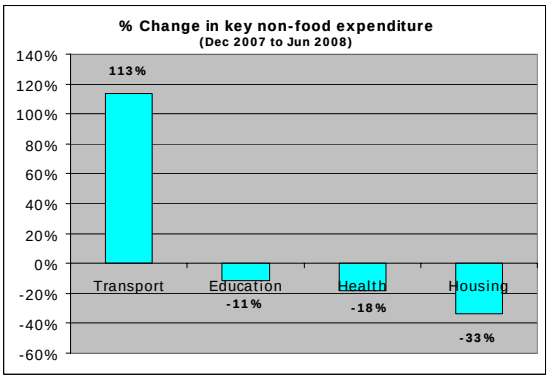
While 39 percent of households in Greater Monrovia perceive that their income level has increased, nearly all households report increasing expenditure (91 percent). For food expenditures, 96 percent of households report increases, followed by transport costs (90 percent). These high figures are a first indication that the high global food and fuel prices are strongly felt by urban Liberians. In comparison, for education, health and housing, the proportion of households perceiving an increase is relatively smaller than for food and fuel prices.

Household cash expenditures are a proxy for household's income levels, particularly in the urban context where consumption from own production only plays a minor role. The comparison of cash expenditure between December 2006 and June 2008 shows an increase of 38 percent in total cash expenditure. Both food and non-food expenditure increased. As the increase for non-food expenditure was higher than that for food; the share of food in total expenditure has decreased from 57 percent to 50 percent.



In the context of increasing prices and inflation (forecast at 13 percent per annum for 2008), increasing incomes do not necessarily imply increasing purchasing power and consumption of households. The two graphs below illustrate where changes have occurred within the food and non-food expenditures.





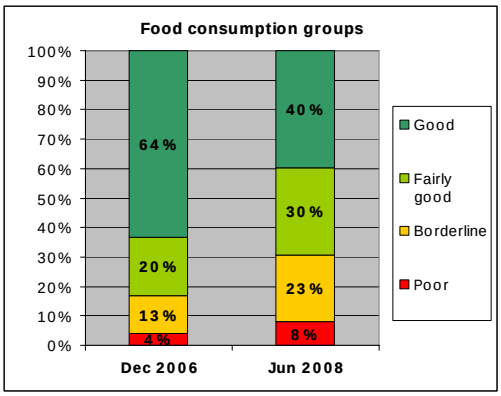
In terms of food expenditures, households in Greater Monrovia are spending more on basic food commodities including fish – mainly dried bonnie fish which is usually serves as a condiment in soups – (85 percent increase), oil (75 percent increase), rice (59 percent increase), pulses (54 percent increase) and cassava (50 percent increase). On the other hand, households spend less on eggs (16 percent decrease), vegetables and fruits (29 percent decrease), meat (40 percent decrease) and bush meat (55 percent decrease). For the major non-food categories, the largest change is observed for transport costs (113 percent increase), while expenditures for education, health and housing dropped.

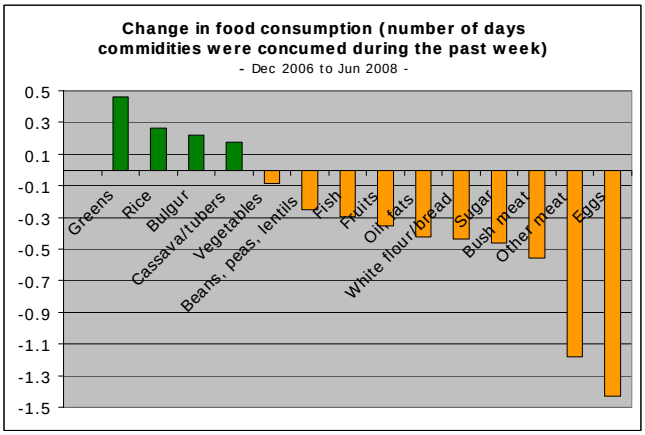
This indicates that due to increase of prices in basic food commodities as well as fuel costs, households are forced to reduce expenditures on higher quality food commodities as well other basic needs such as education, health and housing. The next section will illustrate how higher prices actually impact on household food consumption patterns.

Change in food consumption and dietary diversity

Food consumption and dietary diversity are good proxy indicators of the access dimension of food security and food intake. Research has demonstrated that dietary diversity is highly correlated with caloric and protein adequacy and household purchasing power in general. Though currently several methodologies co-exist in on the calculation of the food consumption score, for comparison purposes the same methodology that was used in the 2006 Monrovia CFSNS has been applied in this report.

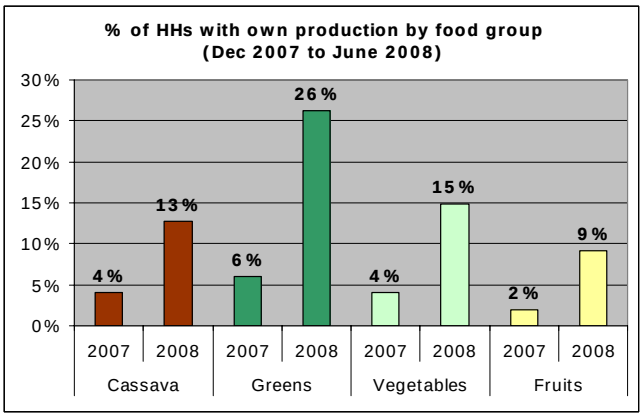
Based on the analysis, there has been an increase of households with poor food consumption levels from 4 percent to 8 percent in between December 2006 and June 2008. The diet in this group of households is characterized by poor diversification; it is mainly based on the consumption of cereals or tubers, while consumption of protein, vegetables and fruits as well as oil is very low. During the same period, the proportion of households with good food consumption dropped from 64 percent to 40 percent. These are households with good dietary diversity and frequency of all sources of macro and micro nutrients.





The chart on the left illustrates the actual average change in consumption by food item. While households in Greater Monrovia are consuming more greens, rice, bulgur wheat and cassava, the consumption of all protein sources as well as fruits, vegetables and oil has been reduced. These results strongly indicate that increasing commodity prices do have a negative impact on the consumption behavior of urban households. This trend may worsen if food prices further increase as suggested in section 2 of this report.

The main mode of access to food for the population in Greater Monrovia is cash purchase. The only items where own production plays a role are cassava, greens, vegetables and fruits. Proportion of households relying on own production of these items have increased as illustrated in the chart below, which could be a sign that some urban households are increasing their production to respond to increasing food prices.



Response and coping strategies

Households in Greater Monrovia were requested to name up to three shocks that had negative impacts. The table on the right illustrates answers. Based on a multiple response analysis, high food and fuel prices were reported by 79 percent and 36 percent of respondents respectively. The second most cited shock is the inability to buy enough food or cover other basic needs which was reported overall by 44 percent of households.

	Total
High food prices	79%
Not enough money to buy food or cover other basic needs	44%
High fuel/transportation prices	36%
Sickness/health expenditures	33%
Death household member/funerals	14%
House damaged	9%
Loss employment/reduced salary	8%
Debt to reimburse	8%
Insecurity/theft	8%
Other shock	6%
Irregular/unsafe drinking water	5%
Payment house rental	4%
Bad weather/heavy rains	4%

Before, households were asked if they or any of their household members applied any coping strategy during the past one month prior to the survey. The question was asked generally, not specifically in relation to the increasing food prices.

The most commonly applied strategy is reliance on less preferred food (75 percent), limiting the size of meal (68 percent), reducing the number of meals (66 percent), give preference to children to eat (42 percent), purchase food on credit (35 percent) and rely on help from friends or relatives (27 percent). It is recommended to interview the same households again in two to three month time to observe any changes in coping behavior in the context of further increasing food prices.

6.3 Impact on rural livelihoods

Pre-high-food-price situation in semi-urban and rural Liberia

According to the recent population census about 60 percent of the Liberian population lives in communities with less than 5,000 inhabitants. In addition to this, 10 percent live in 17 semi-urban centers across the country with population between 5,000 and just over 40,000. Though these are officially considered to be urban areas, they show a mix of urban and rural characteristics in terms of livelihoods, access to basic services and infrastructure.

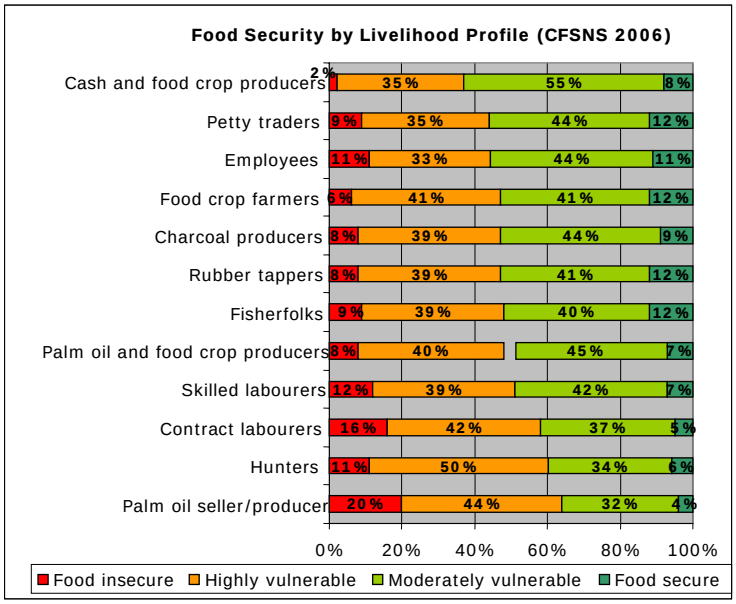
The Government of Liberia with support from the UN (FAO, UNICEF, WFP, WHO, etc.) and several NGOs conducted a countrywide Comprehensive Food Security and Nutrition Survey (CFSNS) in January to October 2006, when the report was officially launched. Data collection, which covered 5,409 households, took place in March to April 2006. During the survey, the nutritional status of 6,041 children and their caretakers was determined. At the time, Liberia was still heavily recovering from the 14 year long civil crisis and many households were in the process of resettling after years of displacement.

Compared to households in Greater Monrovia, rural households have a higher reliance on own production – especially for cassava and vegetables as well as fishing, hunting and gathering. This makes them slightly less exposed to price increases compared to urban households that rely on markets for nearly all their food purchases. Despite this fact, rural households still rely heavily on the consumption of imported rice, which makes up 44 percent of their total rice consumption, according to a recent World Bank study (CWIQ 2007).

