



Impacts of Rising Food - Fuel Prices and Refugee Influx in Liberia

Emergency Food Security and
Market Assessment

2011

REPUBLIC OF
LIBERIA
Monrovia



June 2011

Data collected between
April – May 2011



ACKNOWLEDGMENT

The Government of Liberia is deeply grateful to the individuals, households, and communities of rural and urban Liberia for their time and hospitality.

The Emergency Food Security and Market Assessment was an integrated endeavor involving many organizations in its design, the collection of data, and the production of this report.

The survey was primarily supported by the Ministry of Agriculture (MOA), Ministry of Commerce and Industry (MCI) and the United Nations World Food Programme (WFP). The sampling methodology was designed by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) and WFP.

In the field, many agencies contributed staff, vehicles and other logistical support that ensured successful implementation of the survey. In particular, the Ministry of Agriculture, Ministry of Commerce and Industry, LISGIS, FAO, WFP, UNHCR, Action Contre La Faim (ACF) and Norwegian Refugee Council (NRC) were involved in the field phase of the survey.

We are deeply appreciative for the useful comments from various individuals/organizations on the design, implementation and compilation of survey report, and particularly staff from Action Contre la Faim (ACF), Catholic Relief Service (CRS), FAO, World Bank, United States Agency for International Development (USAID) and many others. Also to mention are WFP VAM staff from Headquarters and Regional Bureau in Dakar, Senegal for the useful comments and review of the document. The survey team received valuable comments which were incorporated in the final report.

The survey was funded by the United Nations World Food Programme (WFP) in addition to material and technical contributions from ACF, NRC, FAO and UNHCR. The Government of Liberia is grateful for these generous contributions.

We would also like to thank the United Nations Mission in Liberia (UNMIL), County authorities, and WFP Sub-offices for supporting the logistics and helping to ensure safety of the data collection and monitoring teams in the field.

We are greatly indebted to WFP VAM staff and MOA for the great work, technical guidance and dedication in making the Emergency Food Security and Market Assessment a reality – immensely contributing in all stages of the exercise. We would also want to thank Dr. Melanie Mason, WFP Consultant, for her valuable comments and editing of the report.

This report was compiled in collaboration with various stakeholders including FAO, UNHCR and WFP. For any feedback, clarification or comments, please contact any of the following persons:

Deroe Weeks
MOA – Director of Food Security and
Nutrition Programme
Daweeks2002@yahoo.com

Stephen Flan-Paye
Director of Statistics
Ministry of Commerce
steflapa@yahoo.com

Bernard Owadi
VAM Officer
World Food Programme
Bernard.owadi@wfp.org

TABLE OF CONTENTS

Content	Page
List of Acronyms.....	3
List of Tables	5
List of Figures	5
Executive Summary	7
1. Introduction	11
2. Assessment objectives and methodology	13
3. Recent macro-economic performance	16
4. Country context and impacts of high commodity prices on markets and traders	18
5. Impacts of high commodity prices on household food security status	27
5.1. The urban poor in Monrovia.....	27
5.2. Impacts in refugee affected counties of Grand Gedeh, Nimba and Maryland	32
5.3. Impacts on rural households in Bomi and Lofa Counties	41
6. Response Analysis	46
7. Conclusion and recommendations	49
Annexes	
Annex I: Overview of existing interventions.....	50
Annex II: TOR for emergency food security and market assessments.....	58
Annex III: Household food security survey methodology	61
Annex IV: Market survey methodology	63
Annex V: Rapid household food security assessment questionnaire.....	65
Annex VI: Market survey questionnaire	69
Annex VII: Key informant interviews questionnaire.....	76
Annex VIII: Map of Liberia.....	80