According to the CFSNS, only 14 percent of households in reported own production as one of the two main sources of rice consumed in 2006, while the majority of the

population was depending on market purchases. Sixty-six percent of total cash expenditure was spent on food, 25 percent on rice alone. Since then, the agricultural sector is reviving as many households were able to restore their livelihoods through their own efforts with the support of emergency agricultural interventions (seed and tool distribution, extension services, post-harvest processing and related interventions), agricultural production and productivity is on an upwards trend. This was also confirmed by a recent post-harvest assessment conducted by MOA, FAO and WFP.

In comparison with Greater Monrovia, rural households had a much lower frequency of food consumption and less diversified diets. Nearly 14 percent of households were considered to have 'poor' and 36 percent 'borderline' food consumption compared to 3 and 10 percent in the urban sample, respectively. Only 15 percent of rural households had 'good' food consumption, while 65 percent in Greater Monrovia fell into this category. Underlying factors for food insecurity in the rural context were a mix of transitory and chronic factors: recent return after displacement, lack of access to agricultural inputs, high prevalence of animal pests, lack of access to agricultural markets, lack of access to alternative employment.



Based on the relative importance of income sources contribution to total income, households were classified into distinctive livelihood groups.
In 2006, the most vulnerable households were those primarily relying on palm oil production and casual labour ("contract work"). Better off were food crop producers, cash crop producers, petty traders and households with regular employment.

Stunting or chronic malnutrition for children under-5 was estimated at 39.2 percent, with 9 out of 15 counties having rates above 40 percent, 'critical' according to the WHO classification. Wasting or acute malnutrition was estimated at 6.9 percent about the same range as found in Greater Monrovia and underweight 26.8 percent, compared to 21.3 percent in urban Liberia.

Based on the pre-crisis baseline situation from the 2006 CFSNS, higher food prices could be assumed to have negative impacts on household food security levels in the rural context. The next section will assess trends of key food security indicators in 9 distinct livelihood groups using qualitative assessment tools: focus group discussions and participatory appraisal tools.

Changes in income and expenditure patterns, terms of trade and coping strategies by livelihood group

A total of 18 focus groups were conducted across Liberia with 9 distinct rural livelihood groups. Separate sessions where held for men and women in each livelihood group. Each group consisted of either 5 men or 5 women. To qualify for selection as a group member, participants had to be involved in the respective livelihood activity for at least one year. Interviewers also ensured that participants represented different backgrounds and characteristics (clans/families, ethnic groups, different methods/tools used within

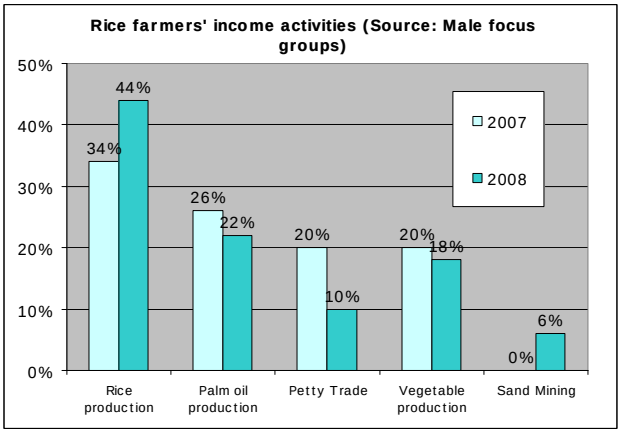
livelihood groups, etc.). In each group five persons participated. Participants were requested to name and rank the five main income sources and expenditure in their households. In order to determine relative share of income and expenditure, they were then requested to distribute 20 beans, representing 100 percent in total, among each of the listed category. This exercise was followed by set-up of open ended questions to gain a better understanding on the underlying causes of trends and changes as well as response and coping strategies.

The information gathered allows an insight into the livelihood group's terms of trade (ToT). The reader is cautioned that stable or improved terms of trade – the number of units of rice that can traded against a given unit of work or a unit of a cash crop- does not necessarily mean that the livelihood group is not vulnerable to food insecurity. A 'terms of trade' analysis takes neither assets nor coping into account. The reader is warned that figures provided in this section are indicative, and not based on a statistically representative household survey.

Livelihood Profiles in Rural Liberia by County (CFSNS 2006)

	Food crop farmers	Palm oil seller/producer	Petty traders	Hunters	Contract labourers	Rubber tappers	Charcoal producers	Fisher folks	Employees	Skilled labourers	Cash and food crop producers	Palm oil and food crop producers	Other activity
Bomi	5%	22%	6%	1%	5%	18%	23%	1%	3%	6%	2%	4%	2%
Bong	23%	7%	16%	1%	7%	9%	2%	2%	4%	2%	7%	18%	1%
Gr. Bassa	14%	21%	9%	4%	5%	3%	9%	4%	0%	4%	11%	15%	2%
Cape Mount	7%	14%	18%	10%	15%	0%	6%	13%	4%	2%	1%	2%	8%
Gr. Gedeh	26%	9%	13%	25%	7%	0%	1%	5%	4%	1%	2%	2%	4%
Grand Kru	21%	9%	8%	8%	3%	3%	1%	18%	5%	2%	5%	11%	7%
Lofa	6%	33%	9%	7%	16%	0%	1%	5%	3%	5%	5%	9%	0%
Margibi	13%	5%	9%	0%	12%	26%	21%	5%	2%	3%	2%	1%	1%
Maryland	26%	5%	7%	4%	4%	18%	1%	3%	5%	1%	9%	15%	2%
Montserrado	12%	5%	18%	1%	12%	7%	16%	1%	14%	3%	1%	3%	5%
Nimba	17%	11%	14%	1%	11%	6%	1%	4%	2%	3%	20%	8%	1%
River Cess	13%	29%	10%	21%	2%	1%	3%	6%	2%	3%	1%	5%	2%
Sinoe	39%	15%	9%	16%	1%	3%	3%	2%	3%	1%	1%	4%	2%
River Gee	23%	12%	12%	12%	8%	6%	0%	1%	3%	2%	3%	13%	5%
Gbarpolu	12%	15%	9%	17%	13%	1%	1%	4%	4%	2%	4%	8%	9%
Total	**15%**	**14%**	**12%**	**5%**	**10%**	**7%**	**7%**	**4%**	**5%**	**3%**	**6%**	**8%**	**3%**

Rice producers

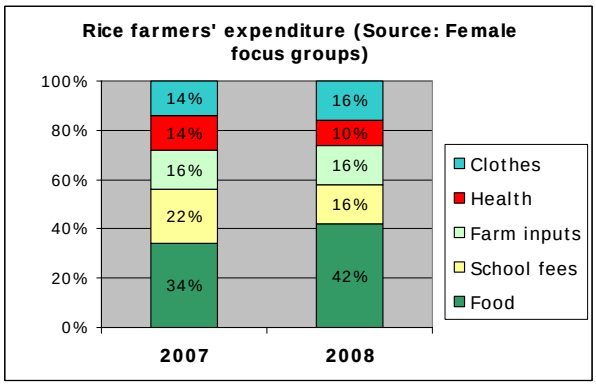


Rice farmers were interviewed in Mendingesua Town, Foya District in Lofa County on 26 June 2008. Lofa in general was heavily affected during the last years of the civil crisis due to the fact that nearly the whole population was displaced and only returned in 2005-2007. As a consequence agricultural activities only resumed in Lofa in 2006. Foya is traditionally one of the 'breadbaskets' of Liberia for rice. The predominant cultivation method is lowland (swamp) production, which is generally more productive compared to upland rice production. The latter causes environmental degradation as it contributes to deforestation.

In terms of division of labour, men are commonly responsible for the brushing, clearing and digging of the fields, while women plant and weed. Harvesting is usually done by all family members. As rice farming is labour intensive, most households depend on hiring temporary external labour for support.

Besides rice farming, households engage in palm oil production, petty trade, vegetable production and sand mining. According to the male group, income from rice production has increased, while revenues from palm oil production, petty trade and vegetable production have decreased in relative terms. An increase in income deriving from rice production could be a reflection of increasing rice prices on the local market. In addition to this, FAO, on behalf of the government, had recently procured rice seeds from these farmers which were redistributed to vulnerable households. This served as an additional income source that benefited male farmers. A new income source in 2008 is sand mining, in response to high demand by NGOs engaged in construction work. Women reported the same income activities, however according to them palm oil production is of higher importance compared to rice production.

In terms of expenditure, women reported food as their top expenditure, increasing from 34 percent in 2007 to 42 percent in 2008. Other reported expenditure include school fees, farm inputs, health related expenditure and clothes. Instead of farm inputs and clothes, men reported construction and family matters (referring to donations and cultural ceremonies) as the third and fifth most important expenditure – relative changes were minor, according to them, between 2007 and 2008.



The women's group said that there has been a significant reduction in expenses for school fees in 2008 as compared to 2007. They said their own and their children's health improved this year compared to last year. They expressed fear that the higher price of seed rice paid by NGOs is likely to increase the already high price of country rice on the local market, an indication they are still net-buyers.

Rice producers	Rice (LD per 'cup')	Agri. wage labour (LD/day)	**ToT** (cups rice/day's labor)
June 2007	12.5	100.0	8.0
June 2008	20.0	175.0	8.8

Both groups agreed that the increase in prices - particularly food prices - enabled them to generate more revenue from their agricultural produce. They also made reference of the higher price for seed rice offered by the NGOs and FAO in 2008. They emphasized, however, that the increase in the costs of transportation, production inputs (including labor which has increased from L$100 to L$150-L$200 per day) and other consumer goods off-sets the higher incomes earned from agricultural produce. This is confirmed by a terms of trade analysis comparing the costs of a rice per cup and the rate for daily wage labour, which remain at about the same level compared to 2007

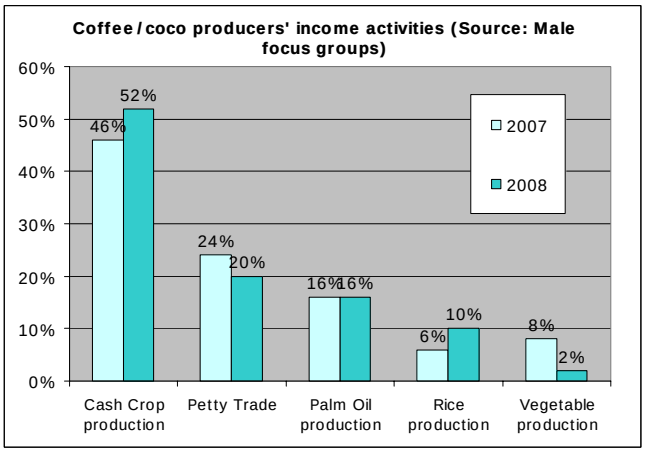
The price of country rice increased from LD 10-LD 15 per cup in 2007 to LD 20 per cup in 2008 and will likely go up in August and September. The failure of the 2007 swamp rice crop, coupled with the massive sale of seed rice is likely to have negative impact on consumption and expenditure on food. This is evident by the presence of butter rice on the market – butter rice was not on the market in 2007.