LIST OF ACRONYMS

ACF	Action Contre la Faim
ADRA	Adventist Development and Relief Agency
AIDP	Agricultural Infrastructure Development Project
BCC	Behavioral Change and Communication
CARI	Center for Agriculture Research Institute
CBL	Central Bank of Liberia
CEOs	County Educational Officers
CEP	Community Empowerment Project
CFSAM	Crop and Food Security Assessment
CFSNS	Comprehensive Food Security and Nutrition Survey
CFSVA	Comprehensive Food Security and Vulnerability Assessment
CFW	Cash-For-Work
CIF	Cost Insurance and Freight
CO	Country Office
CRS	Catholic Relief Services
CSI	Coping Strategy Index
CTC	Community Therapeutic Care
DEOs	District Educational Officers
EAs	Enumeration Areas
EC	European Commission
ECHO	European Commission's Humanitarian Aid department
EPA	Environmental Protection Agency
EU	European Union
FAO	Food and Agriculture Organization
FBO	Farm-Based Organizations
FCG	Food Consumption Group
FCS	Food Consumption Score
FFW	Food-For-Work
FGDs	Focus Group Discussions
FOB	Freight on Board
FSCA	Food Security through Commercialization of Agriculture
FSN	Food Security and Nutrition
FSNCC	Food Security and Nutrition Coordination Council
FSNMS	Food Security and Nutrition Monitoring System
FTM	Farm-To-Market
GDP	Gross Domestic Product
GOL	Government of Liberia
HH	Household
IFAD	International Fund for Agricultural Development
IITA	International Institute for Tropical Agriculture
IVC	Ivory Coast
LACE	Liberia Agency for Community Empowerment
LAR	Livelihood Asset Rehabilitation
LASIP	Liberia Agriculture Sector Investment Programme
LC	Land Commission
LD	Liberian Dollars
LFSNS	Liberia Food Security and Nutrition Survey
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LMA	Liberia Market Association
LPMC	Liberia Produce Marketing Corporation
MIA	Ministry of Internal Affairs
MICAT	Ministry of Information, Culture and Tourism
MOA	Ministry of Agriculture
MOCI	Ministry of Commerce and Industry
MOE	Ministry of Education

MOF	Ministry of Finance
MOGD	Ministry of Gender and Development
MOHSW	Ministry of Health and Social Welfare
MOL	Ministry of Labour
MPEA	Ministry of Planning and Economic Affairs
MOPW	Ministry of Public Works
MT	Metric Tonnes
MYS	Ministry of Youth and Sports
NGOs	Non-Governmental Organizations
NRC	Norwegian Refugee Council
OPEC	Organization of the Petroleum Exporting Countries
PPS	Probability Proportional to Size
PRS	Poverty Reduction Strategy
PTA	Parent Teachers Association
SFP	Supplementary Feeding Programme
SPSS	Statistical Package for Social Sciences
SWAT	Supplying West Africa Trading, Inc.
TC	Technical Committee
TFP	Therapeutic Feeding Programme
TOR	Terms of Reference
TOT	Terms of Trade
TOT	Training of Trainers
TTC	Technology-Transfer Centres
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNMIL	United Nations Mission in Liberia
UNOPS	United Nations Office for Project Services
US	United States
USA	United States of America
USAID	United States Agency for International Development
USD	United States Dollars
VAM	Vulnerability Analysis and Mapping
WARDA	West Africa Rice Development Association
WASH	Water Sanitation and Hygiene
WATSAN	Water and Sanitation
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization

LIST OF TABLES

Table	Page
Table 1: Food (rice and cassava) balance sheet- May 2011	19
Table 2: Price changes for 50kg bag of imported rice (April 2010 -April 2011)	20
Table 3: Price changes in refugee affected areas	21
Table 4: Gallon of gasoline	21
Table 5: Characteristics of households with poor and acceptable dietary intake	28
Table 6: Surveyed households by residence status and county	32
Table 7: Household characteristics by county and residency status	33
Table 8: Access to improved water and sanitation facilities by county and residency status	34
Table 9: Characteristics of households with poor and acceptable dietary intake	35
Table 10: Access to casual labour (%) and average wage rate (in LD)	37
Table 11: Average number of tins used last season and upcoming season	37
Table 12: Main source of rice seeds used last season	38
Table 13: Number of months rice and cassava stocks may last for by county and residency status	38
Table 14: Access to credit for resident households	39
Table 15: Coping mechanisms used by households	39
Table 16: Percentage of households who have received humanitarian assistance	40
Table 17: Estimated number of households at risk by FCS groups, refugee areas	40
Table 18: Livelihood/income sources for Bomi and Lofa residents	42
Table 19: Main sources of rice seeds used during last season, Bomi and Lofa	43
Table 20: Main sources of rice seeds used during upcoming season, Bomi and Lofa	43
Table 21: Access to credit for resident households	44
Table 22: Estimated number of households at risk by FCS groups in Bomi and Lofa	45

LIST OF FIGURES

Figure	Page
Figure 1: Global trends in Food price indices 2006-11	17
Figure 2: Six Month Average Retail Price Chart	17
Figure 3: Estimated rice (milled) production Deficit 2011	18
Figure 4: Per capita vegetable oil consumption	19
Figure 5: Per capita Rice and wheat consumption	19
Figure 6: Price of 1 gallon of palm oil in LD (April 2010 & 2011)	22
Figure 7: Terms of Trade between daily wage and imported rice (January 2010-2011)	22
Figure 8: Trend in rice importation (MT) between January and April	23
Figure 9: Market chain for imported rice	24
Figure 10: Market stability 2009-11	25
Figure 11: Market Integration, Red Light as central	25
Figure 12: Food consumption groups in urban poor parts of Monrovia	28
Figure 13: Income sources/livelihood activities for the urban poor May 2011	29
Figure 14: Household expenditure change	30
Figure 15: Typical progression of coping strategies	31

Figure 16: Coping strategies used by urban poor households in Monrovia	32
Figure 17: Timeframe of returning refugees	33
Figure 18: % of households with poor food consumption, April 2011	34
Figure 19: Change in food consumption 2010 -to 2011	35
Figure 20: Livelihood/income sources of resident and refugee households	36
Figure 21: Households engaged in different livelihood sources by food consumption groups (%)	36
Figure 22: Changes in expenditure for food and non-food items.....	39
Figure 23: Changes in food consumption levels	41
Figure 24: Changes in expenditure of essential commodities and services in Bomi and Lofa Counties ..	44
Figure 25: Coping strategies in Bomi and Lofa Counties.....	44

EXECUTIVE SUMMARY

Background

Global food prices are on the rise again. The Food and Agricultural Organization (FAO) of the United Nations (UN) food price index reached a record level in February 2011, surpassing the 2008 peak, driven by increases in the prices of wheat (75 percent), maize (73 percent), vegetable oil (50 percent) and sugar (73 percent) since June 2010. Although rice prices have increased less (17 percent) than other cereals, the reported “panic responses” by some governments may eventually see a global rise in the price of rice.

Liberia has not fully recovered from the food price shock of 2008. The food security and nutrition situation in most parts of the country remains precarious, characterized by an estimated 41 percent classified as food insecure and chronic malnutrition levels estimated at 42 percent. Poverty remains very high: 64 percent of the population lives on \$1 per day or less.

With more than two-thirds of its food requirements imported, Liberia is strongly dependent on international markets and highly vulnerable to high food price shocks. Three additional factors may compound this vulnerability: i) the conflict in Cote d’Ivoire has weakened traditional cross-border trade and, with large refugee influxes, adds pressure on limited local resources; ii) 2011 is an election year, only the second since the end of the war in 2003, and the country is prone to anxieties that may be easily aggravated by high food prices; and iii) the poor already have difficulty coping with food prices. Indeed, expenditures on food are high, estimated at more than 50 percent among poor households, irrespective of price shocks.

The recent conflict over the presidential election in Cote d’Ivoire has led to an estimated 183,000 Ivorian refugees crossing into Liberia since November 2010. The two months of March and April 2011 experienced a surge in refugee numbers, jumping from 71,000 to more than 157,000, causing an immediate strain on food and other resource availability.

The government, through the Ministries of Agriculture (MoA), Commerce and Industry (MCI) and the Liberia Institute of Statistics and Geo-information Systems (LISGIS) formally asked WFP to enhance its capacity on market information and established a technical working group to undertake an in-depth analysis and conduct an emergency needs assessment of the impacts of high food, fuel prices, and refugee influx.

To acquire a robust understanding of the potential impacts of rising prices on household food security, two assessments were conducted concurrently: i) an emergency food security assessment in refugee-affected areas and among urban poor, and ii) a market analysis as a follow up of the 2008 study on impacts of high food prices in Liberia.

Assessment objectives

The overall objective of the assessment is to gain a robust understanding of the impacts of rising food and fuel prices on three population groups:

- urban and peri-urban poor households,

- rural households in communities hosting Ivorian refugees/ Ivorian refugee households,
- households from an agricultural productive area with established markets and food insecure non-refugee affected households.

The components of the assessment include:

- analysis of current food prices, trends and future outlooks;
- investigation of relationships between rising commodity prices and underlying vulnerability of households;
- identification and recommendations of immediate, mid-term and long-term response options for the different population groups.

Survey Methodology

For the household survey, a two-stage stratified cluster sampling method was used to draw a statistically representative sample size from each county. A total of 1,618 households were sampled from six counties: Montserrado, Nimba, Grand Gedeh, Maryland, Bomi and Lofa. Out of those households, 541 were refugee households and the remaining 1,077 households were selected from both refugee hosting and non-hosting resident households.