Generally, during the lean season, the following coping strategies are applied: reduction of number of rice meals from 2 to 1, reduction of rice consumed per meal, substitution of rice with less preferred food commodities such as cassava, bush yams and plantain. Households also diversify their income sources and engage in vegetable production, palm oil production and creek or river fishing.

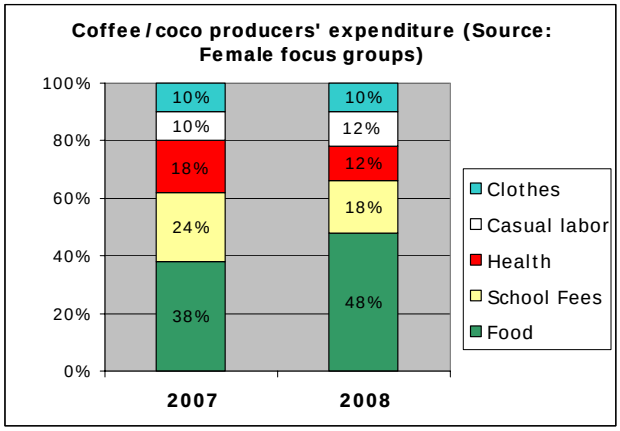
Coffee/cocoa producers

Coffee and cocoa producers were interviewed on 30 June in Massabolahun Town, Kolahun District in Lofa County. Coffee and cash crop have been the traditional export commodities in Liberia, during the civil crisis, production came to a halt and the sector is still recovering. Some participants engaged in both coffee and cocoa production, others only in cocoa production. The sector is dominated by men, but some women producers were also found in the community. They reported that they have lost their spouses and are now managing the cocoa and coffee farms.

Both male and female groups reported the following income sources in addition to coffee and cocoa production: palm oil production, petty trade, rice and vegetable production. For the male participants, there have been relative increases in income from coffee and cocoa production as well as rice production, while revenues from petty trade and vegetable production have declined. The relative income from palm oil remained the same.



Women reported having increased expenditure on food compared to 2007, while expenditure on health and education were decreasing. With regard to labour, expenditure slightly increased, while expenditure on clothes remained the same. Instead of clothes, men were referring to expenditure on construction but similar to the rice producers they indicated little change between the situation in 2007 and 2008.



Rising prices have triggered an increase in the prices of locally produced agricultural commodities as well production inputs, particularly casual labor used for brushing cocoa and coffee farms. Similarly to the rice producers, coffee and cocoa growers complained that the increase in their revenues is not sufficient to offset the higher cost of food, transport fares and basic commodities. For example, in 2008, the cost of casual labor per day is nearly three-times as high compared to 2007. The price of country rice ranged between LD 5 to LD10 per cup in 2007 but is now LD15 to LD20 per cup. It was not possible to determine changes in terms of trade as participants were not aware how much they will earn from their cash crops this year as the harvest will only take place in September to November, though there is a general expectation that price will rise. Last year, the

coffee was sold at LD 85 for 1kg of coffee and LD 75 for 1kg of cocoa. A recent USDA bulletin[18] confirms that FOB prices for coffee have been rising since 2005.

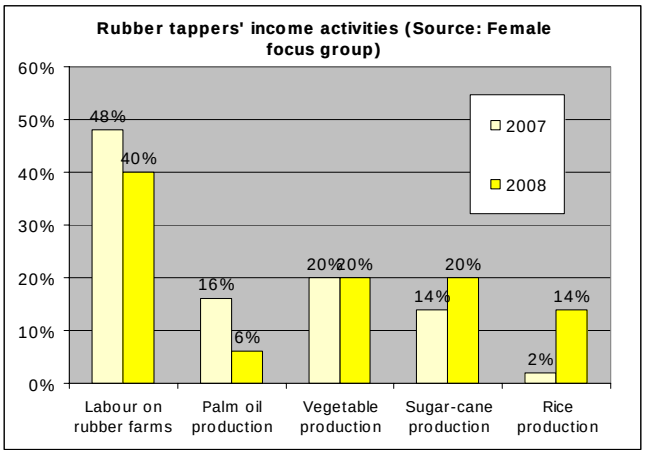
According to the STCP, the average cocoa grower produces 160 kg of cocoa per season. Last year, at the prices quoted by the focus group, this was equivalent to 1200 cups of rice. To benefit from the same terms of trade for rice in 2008, the price for cocoa will have to double to LD150/kg assuming that cocoa production remains constant (the supply of which is inelastic in the short term).

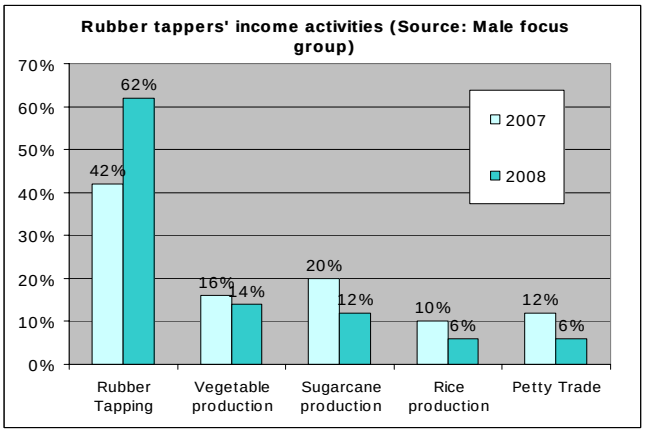
As a consequence, the two groups reported that they are forced to change their consumption and expenditure patterns. They now consume less and spend less on non-food commodities. The women group's group noted that 'the value of the LD has reduced because what LD5 could buy before now cost LD10 or more'.

Main coping strategies are a reduction in rice meals and substitution to less preferred food items, in particular bush yam, eddoes (taro), plantains and banana. Some reported borrowing cash from cocoa and coffee buyers which forces them to sell to the creditors after harvest while others engage in the production of short duration crops such as rice and cassava for sale and household consumption.

Rubber tappers

The focus group discussion took place on 26 June 2008. Rubber is the most important export crop followed by cocoa. To qualify for selection as group member, a participant had to be involved in the rubber sub-sector either as an employee or small-holder farm owner. Within this group, men work as tappers while women are usually responsible for under-brushing of the rubber farms.





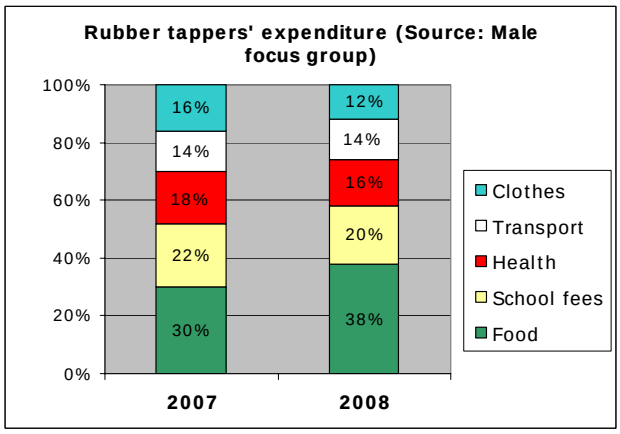
Beside rubber tapping and under-brushing, this livelihood group also engages in vegetable, rice, palm oil, and sugarcane production (which is usually processed and sold as 'cane juice'/gin). The male group also referred to petty trade. Interestingly, while men benefited from a relative increase in revenues deriving from rubber tapping, women on average reported a slight decrease in the income generated from working on the rubber farms in relative terms. Their revenues from the rubber farms highly depend on their bargaining power with the farm owners. They reported an increase from palm oil and rice production.

In terms of expenditure, the largest share is devoted to food with an increasing trend from 2007 to 2008. While the relative share on transport remained the same, expenditure for clothes and health dropped. The women's group followed a similar

[18] USDA – FAS Tropical Products: World Markets and Trade. http://www.fas.usda.gov/htp/tropical/2008/June%202008/June%20Tropical.pdf

pattern, however reported support to family members as a second most important expenditure following food.

Both women and men acknowledged the increase in income (contract wages and income from the sale of rubber and other agricultural produce). However, they complained that the rising cost of food, transportation and other consumer goods poses more problems for households in terms of meeting their basic household expenditure requirements. The women complained of spending more than double (LD75 to LD 200) per day to hire contractors to brush cassava and vegetable farms. The price of rice was said to have more than doubled from LD 10 to LD 12.5 per cup in 2007 to LD 25 to LD 30 per cup in 2008. Indeed, the terms of trade for agricultural wage labourers have slightly improved compared to rice producers, while they have declined for persons engaged in the rubber sector.

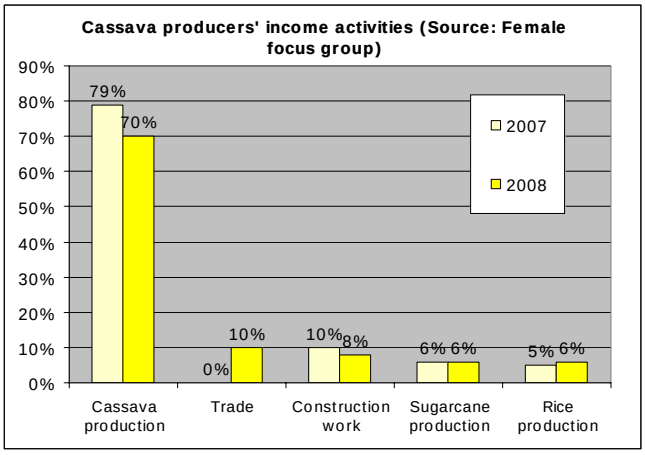


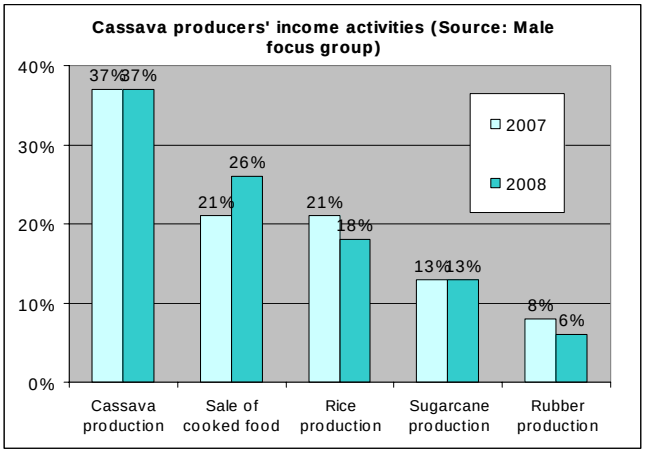
Rubber tappers	Rice (L$ per cup)	Agri. wage labour (L$/day)	Rubber (US$/MT)	**ToT** (cups rice/days labor)	**ToT** (cups rice per mt rubber)
2007	12.5	75.0	860.0	6.0	4128
2008	27.5	200.0	1090.0	7.3	2543

This degradation of rubber tapper's terms of trade has resulted to group members buying less rice and changing their food consumption pattern. Similar coping strategies are applied as outlined for the previous livelihood groups. In addition it was reported that more people are now engaging vegetable, cassava, sugarcane and charcoal production as a means of earning additional income to purchase rice and other consumer goods.

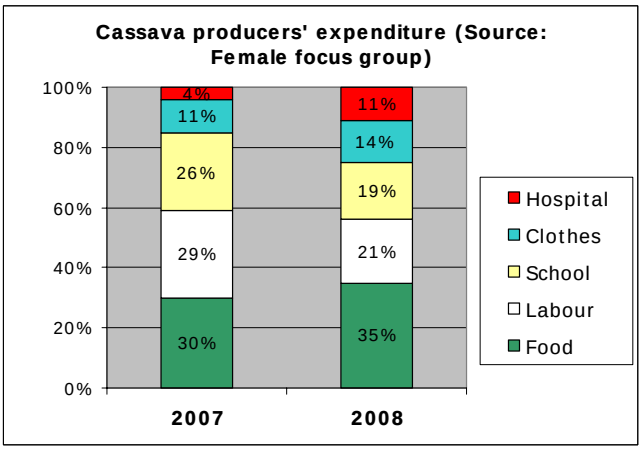
Cassava producers

The focus group with male and female cassava producers took place in Weteken, Trehn District in Grand Kru County on 29 June. Grand Kru is characterized by high chronic food insecurity due to its geographic isolation. It is one of the counties targeted by the MOA/FAO seed rice distribution. The whole county is usually inaccessible during and after the rainy season, which can last for 6 months. The community has a weekly market on Saturday, where traders from Harper, Pleebo (both Maryland) and Bowein (Grand Kru) come to buy goods if road conditions permit. Due to high transport costs, very few residents are able to bring their goods to larger markets within Grand Kru or to Maryland. In Maryland, particularly in the urban centers, the demand for cassava and farina (cassava flour) is increasing due to increasing prices of rice. The most preferred cassava variety is produced in the upland areas of Grand Kru. The visited community receives agricultural support from Danish Refugee Council for rice, cassava and vegetable production.





Both male and female groups reported cassava as their main income source. For women, cassava production dominates over any other activity. They are both engaged in the production of fresh tubers as well as in the manual processing of cassava into *fufu* or *farina* (cassava flour). With road improvement in 2008, petty trade gained in relative importance for women. It should be emphasized that this is seasonal income source as road conditions were already deteriorating when the mission team visited the community.



In terms of expenditure, the largest share is spent on food with an increasing trend for food expenses for women, while relative expenditure on labor and education and clothes had to be reduced. For men, the highest increase was for labor, which could be explained by higher costs to pay wage labor and in increase in agricultural production as several people stated the fact that their farm sizes increased from 2007 to 2008. Transport was not cited a one of the five major expenditure items as few residents can afford the high costs. It became clear though that costs for reaching Pleebo, the next major market have increased from LD150 to LD250, an increase of 67 percent in between 2007 and 2008.

When observing the terms of trade, prices in rice have increased relatively less than other items, meaning that cassava and sugarcane producers have actually benefited from increasing prices of these two goods. This also indicates that there is a market for cassava in south-east Liberia; however, as road conditions are very bad, particularly during the rainy season, agricultural producers in Grand Kru will not be able to fully benefit from this trend.

Cassava producers	Cassva (LD per piece)	Rice (LD per 'kilo'[19])	Cane juice (L$ per gallon)	**ToT** (pieces cassava/'kilo' rice')	ToT ('kilo' rice per gallon cane juice)
2007	1.25	50.0	100	40	2
2008	3.33	65.0	250	19	3.84

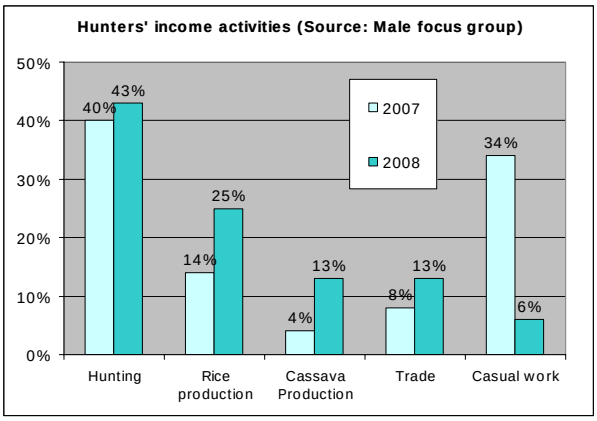
While focus group participants were aware of increasing prices, they seem to be less affected than other livelihood groups, partly because they are less integrated into the regional market system due to their isolation. Their main coping strategy to respond to increasing rice prices is to increase the price for the goods that they are marketing.

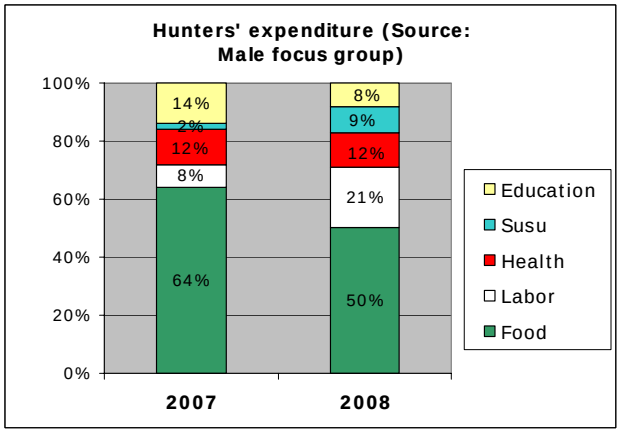
Hunters

[19] The local 'kilo' has no relation to the kilogram. The expression kilo in Liberia is thought to have been 'imported' by returnees from Guinea, where the metric system is used.

The focus group discussions took place on 26 June in Jaibo Town, Tchien District in Grand Gedeh County. All selected participants engage in the bush meat sector either through hunting using a single barrel gun, setting traps, or processing or selling of bush meat (mainly women). Various ethnic groups are present in the community: Krahn, Lorma, Grebo, Bassa, etc.). It appears that unlike other hunting communities in the area, food crop farming is a major additional income source which can be attributed to the fact that many inhabitants migrated from neighboring Nimba County, where food crop production is a major income source. Migrants were attracted by the fertile agricultural land and hunting grounds. While hunting restrictions were reported in a community closer to Zwedru, hunting households in this community did not report any type of restrictions. The group considers the dry season (January-March) as the best period for hunting as animals are forced to gather at water points (creeks and streams). They refrain from hunting in the period November to December as this is the breeding time for most animals. Most hunters sell their produce to traders who travel from other counties or Monrovia, many of them have regular customers.

Hunting is the major income source for these households and contributed roughly equally in 2007 and 2008 to household income. The second most important income source is rice, followed by cassava production and trade. All these sources have increased with regard to their relative contribution to total income. The main reason for this is that last year, more households engaged in side-brushing of the road – a cash-for-work project implemented by UNDP - which was the second most important income in 2007.





Interestingly, this was the only livelihood group – for both women and men – where relative share of food expenditure had *decreased* from 2007 to 2008. The main reason reported for this change was increased self-reliance on agricultural production, while last year most households engaged in cash-for-work programs in the infrastructure sector. While expenditure on food declined in relative terms, expenditure on labor (due to increased farming activities) and saving clubs ('susu') have increased. This is only group that selected saving as one of the 5 major expenditure items.

Though not reported as one of the major expenditure, transport costs to reach Zwedru, the county capital have increased by 60 percent in between June 2007 and June 2008, while the costs for one gallon of fuel has increased by 52 percent.

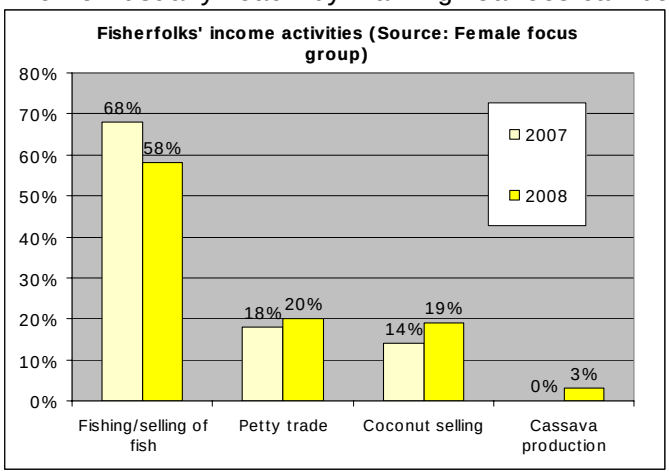
Despite increasing food prices, terms of trade of hunters have slightly improved, while the ToT for casual laborers (both road-side brushing as well as agricultural labour) have declined.