Market data collection covered 90 traders (3 importers, 6 wholesalers, 15 large scale retailers, and 66 micro-traders) selected using purposive sampling method. Key informant interviews with 20 purposely selected traders and six focus group discussions (FGDs) were conducted for in-depth qualitative information covering the what, which, why, and how aspects of market issues.

Key questions explored during the course of the assessment include:

- Are there changes in household (HH) food consumption and expenditures?
- What coping mechanisms are used among HHs?
- Are there concurrent changes in domestic prices?
- Can existing market performance support consumers?
- What is the availability of food (production & imports)?
- What can be done?

Results are reported both at regional and national level. The analysis included descriptive analysis and multivariate techniques such as regression analysis.

KEY FINDINGS

1) **Food Consumption** has deteriorated. In Monrovia, 40 percent of households have inadequate food consumption scores,¹ reaching the peak level of 43 percent during the 2008 crisis. In refugee affected areas, the proportion of households with inadequate food consumption scores increased from 32.4 percent in 2010 to 68.8 percent in Nimba and from 42 percent to 75 percent in Grand Gedeh counties. This deterioration is likely to worsen during the lean season.

¹ Household food consumption score is used as a proxy indicator to food insecurity that takes into account the frequency of food groups consumed and the nutrient density of the food groups.

II) **Share of food expenditures** has significantly increased. In urban areas, expenditure on food grew from 50 percent in 2010 to 61 percent in April 2011. In refugee-affected areas, expenditure on food has increased from 53 percent in 2010 to 59 percent in April 2011. Typically, this implies that families have less to spend on essential non-food items

III) **Consumption related stress coping** measures have been activated by affected households. Both residents and refugees are increasingly dependent on adverse coping strategies including reduced consumption, borrowing, skipping of meals for the whole day and consumption of seed stocks by farming households.

IV) **Domestic prices of essential commodities are rising.** Despite stable global rice prices, domestic rice prices are increasing faster in Liberia and are substantially higher than pre-2008 levels. Domestic fuel prices have also risen sharply by 25 – 40 percent in the last six months, in line with global market trends. Gasoline price rises with consequent increases in transport costs have pushed up domestic food and other commodity prices, creating a further deterioration in access to food and other essential commodities. The increases in prices were even more dramatic in refugee affected counties—in some cases tripling, as in the case of “bonny fish” a popular protein source among the poor.

V) **Micro-retailers deliver food commodities at a higher cost.** It was estimated that more than 80 percent of consumers purchase their foods from micro-retailers which are characterized by higher retail costs. Micro-retailers dominate markets outside of Monrovia, largely because poor roads limit transport. Poor roads typically worsen during the rainy season.

VI) **Widening national food balance deficit.** Analysis of rice production in the country shows a shortfall of 64 percent between consumption requirements, estimated in 2010 at 470,000MT, and production, estimated at 169,000MT.² The amount of imported rice in 2011 is still unable to meet the shortfall. Cassava production also suffers massive losses and although the fresh cassava produced is estimated at 490,000MT in 2010, the amount is only estimated to yield about 103,000 MT cereal equivalent based on calories³. Liberia typically relies on a significant cross-border import of *farina/gari* from Sierra Leone. However, the assessment noted a decline by 40 percent in gari trade over the last six months.

VII) **Inadequate employment opportunities and low wages.** Only one-third of the households reported access to casual labour. However, the average daily wage rate of less than 2USD/day is hardly enough to meet basic requirements. The urban poor, mainly working in the construction sector, had a slightly higher daily wage rate (USD 3 against USD 1.7) than reported by rural residents in the agricultural sector. The daily wage rate is even lower in refugee- affected areas, ranging from only 50 Liberian dollars (LD) to 140 LD, for an average 105 LD.

² 2010/11 Crop Harvest Assessment, MOA/LISGIS

³ FAOSTAT-Food balance sheet –conversion for cereal equivalent

Liberia's Food Security prospects

- Global contexts, such as the Arab re-awakening, China's possible reduction of rice export, and the ongoing drought in Europe that may reduce food exports are likely to continue mounting price pressures on Liberia's food market;
- Staple food prices in Liberia will continue to increase due to concurrent increases in fuel prices, continued pressure from refugees for food and other services, and the onset of lean season;
- Household food security is likely to deteriorate sharply, unless immediate mitigation measures are put in place, due to continued rises in costs of transport, restricted movement of commodities, and incidences of diseases further exacerbated by the effects of rainy season;
- The urban poor will continue to bear the brunt of the rising prices;
- Additional demands for food and services will likely to maintain the present pressure on local prices in refugee hosting counties. Refugees indicated that they will not return back any time soon.

Response options

- Initiate immediate measures to further increase stock levels, especially before the onset of rains, e.g. encouraging importers to increase stock levels, pre-positioning food stocks to serve as emergency grain reserve, through making government budgetary provision or encouraging donations from bi-lateral partners;
- Encourage pre-positioning of imported stocks outside Monrovia using the trader distribution network with a specific focus on food emergency management and response capacity at policy and institutional levels;
- Expand food assistance to host communities in counties hosting refugees to cover some 18,000-20,000 families with poor dietary intake for six months, with general food distribution particularly during critical months of July-October, pending an follow up assessment to determine possible extension if needed;
- Expand ongoing employment /production-based programmes such as rural based productive safety nets, provision of agricultural inputs, etc. Using vulnerability criteria, cover an estimated 17,000-25,000 families between July and December 2011 and extension to 2012 purely based on rebuilding the community assets in affected populations;
- Expand ongoing production-based programmes to increase rice /cassava production and diversified cropping, particularly focusing on productive safety nets;
- Target an estimated 15,000 to 20,000 peri-urban and urban poor families around Monrovia through cash/food/voucher system from June/July to November/December 2011 as urban based social safety nets followed by a follow up assessment to determine the project's future;
- Strengthen food security and market monitoring systems.

1. INTRODUCTION

Global food prices are on the rise again. The Food and Agricultural Organization (FAO) of the United Nations (UN) food price index reached a record level in February 2011, surpassing the 2008 peak, driven by increases in the prices of wheat (75 percent), maize (73 percent), vegetable oil (50 percent) and sugar (73 percent) since June 2010. Although rice prices have increased less (17 percent) than other cereals, the reported “panic responses” by some governments may eventually see a global rise in the price of rice. For instance, Burma has imposed restrictions on rice exports while Vietnam has set quotas on the amount of rice available for export. In West Africa, neighboring countries such as Sierra Leone and Guinea have responded by restricting all food movements across their borders.

Liberia is heavily reliant on food imports to meet domestic requirements. Food imports range from staples, including rice, to fats and oils, vegetables, pulses, chicken, meat and condiments. In Monrovia, the main urban city in the country, close to 95 percent of food requirements is imported. Rice is the primary staple cereal for Liberians. The country ranks among the highest in rice per capita consumption in West Africa. By contrast, the country produced only 169,000MT of milled rice in 2010, barely a third of annual rice consumption requirements.⁴

Liberia has not fully recovered from the food price shock of 2008. The food security and nutrition situation in most parts of the country remains precarious, characterized by an estimated 41 percent classified as food insecure and chronic malnutrition levels estimated at 42 percent. Moreover, poverty remains very high: 64 percent of the population lives on \$1 per day or less.⁵ The country is approaching the lean season—usually associated with depleted food stocks, inaccessible road network especially in the rural areas (due to high rains), high incidences of diseases and generally worsening food and nutrition situations.

This strong dependency on imports, particularly for rice, combined with high levels of poverty and high food insecurity leaves Liberia highly vulnerable to high food price shocks.⁶ Three additional factors may compound this vulnerability: i) the conflict in Cote d’Ivoire has weakened traditional cross-border trade and, with large refugee influxes, adds pressure on limited local resources; ii) 2011 is an election year, only the second since the end of the war in 2003, and the country is prone to anxieties that may be easily be aggravated by high food prices; and iii) the poor already have difficulty coping with food prices. Indeed, expenditures on food are high, estimated at more than 50 percent among poor households, irrespective of price shocks.

Purchase remains the main food access modality for both rural and urban households (nationally over 60 percent of food consumed at household level is purchased⁷). Higher food prices translate into a further increase in expenditures 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

⁴ 2009/10 Crop Harvest Assessment (MOA/LISGIS 2010)

⁵ 2010 Liberia Comprehensive Food Security and Nutrition Survey, MOA

⁶ *ibid*

⁷ *Ibid.*

those most dependent on markets and with weak purchasing power – such as urban poor, daily wage laborers and the majority of small farmers.

The recent conflict over the presidential election in Cote d'Ivoire has led to an estimated 183,000 Ivorian refugees crossing into Liberia since November 2010. The two months of March and April 2011 experienced a surge in refugee numbers, jumping from 71,000 to more than 157,000, causing an immediate strain on food and other resource availability. Most refugees are living along the border counties of Nimba, Grand Gedeh and Maryland.