Hunters	Rice (LD per cup)	Deer per carcass	Cash-for-work (LD per day)	Brushing of farm (1 ha)	**ToT** ('cups' rice per deer carcass)	**ToT** ('cups' rice/cash for work wage)	**ToT** ('cups' rice/brushing 1ha)
2007	20	400	180	1300	20	9	65
2008	25	600	180	1500	24	7.20	60

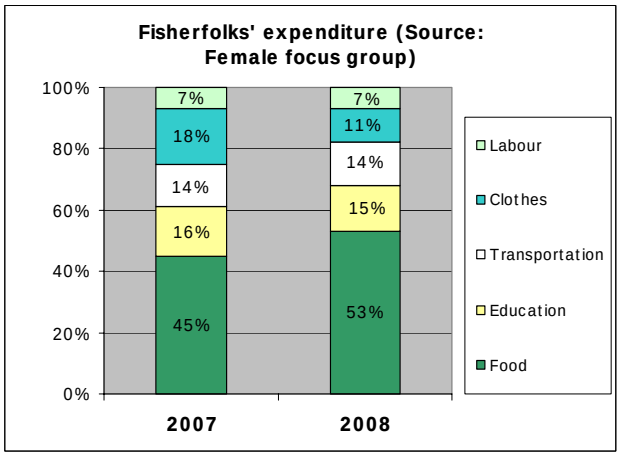
In summary, these groups of hunters were managing fairly well compared to other groups with increasing prices, due to improving terms of trade for their main product over the past year. As members of the livelihood group are aware of increasing prices in general, they reported the following coping strategies to mitigate the impact of increasing rice prices: buy rice in retail per cup instead of wholesale, consume more cassava, increase food production and walk instead of using passing vehicles to avoid high transport costs.

Fisher folk

The discussion was held on 28 June 2008 in Fishtown, Harper District, Maryland County. The male group consisted of both net and line fishermen. Women usually buy the fish from the men (often their own husbands) and dry it for selling. The main market for the fish is Harper, the county capital) which women usually reach by walking. Canoes can be hired to transport coconuts to Harper.



According to the female group, the main income activity is fishing/processing of fish followed by petty trade and coconut selling. Cassava production plays a minor role in the surrounding area, characterized by grassland savannah is not suitable for agricultural production. Some households have land in areas located in the interior away from the coast - recently land disputes which ended violently were reported in a neighboring community.
The main reason for lower revenues from fishing was that demand for fish had decreased in Harper. This was referred to as the 'no money syndrome'.
According to the women, relative expenditure on food increased from 2007 to 2008. The relative share of transportation in overall expenses was unchanged, as many refrain from using transport by motorcycle and walk instead. The cost to hire a canoe for example has increased by 50 percent since June 2007.



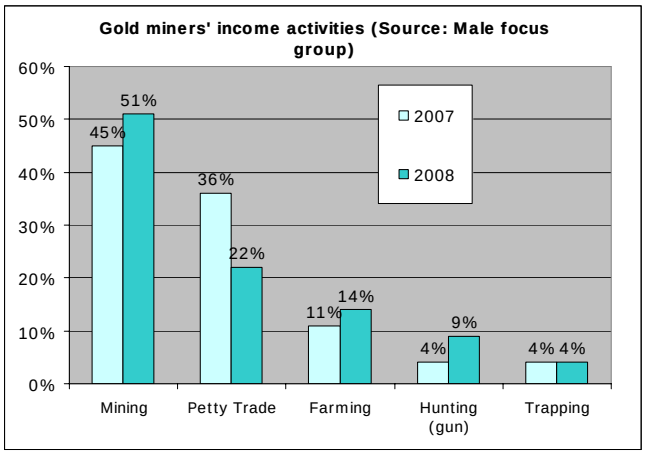
The terms of trade analysis shows, however, that prices of rice have increased less compared to other commodities; hence this livelihood group is less vulnerable to increasing prices compared to other groups.

Fisher folks	Rice (L$ per 'kilo')	Dry fish: bonnie (L$ per piece)	Fresh fish: bonny (L$ per piece)	Wage labour per day	Coconut (L$ per piece)
2007	50	4	6.67	150	4
2008	60	10	16.67	250	5

Terms of trade	**ToT** (nmber dry fish for a 'kilo' of rice)	**ToT** (number fresh fish per 'kilo' rice)	**ToT** ('kilo's rice per days's labor)	**ToT** (coconuts per kilo rice)
2007	12	9	3	12
2008	6	4	4	12

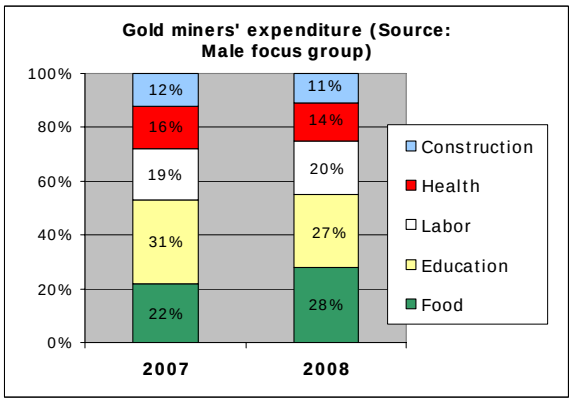
Gold miners

Focus group discussion took place on 26 June 2008 in Bartigen, Gbarzon district in Grand Gedeh County. The gold mining community hosts both Liberian nationals as well as people from other West African countries. There are two ore sources: silt that is removed from a river bed or dirt that is extracted from makeshift shafts. The latter activity cannot be done during the rainy season as the small tunnels easily collapse. The dirt is manually panned to obtain the gold. The sector creates direct and indirect income opportunities. The industry attracts young people from other parts of Grand Gedeh. 'Gold boys' work for miners, while young women either engage in threshing rocks, preparing meals, or other related businesses. Women outnumber men in the camp. Since this is a spontaneous, informal settlement, housing and hygiene standards are very poor and little investment has been made to change the situation.



Mining is the main income source for both men and women followed by petty trade, farming, hunting and trapping. The three latter are not conducted in the gold community but in the areas of origin – meaning that most locals commute back and forward in between their villages and the gold mining site.

While income from petty trade has decreased due to higher commodity prices and transport costs due to bad road conditions, relative income from the preparation of meals has increased for women. Transport costs to Monrovia (one person/one-way), for example, has increased by nearly 90 percent from LD 900 to LD 1,700.



In terms of expenditure, the relative share spent on food has increased according to the male miners. Despite this livelihood group is not seriously affected by price changes as they benefit as the price for gold has doubled since June 2007.

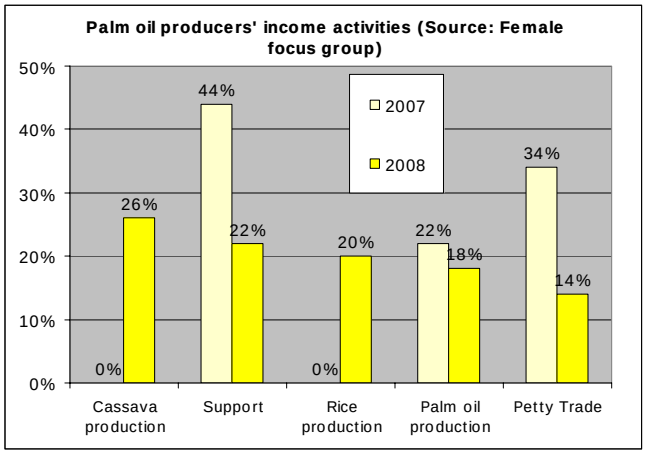
Gold miners	Rice (L$ per bag)	Rice (L$ per 'kilo')	Gold (L$ per gram)	**ToT** ('kilos' rice per gram of gold)
2007	2500	15	700	45
2008	3200	25	1400	93

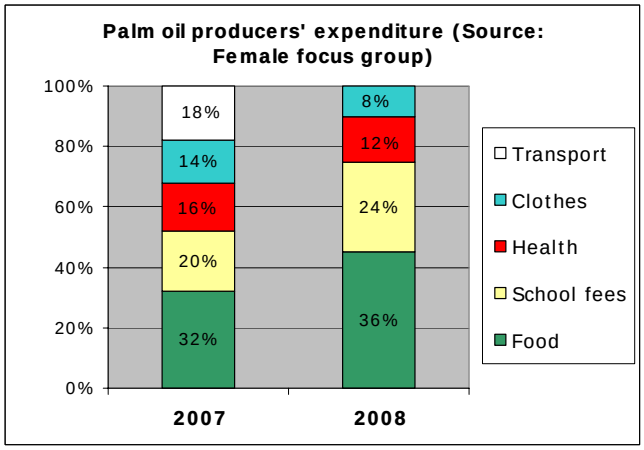
Though not under serious stress, female participants involved in food preparation reported the two strategies to mitigate increasing fuel and commodity prices: use of firewood instead of charcoal to prepare meals and reduction of meal size. Compared to last year, the cost for the most basic meal has increased from L$35 to L$50.

Palm oil producers

The focus groups discussions with palm oil producers were conduced on 17 July 2008 in Zordee Town, Bomi County. To qualify for selection as group member, a participant had to be involved in palm oil production and/or palm oil sale. The palm oil sector in Liberia is based on the tapping of wild oil palm stands as opposed to commercial plantations. In the aftermath of the civil crisis, it was a key coping strategy for households with little access to other income activities, therefore household relying on palm oil production were generally more vulnerable than other rural livelihood groups. Since then, with increasing palm oil prices, the sector is becoming increasingly profitable.

For women, the main income source in 2008 is cassava production, followed by support from family and friends, and rice production. Income from palm oil production is only on rank three followed by petty trade. Last year, according to the women focus group, households were not engaged in agricultural production and mainly relied on remittances, petty trade and palm oil production. Petty trade is no longer profitable because of high commodity prices and transport costs.





In line with this, expenditure in food have increased, less is spent on transport as women engage less in petty trade this year.