Liberia's social safety net programmes were greatly eroded during the 14-year of conflict (1989 – 2003), giving rise to government's concern over rising food prices. Safety net policies outlined in the Liberia Agriculture Sector Investment Programme (LASIP), the draft Social Welfare Policy, and the Liberia Poverty Reduction Strategy (PRS) are constrained by the myriad challenges facing the economy. Without a better understanding of the scale and implications of current high food prices on the domestic economy, actions to mitigate impacts of the price rises cannot be properly designed. The government, through the Ministries of Agriculture (MoA), Commerce and Industry (MCI) and the Liberia Institute of Statistics and Geo-information Systems (LISGIS) formally asked WFP to enhance its capacity on market information and established a technical working group to undertake an in-depth analysis and conduct an emergency needs assessment of the impacts of high food, fuel prices, and refugee influx.

To acquire a robust understanding of the potential impacts of rising prices on household food security, two assessments were conducted concurrently: i) an emergency food security assessment in refuge-affected areas and among urban poor, and ii) a market analysis as a follow up of the 2008 study on impacts of high food prices in Liberia.

2. ASSESSMENT OBJECTIVES AND METHODOLOGY

The overall objective of the assessment is to gain a robust understanding of the impacts of rising food and fuel prices on three population groups:

- urban and peri-urban poor households,
- rural households in communities hosting Ivorian refugees/ Ivorian refugee households,
- households from an agricultural productive area with established market and food insecure non-refugee affected households.

The components of the assessment include:

- analysis of current food prices, trends and future outlooks;
- investigation of relationships between rising commodity prices and underlying vulnerability of households;
- identification and recommendations of immediate, mid-term and long-term response options for the different population groups.

Key questions explored during the course of the assessment include:

- Are there changes in household (HH) food consumption and expenditures?
- What coping mechanisms are used among HHs?
- Are there concurrent changes in domestic prices?
- Can existing market performance support consumers?
- What is the availability of food (production & imports)?
- What can be done?

Survey Methodology

Stakeholders and Implementation Process

The assessment was conducted between April and May 2011. The survey was preceded by an extensive review of secondary data including previous food security and nutrition surveys in the country as well as those conducted in refugee affected counties since the beginning of 2011. This secondary data review provided a preliminary overview of the food security situation in the country.

Planning sessions were organized with main stakeholders in the weeks preceding the assessment. Standard household and community questionnaires developed jointly for previous assessments in 2008 were used as the basis of the current survey. Training for primary data collectors was conducted between 20 and 22 April 2011 that involved pre-testing of the assessment tools. Twenty-five participants from ministries, NGOs (local and international) and universities participated in data collection. Six teams were established, each comprised of a supervisor, team leader and 2-4 enumerators. The MoA and MCI, with technical support from FAO, the UN High Commissioner for Refugees (UNHCR) and WFP, were responsible for overall supervision and coordination of primary data collection. The primary data were collected from 25 April to 4 May 2011. Data entry and data analysis followed in May. Preliminary findings were presented on 19 May 2011.

The Ministries of Agriculture (MOA), Commerce & Industry (MCI) and the Liberia Institute of Statistics and Geo-Information Services (LISGIS) provided overall leadership to the assessment. Participating partners included WFP, FAO, the United Nations Children’s Fund (UNICEF), UNHCR, Action Contre la Faim (ACF), Catholic Relief Services (CRS) and the Norwegian Refugee Council (NRC). FAO, UNHCR and WFP provided technical leadership for different components of the assessment.

Survey Instruments

The assessment collected quantitative information from households and market information from traders and key informants. The household questionnaire included modules on demographics, household status, access to water and sanitation facilities, agriculture, income and access to credit, household expenditures, food sources and consumption, shocks and coping strategies, and external assistance. Additional information was collected through key informant interviews at community levels which included information on infrastructure and services, availability of external assistance, and major constraints to well-being of the inhabitants.

The market analysis focused on the following market chains:

- Rice (local and imported) as main staple crop for both communities and refugees
- Palm oil as main fat source and source of income (cash crop)
- Local labor, particularly agricultural labor.

All survey instruments were developed in English and enumerators’ ability to uniformly translate them into local Liberian languages was ensured. Surveyors were assigned to areas depending on dialects understood and spoken.

Scope, Sampling and Sampling Procedures

The survey compared food security indicators across the different groups of interest—urban/peri-urban residents, refugees/host communities, agricultural productive/markets and rural non-refugee affected households. Each population of interest was treated as a separate stratum.