The two groups acknowledged the increase in income through the sale of agricultural produce. However, they complained that the rising cost of food, transportation and other consumer goods is posing more problems for households in terms of meeting their basic needs.

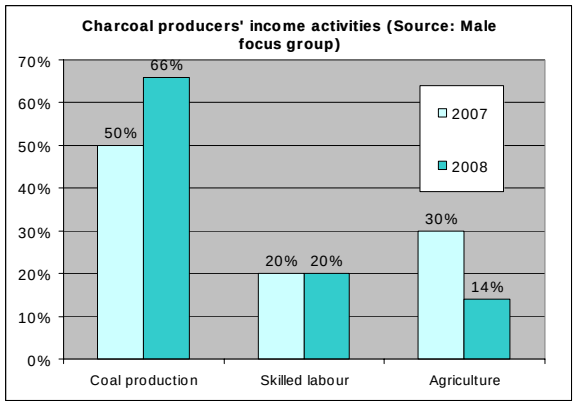
The Terms of Trade analysis shows that terms of trade have only slightly improved for palm oil producers. In order to mitigate increasing prices, households substitute with cassava and rice is only consumed once per day.

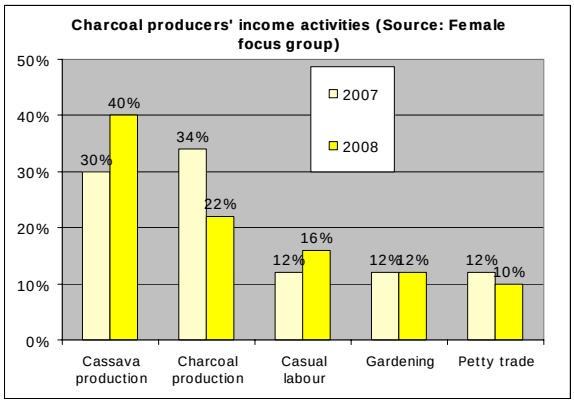
Palm oil producers	Rice (L$ per cup)	Palm oil (L$ per gallon)	**ToT** (cups rice per gallon oil)
2007	17.5	250	14.29
2008	22.5	350	15.56

Charcoal producers

The discussion took place on 20 June 2008 at Weajoh, Bomi County. Prior to the war, charcoal production was seen as a coping strategy for people who needed some extra income. During and in the aftermath of the civil crisis it gained in importance due to high unemployment rates. There is also an increased demand for charcoal in Greater Monrovia, where 96 percent of the population uses charcoal as their main cooking fuel source. Charcoal production therefore is concentrated in the areas close to the capital: Montserrado, Margibi and Bomi. An average charcoal burner can produce some 400 bags per year.

Charcoal is the biggest contributor to income for men, followed by food production and skilled labor. For men, charcoal production gained in importance, while income from food production decreased.

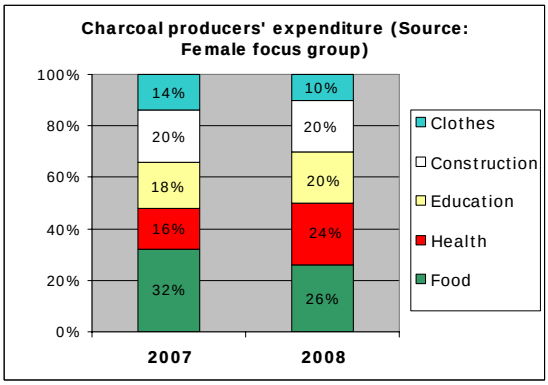


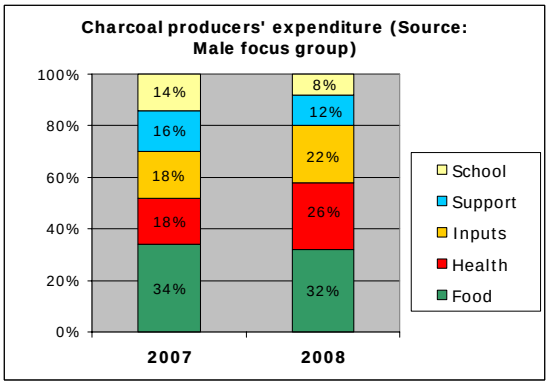


For the women, on the other hand, the share of cassava production is increasing, while revenues from charcoal production have been reduced in relative terms. Other reported income sources for them include casual labor, vegetable gardening and petty trade.

Income generated by charcoal production in absolute terms is increasing. Charcoal, was sold for LD 60 per bag in June 2007 and is now sold at LD 130, a 117 percent increase in nominal terms.

For both women and men, the highest food expenditure are on food, however, relative shares are decreasing between 2007 and 2008, while they increased for expenses on health and medical care. The share of expenses on inputs for charcoal production ('stick' wood) has increased according to the men.





Labor is getting more expensive as it doubled from LD 50 to LD100 per day, fire wood has become more scarce due to the depletion of forest reserves. Transport from the community to Duala Market in Monrovia has doubled, increasing from LD 200 to LD 400 within one year. Also agricultural inputs have become more expensive: Seed rice is now LD550 per tin compared to LD400 last year and a cutlass now costs LD 200, compared to LD 175 in 2007. In addition, credit is becoming more expensive and taxes are becoming

an increased burden (new tax of LD 5 per bag). During the same time, the price of rice has increased from LD 1750 to LD 2200 per bag and from LD 15 to LD 25 per cup.

Overall, this group of charcoal producers is less vulnerable to price hikes as they are substituting to cassava to avoid expensive rice. The Terms of Trade analysis indicates that despite rice price increases they are able to buy more rice for one bag of charcoal compared to last year.

Charcoal producers	Rice (L$ per cup)	Charcoal (L$ per bag)	Wage labour (L$ per day)	**ToT** (cups rice per bag charcoal)	**ToT** (cups rice per days labor)
2007	15	60	50	4	3.33
2008	25	130	100	5.2	4

Both women and men are aware of increasing prices and reported the following strategies to respond to or mitigate the impact: buying by cup instead of by bag, sharing less food with relatives and/or friends in need, consuming more cassava (which before the price increases was produced merely for selling), sharing transport with others to save costs, and starting rice farming.

This analysis allows the following summary table to be drawn

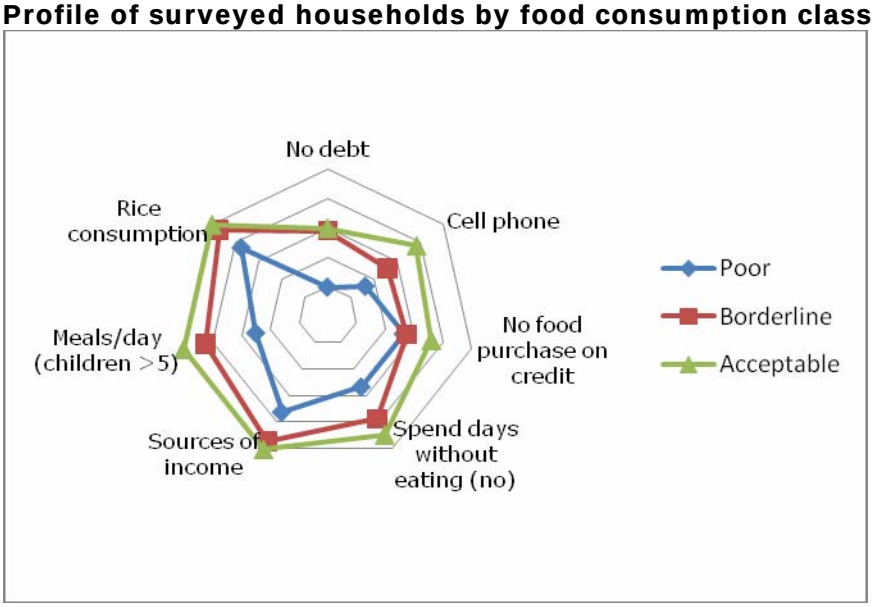
Livelihood group	**County**	**Terms of trade (2008 vs. 2007)**
Rice, cocoa/coffee producers	Lofa	Stable
Rubber tappers	Bong	Decline
Cassava producers	Grand Kru	Increase
Fisherfolk	Maryland	Stable
Hunters	Grand Gedeh	Increase
Gold miners	Grand Gedeh	Increase
Palm oil	Bomi	Stable
Charcoal producers	Bomi	Increase

6.3 Profile and caseload of people in need of assistance

Based on the statistically significant ($p <= 0.05$) household characteristics, the following profile of people in need can be drawn. The limited sample size ($n=266$) has not allowed the analysis to generate a longer list of significant household characteristics.

Households of Greater Monrovia in the 'poor' food consumption group are less likely than others to own a bed frame, a radio or a cell phone. These households are more likely to have unpaid loans or debts. They are more likely to borrow food or to purchase food on credit. Households of the 'poor' food consumption group are more likely than others to have reduced the number of daily meals and to spend days without eating in the week before the survey. Adults and children consume fewer meals than adults and children of other groups. Children under 5 in households with 'poor' food consumption only eat one meal per day, half that of the 'acceptable' group. Rice is consumed less frequently than in the other groups.

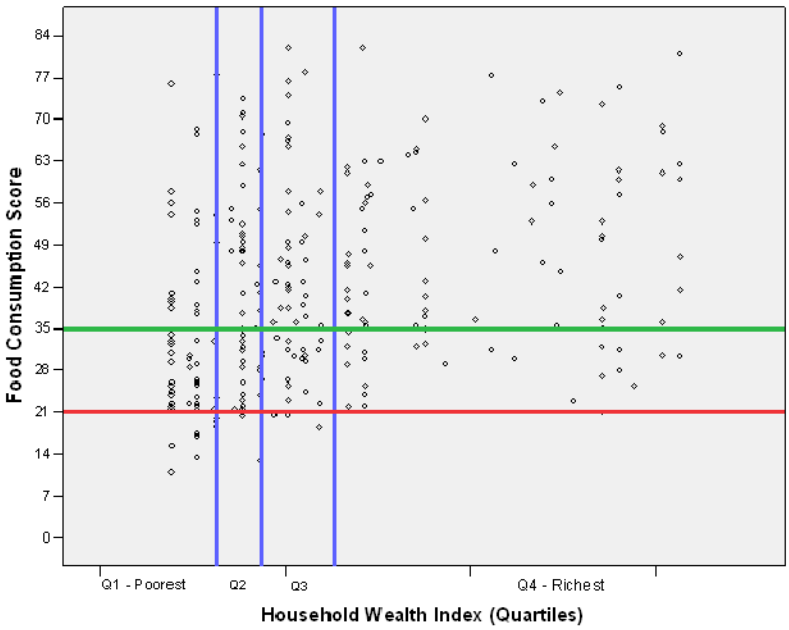
Profile of surveyed households by food consumption class



The profile shows that the households with 'poor' food consumption are more vulnerable than others as their more limited income sources place them at a disadvantage for food access. Food access is becoming difficult, with a higher reliance on loans and credit. These access strategies may be reaching their limits for this group, which translates into declining household food consumption. There is specific concern as food consumption in this group is very poor and could yet worsen should prices continue to increase, as now seems likely.