Primary data collection covered the following geographic locations: Monrovia (urban/peri-urban poor), the refugee- affected counties of Nimba, Grand Gedeh, and Maryland, Bomi (HH food insecurity & minimal production) and Lofa (high potential production and markets).

To determine the sample size, a minimum statistically representative sample size for each stratum was calculated based on indicators from previous surveys. From the calculation, the minimum sample size was determined at 150-175 households per stratum. A minimum sample size of 180 households per stratum was used to account for non-responses.

The survey utilized the sampling frame constructed by LISGIS for the 2008 Liberia census and the 2011 UNHCR Ivorian refugee listing. A two-stage stratified cluster sampling approach was used as follows:

- Stage 1: Eighteen enumeration areas (EAs) at the stratum/county level were randomly selected, using probability proportional to size, to ensure that each household in the population, whether from a small or large village, has an equal probability of being selected;
- Stage 2: Ten households within each EA were systematically randomly selected.

The primary data collection took place between 25 April and 4 May 2011. In total, 162 randomly selected rural and urban EAs were visited in which ten households were systematically randomly sampled for interviews. A total of 1,618 households (1077 Liberians and 541 refugee households) were interviewed.

Market data collection covered 90 traders (consisting of 3 importers, 6 wholesalers, 15 large scale retailers, and 66 micro-traders), and all were selected using purposive sampling methodology. In addition, the market assessment has also used key informant interviews of 20 purposely selected traders. To strengthen the findings of the assessment, six focus group discussions (FGDs) collected in-depth qualitative information covering the what, which, why, and how aspects of market-related issues.

Data Entry, Data Processing and Statistical Analysis

An ACCESS-based data entry template using CSPro supported by data quality check and control was created for data entry. Data entry was supervised by WFP. Data cleaning and analysis was carried out by the MOA, UNHCR and WFP using SPSS version 11.5, and outputs reviewed by participating organizations.

Tests of statistical significance for proportions used a chi-square test. A p -value <0.05 was considered statistically significant. Results are reported both at regional and national level. The analysis included descriptive analysis and multivariate techniques such as principal component analysis, cluster analysis and regression analysis.

3. RECENT MACRO-ECONOMIC PERFORMANCE

Liberia's remarkable economic growth since 2006 is largely attributed to the Government's pursuit of policies aimed at promoting economic revitalization and growth. Real GDP is estimated to have increased by 7.8 percent, 9.5 percent, 7.1 percent and 4.6 percent per annum over the period 2006 to 2009 respectively, and was projected to grow further by 7.5 percent in 2010 and 10.5 percent in 2011. This growth is mainly driven by the mining, services, manufacturing, agriculture and forestry sectors.

The country's inflationary pressures moderated in the twelve months up to December 2009, with consumer price inflation averaging 7.4 percent, far below the average double-digit rate of 17.5 percent in 2008. The slowdown in the upward movement in general prices, was influenced by the domestic pass-through effects of the relative low oil and high food prices on the world market.⁸

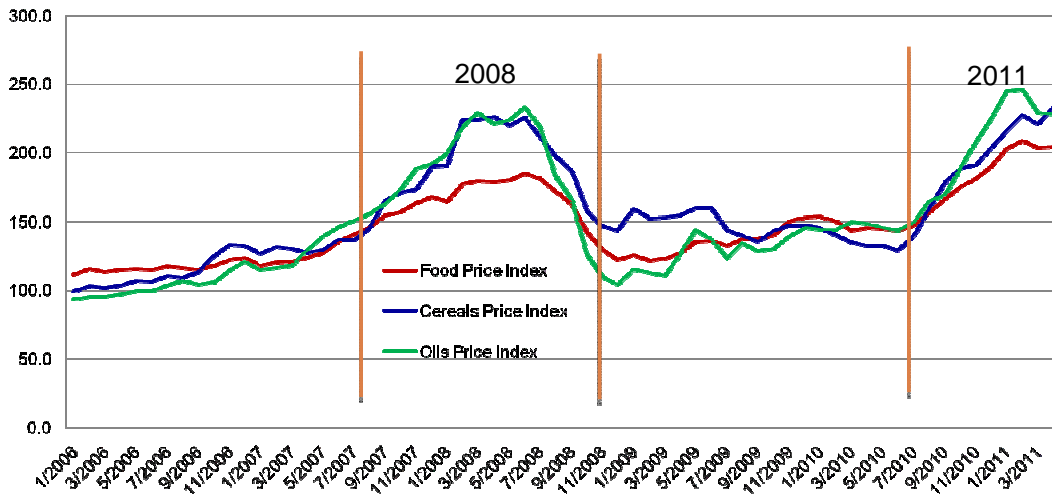
An estimated 63.8 percent or 1.7 million Liberians live below the national poverty line. Of these, 48 percent or 1.3 million live in extreme poverty. Poverty is higher in rural areas (68 percent) than in urban areas (55 percent). Since about 70 percent of the population lives in rural areas, this implies that about three-quarters (73 percent) of the poor live in rural areas.