The distribution of the surveyed households in terms of food consumption and wealth is shown on the graph below. The graph shows that there is a positive relationship between food consumption and wealth. Targeting options will have to take into account the possibility of inclusion errors should wealth be selected as a criteria for assistance.

Distribution of households by food consumption class and wealth



Calculating a caseload on the basis of community characteristics – meaning extrapolating the incidence found in the sample to the population of neighborhoods similar to those surveyed- is not recommended for the following reasons:

1. Population data from the 2008 census is not yet available by zone and community for Greater Monrovia.
2. Available sub-district data is from the 1984 census, hence very much outdated.
3. Communities within Greater Monrovia are very heterogeneous, as that the poorest live next to rich people and vice versa. Any classification would be of limited validity.

The suggestion is therefore to assume that relative proportions between households with poor, borderline and adequate food consumption have not changed since the CFSNS conducted in December 2006. Using the new standard VAM methodology, 5.6 percent of households in the selected communities have poor food consumption. This proportion is adjusted by a factor (0.83) reflecting the difference between poor communities and the entire population of Greater Monrovia. Hence, it is estimated that 4.8 percent of households in Greater Monrovia have poor food consumption.

The potential caseload for food assistance is therefore estimated at **8,244 households** (given a total population of 1,010,970 in Greater Monrovia and an average household size of 5.9 according to the 2007 CFSNS). This would imply a potential caseload of about **48,640 individuals.**

This procedure is 'quick and dirty' but imposed by the circumstances of this rapid assessment. It is recommended that households be revisited in September/October to see if any adjustment to this caseload is required.

7. Response analysis

The price of rice is a very sensitive issue in Liberia. As such the government has formulated a document outlining its response plans for the high prices. The main strategic thrusts of the program include:

- Ensuring adequate supply. This item includes the suspension of import taxes, the delivery of import permits. The government is encouraging importers to pool resources to reduce the cost of importing rice. The government has approached friendly governments to secure rice supplies at favourable rates. The MOA has cautioned against export bans and against price controls.

- Increasing production. On June 19 the president of Liberia launched a 'back to the soil' initiative to encourage increased production of food and consumption of locally grown foods. The MoA has announced that USD 750,000 would be spent to acquire seed rice for distribution, and paddy rice for sale. The Ministry of Agriculture wishes to strengthen agricultural value chains by improving processing and reduce loss rates.

- Protection of vulnerable groups. The Government of Liberia is counting on the return to Greater Monrovia of school feeding, on food assistance to resettled refugees and urban cash for work programs.

These programs are expected to be made possible by support from Liberia's donors.

Response options focus on strengthening existing or planned interventions in particular in the short-term, as this will ensure coordination and efficiency through use of existing structures. Medium to longer term interventions will take into consideration developing new and innovative interventions under WFP's upcoming PRRO, in line with WFP's commitment in the context of the PRSP.

All response options discussed here are drawn from and based upon the findings in sections four to six. Inter-linkages are further underscored through direct references and statistics taken from the above mentioned sections.

7.1 Scenarios on foreseen impacts

Most likely: Rice supply will be ensured due to an agreement of the Government and the importers to ship in 80,000 mt of Chinese 'butter rice' to Liberia. This stock will last until the end of the year. Although supply will be ensured, there will be a substantial increase of rice prices. Rural populations will be somewhat more resilient to the price hike, as they are better equipped with coping mechanisms such as the ability to rely on own food production. Interventions in the short term should therefore mainly be concentrated in urban areas. The medium and long-term response should take place in both urban and rural areas.

Worst case: The Ministry of Industry and Commerce and the three main importers of rice fail to agree on a wholesale price of imported Chinese 'butter rice' that is high enough to guarantee a profit to importers and low enough to for the Government avoid rice riots. This would lead to shortages and a depletion of rice stocks between end August and mid September 2008. The food crisis becomes a political crisis. Unlikely – the Government will do everything to avert such a crisis.

7.2 Intervention objectives

WFP and partners' should support the Government High Food Prices mitigation strategy formulated in May 2008. Based on the strategy's objectives of i) ensuring adequate

supply, ii) increasing production and iii) protecting vulnerable groups as well as the assessment findings presented in the previous chapters, all partners of the impact assessment have agreed to formulate response options around the following short (up to the end of 2008) and medium to long term (PRS and beyond) activities:

- Immediate (July to December 2008)
  - Scale up therapeutic and supplementary nutrition programmes
  - (Re-)introduce and strengthen existing food/cash safety net programs
  - Improve the food pipeline situation

- Medium to long term (2009, PRS and beyond)
  - Increase local food production
  - Improve market performance and selected value chains
  - Create income opportunities
  - Increase access to education and health services
  - Encourage dietary diversification
  - Discourage illicit cross-border trading and smuggling to neighboring countries

All of the interventions, whether immediate or longer term, need to be taken up immediately and translated into action.

7.3 Operational environment

Operational factors relevant to the response are entered into a SWOT (strengths, weaknesses, opportunities and threats) framework, reproduced hereunder:

Strengths	**Weaknesses**
• Operational coordination mechanisms • Strong UN and NGO presence and capacity • Experience in urban programming • Good knowledge base on household food security in urban and rural areas • Improving partner capacity in implementing conditional cash transfer projects • UNMIL guarantees relatively good security in Greater Monrovia and in rural areas • Government policy on response to food crisis in place	• High level of corruption • Unavailability of a long time series of price data • WFP holds low food stocks. • No formal transfer mechanism • Weak rural market performance, no rural banking infrastructure • Limited urban banking capacity: not geared towards the small customers • Rural infrastructure improving but still in poor state
Opportunities	**Threats**
• Strong government backing for a response to high prices • Existence of operational plans to respond to food insecurity in urban Monrovia • Upcoming national price monitoring system will allow better programming • Forum for UN and Government coordination	• High inflation, making cash programs problematic. • Supply crunch, threatening market based responses. • Uncertain security environment • Rainy season makes logistics difficult • Procurement of food internationally is difficult • Lean season has already started; response will have to be rolled out quickly. • It will take time to scale up a response in Monrovia. • Rising fuel and therewith transportation costs • Increasing smuggling of rice to neighbouring countries

The experience in urban programming as well as the strong presence of the aid community in Liberia constitute the two strongest assets and will allow a quick, country-wide and coordinated response to needs caused by high food prices. Furthermore, strong government backing and a consensus among stakeholders are positive factors in the enabling environment. However, continued high levels of corruption[20], a weak (rural) market performance and seasonal access issues may limit the effects of initial responses to the crisis. Whatever the response, a supply crunch (commercial and aid food pipeline) and an exponentially increasing inflation will likely weaken any intervention substantially.

7.4 Overview of existing and planned interventions in the wake of the rising prices

A sample of existing and planned responses to high food prices-are listed below, showing intervention modalities in the short term and medium and long term. The programs/projects are only very briefly described, and are not exhaustive.

Short term response (July-Dec 2008)

Intervention modality	Lead partners	Coverage	Remarks
Employment (cash for work)	World Bank/LACE	Greater Monrovia	USD 3m.
	UNMIL/RRR	Rural, perhaps urban	Scale up of existing infrastructure project
Emergency food distribution and nutrition response	ACF	Greater Monrovia	26,000 children under 3 (planned)
	Caritas	Greater Monrovia and rural	Vulnerable group feeding, street children project
	UNICEF, WFP	Greater Monrovia	Supplementary and therapeutic nutrition activities
School feeding	WFP	Rural, urban	Includes reintroduction of school feeding in Greater Monrovia
	WB		
Support to agriculture and livelihoods	CRS	Urban and peri-urban	Cash or voucher for work, scale to be determined
	FAO/MOA	Rural and peri-urban	Seed distribution to vulnerable households, pest-management control, post-harvest processing equipment and training

Medium and long term response (2009-2011 PRS)

Intervention modality	Lead partners	Coverage	Remarks
Support for agriculture	CRS	Rural, semi-urban	Cash/food for work
	FAO	Rural and semi-urban	Rehabilitation of low-land swamps and fish ponds, seed multiplication, farm mechanization equipment and capacity-building, restocking of livestock
	GAA	Rural and county capitals	Cash for work
	Concern World Wide	Bong, Lofa, Grand Bassa	Food security and livelihood
	UNDP		Rehabilitation project
	WFP	Rural	P4P – local food purchases
Nutrition	ACF	Urban	Prevention
	UNICEF	Urban, rural	Therapeutic feeding
	WFP	Urban, rural	Supplementary feeding
Employment	ILO	Urban, rural	Cash for work
	World Bank	TBD	Follow up of cash for work?

[20] Liberia is rated 150th of 179 countries in Transparency international's 2007 Corruption Perception Index,[20] http://www.transparency.org/policy_research/surveys_indices/cpi/2007. Liberia scores a 2.1 on a scale of 0 (highly corrupt) to 10 (highly clean).

	UNMIL/RRR		USD 3m 33,000 workers
School feeding	World Bank/WFP	Rural	USD 4m 69,600 children
	WFP	Urban, rural	Rural under PRRO, urban under budget revision

7.5 Comments on feasibility of cash, voucher and/or food response options in the context of WFP Liberia

Learning gap on impacts of cash injections in rural areas, especially on markets

Many studies have shown that the success of cash transfer programs depends to a large extent on their implementation in an environment of functional markets. Market performance relates primarily to market integration (flow of goods between different market locations, ensuring a constant, adequate supply), number and quality of services, and the level of profit margins of traders in a particular market location.

The matrix under section 8.4 shows the remarkably broad effort in Liberia to use conditional cash transfers in rural, and increasingly in urban settings. The majority of interventions uses Cash-for-Work (CFW) and is concentrated in the south and south-east. The planned WB/LACE effort, in terms of cash volume one of the largest initiatives, will focus on the north and north central areas including Greater Monrovia. All in all, a picture of a non-interlinked patchwork of cash based initiatives emerges.

Despite the numerous cash programs that use similar or identical approaches, there seems to be little coordination among different interventions, let alone systematic common learning in understanding the effects and impacts of those transfers. None of the initiatives seem to have opted for pre-intervention market assessments – a study from a 'do-no-harm' perspective on the appropriateness and/or feasibility of the intervention that would consider whether the cash injected can be absorbed by the markets without causing irregular inflation or raising supply elasticity issues. Nor has there been consideration of specific market-related issues in post-intervention impact evaluations. This would have been especially pertinent as the LMR clearly casts its doubts on the performance of rural markets and spells out the importance of context-specific market analysis before planning and implementing cash injections, let alone large-scale cash transfers. Little is known of the effects of cash on markets.

Scrutinizing all the initiatives and mapping them out, including their total transfer value over the period of the project implementation, would constitute a good basis for an analysis with the aim to depict what impact these transfers have (or do not have) on rural and urban markets, whether positive or negative. Such an analysis would contribute to much-needed systematic learning and could feed directly into the planning of future non-food based transfers.

From WFP's perspective, it is difficult to justify getting involved in larger-scale cash transfer in rural areas, as very little is known of the effects of such a transfer modality. Food complements to existing cash transfer projects/programs will likely be more appropriate and might mitigate possible negative effects on markets of pure cash transfers. In addition, it would enrich the systematic learning of cash and food transfers in the Liberian context.

Market price monitoring

In implementing cash transfers and/or voucher systems, it will be required to constantly monitor price changes of a basic food basket and if necessary, adjust the transfer value in order to continuously ensure that the purchasing power of beneficiaries is sufficient. The size of the food basket needs to be designed according to the level of food insecurity and may come in a supplementary form. In addition, it is not expected that the entire

transfer will be spent on food items, as the fungible nature of cash ensures that some other needs will be covered as well.

WFP, FAO and MoA are jointly monitoring the regular food basket prices in all counties. It was agreed to set up a food security and nutrition monitoring system (FSNMS), run by a technical committee consisting of all stakeholders (GoL, UN, NGO) and chaired by the MoA. The system is expected to be piloted in mid 2008. This data will play an essential role for future quality programming for WFP in Liberia, also with respect to the P4P initiative.

Appropriateness of vouchers

Vouchers may be an adequate substitute for food transfer in urban areas, where physical availability of food is usually ensured. However, the transportation cost that is saved in not transferring food can be easily offset by the high costs of setting up a voucher system and the possibility of forgery. There are a variety of forms of vouchers, ranging from monetary denomination for specific goods to clear indication on amount and type of commodity that it can access. Seed-vouchers have been tried out in rural areas, but as far as the assessment team is concerned, food-voucher systems have not been tested in post-war Liberia. Some of the better-known advantages of vouchers are predetermined/fixed value and/or commodity, easy monitoring, lowered security risks and lowered vulnerability to inflation and devaluation.

The downsides of vouchers compared to cash weigh heavier in the context of an initial short-term response to high prices in the context of Liberia: high administration costs, proneness to forgery, creation of a parallel economy, time-consuming to set up and in case of a monetary denomination, the value of the voucher must be regularly adjusted, inflicting additional costs. All in all, vouchers do not seem to be an appropriate tool to address the crisis in the short term, but might well be looked into again at a later stage, when time will allow more thorough planning. In general, eyes and ears should be kept open for linkages of cash transfers with microfinance initiatives or existing *susu*-clubs[21].

Mix of food and cash

In various schools of thought on cash and food, it seems to be emerging that under many circumstances a combination of food and cash makes most sense. Although a common gauge of the ratio talks about 25 percent food and 75 percent cash, the ratio of the mix and the composition of the food basket should be defined according to the context and the intervention objective. If for instance WFP decides to engage in a mixed transfer on its own, it should consider that running two pipelines (one for the food component and the other for cash) also means increased costs.

The survey findings clearly bring to light that the loss of purchasing power is in the short term the most obvious and hardest felt effect of the higher prices (see chapter 6.2 pages 26 and 27). In a more silent manner, the effects of a less diversified diet, caused by an erosion in household purchasing power, are felt first among children, lactating and pregnant women as well as elderly people (see chapter 6.2 page 28). Malnutrition rates are expected to rise sharply over the coming months (if additional nutritional interventions are not implemented promptly). Cash transfers may be an efficient way of increasing the lost purchasing power. However, rising malnutrition rates obviously make a case for coordinated nutrition interventions. All in all, this makes a case for combining the two and is the basis for the formulation of short term interventions aiming at complementing and scaling up existing cash interventions with a food component as formulated under chapter 7.6 below.

[21]Revolving funds through group savings.

Delivery mechanism

One of the major constraints for delivery of a cash transfer in Liberia is the lack of a rural banking infrastructure. In urban areas, the financial institutions are not geared for the 'small' customer. Even though the existing banking infrastructure in urban and to some extent in rural areas may help to mitigate the (security) burden for agencies to transfer cash into the beneficiaries' pocketbooks, ultimately, the cash still needs to be physically handed out to each beneficiary. Agencies, such as RRR, who have the comparative advantage of being able to draw on the services of a security force (such as UNMIL or the Government), are in better position to disburse cash under the current security circumstances. This makes a strong case for WFP to engage with a food component, complementing the cash transfers done by agencies with the security advantage described above.

8. Recommendations

A preliminary results and response option validation workshop in which all partners of the assessment were actively involved was held at WFP on 10 July 2008. The group endorsed the assessment findings and the following general recommendations:

On ensuring adequate food supply

- Take immediate action to avert a depletion of stocks. MCI should facilitate the import of new rice consignments to Liberia, even at higher prices.
- Limit incentives for illicit cross-border marketing and smuggling by gradually raising the wholesale price ceilings in consultation with importers.
- Scale up and strengthen initiatives directed at increasing local agricultural production to decrease dependency on food imports by enhancing the agricultural value chain.
- Assess the feasibility of setting up a 'buffer stock' of food and engage the private sector in its management in order to ensure stock rotation.

On ensuring improved access to food

- Create short-term income generating opportunities for the unemployed and underemployed with a focus on urban youth.
- Continue/reintroduce school feeding to maintain school enrolment and attendance.
- Shift away from 'food for work' towards 'food/cash/mix for assets', adopting a community based perspective with the objective to create short-term employment opportunities and rehabilitate community assets directly linked to enhanced agricultural production in the longer-term. This should entail a participatory approach to select assets to ensure sustainability and community ownership.

On protecting vulnerable groups

- Scale up Mother and Child Health, nutrition and HIV/AIDS programs as those belong to the most vulnerable groups and will likely be hit hardest by the price shock with a focus on the prevention of acute malnutrition and micro-nutrient deficiencies.

On the implementation of cash/food transfers

- Take stock of existing cash transfer programs and draw best practices in view of the future implementation of this modality. Institutions engaged in the response should take into account possible negative impacts of pure cash transfers in poorly performing rural markets.
- The response to higher prices could include cash transfers in urban areas, where market performance is deemed acceptable. In the longer-term cash programmes may also be appropriate in the rural context.
- Complement existing rural and urban cash initiatives with a food component to avoid or mitigate the risk of households being impacted by high inflation.
- Conduct a solid study on the effects, advantages and disadvantages of cash, food and mixed transfer programme.
- Avoid setting up large scale voucher-based systems in the short-run due to the complexity and risks involved. In the medium to long-term, a voucher pilot may be introduced in urban areas.

On food security and nutrition monitoring

- Operationalize the planned Food Security and Nutrition Monitoring System with a strong price monitoring component, supporting decision-makers to fine-tune and update response and exit strategies.

To ensure the implementation of a successful joint response, the following assumptions have to be considered:

- *Agreement between the Government and importers:* the key underlying assumption for the above recommendations is that the supply of food is guaranteed through an agreement between MCI and importers.
- *WFP and CRS food pipelines are well stocked and functioning*: ration sizes already had to be cut in some cases as stocks are running low. Under the current circumstances, programs can only be sustained until early September. Although a shipment is expected, it will not manage to cover the increased need caused by higher food prices.
- *Capacity of agencies/organizations and the Government is strong enough* to absorb increased efforts to mitigate impacts of price hikes on the most vulnerable
- *Continued donor support* for the Government high food price response strategy and other related programmes such as the GoL/UN Joint Programme for Food Security and Nutrition signed in June 2008.

The table below summarizes the immediate actions that should be prioritized indicating potential stakeholders involved and indicative budget requirements.

Recommendation	**Responsible**	**Expected benefits**	**Cost**
Gradually raise the price ceiling for rice to levels closer to import parity. Avoid restrictions on cross border trade.	MCI	Better market supply, reduced incentive to smuggle	Higher price of rice to the consumer
Immediately approve the import of new rice consignments, even at higher prices	MCI	Better market supply, avoidance of shortages hoarding and price spikes	None
Support vulnerable groups, especially for 48,000 food insecure people in Greater Monrovia	MOHSW, MOE, ACF, UNICEF, WHO, WFP	Malnutrition rates remain within acceptable bounds, children stay in school	USD 6.7m nutrition USD 31 m school feeding
Scale up existing agriculture and livelihood support programmes (rural/peri-urban)	MOA, FAO, CRS, WFP, etc.	Enhanced productivity in the current agricultural season	To be confirmed
Implement pilot cash project in Monrovia	MCI, MOA, NGOs, FAO, ILO, UNDP, WFP.	Enhanced coping ability of targeted groups	Program cost to be defined
Carry out a mapping exercise for existing and planned cash transfer programs in Liberia	All 'cash' stakeholders	Better knowledge of the impact of cash transfers	Cost of study estimated at USD 50,000
Update response plans following the September Food Security and Nutrition Survey	All partners	Response is relevant to assessed needs	Cost of survey, estimated at USD 60,000