Trends in prices of main food commodities globally

Since the last quarter of 2010, prices have increased for all key food commodities. Major increases are in cereals (wheat at 75 percent and maize at 73 percent), vegetable oil at 50 percent, and sugar at 73 percent, with meat prices even exceeding the 2008 peak). The cereals price index rose by three percent in January 2011, hitting a 30-month high of 232 points in March 2011 as shown in Figure 1. Global food price indices surpassed the 2008 levels by early 2011 although there has been minimal decline since March. However, the international price of rice has remained fairly stable since the beginning of the year after initial increases in late 2010.

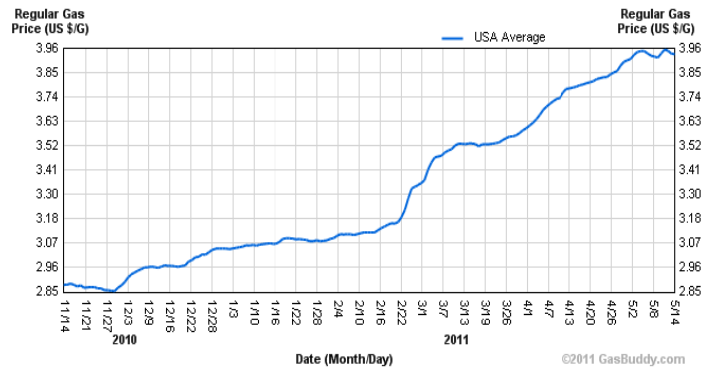
⁸ Source: LISGIS and Central Bank of Liberia.

Figure 1: Global trends in food price indices 2006-11



International fuel prices have also increased, further complicating the prices of other commodities. In the last 6 months alone, fuel prices have risen by up to 35 percent with no reprieve in sight (Figure 2).

Figure 2: Six Month Average Retail Price Chart



Factors driving global prices include:

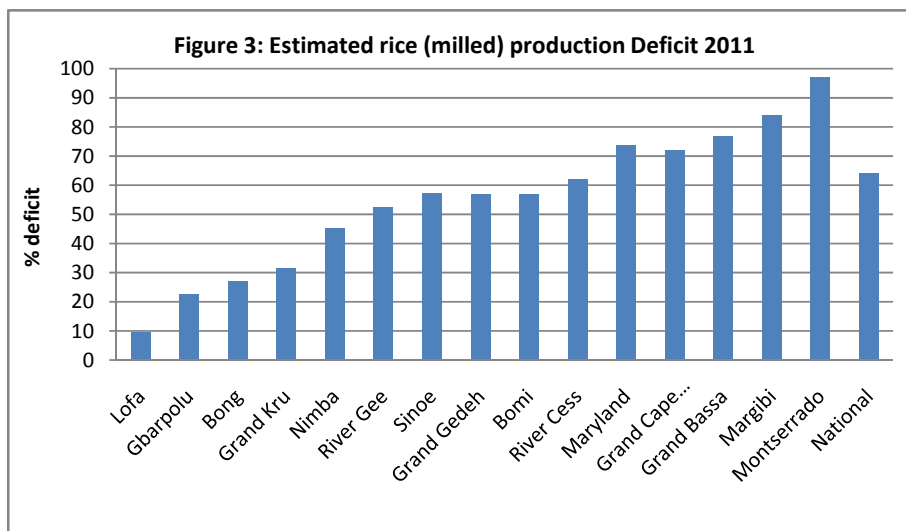
- Reduced production due to bad weather possibly linked to climate change e.g. extreme floods and drought as seen recently in Australia and Russia;
- Export restrictions and “panic buying” as witnessed in the previous months. Vietnam and Burma announced a restriction in rice exports while some West African counties have also reported ban on food exports—e.g. Sierra Leone and Guinea;
- Increased demand for food, which requires more productive land and for biofuel, which removes land from food production, as in the US, for example;
- Increased oil prices which drive up costs of agricultural essentials such as fertilizers and transport;
- Under-investment in the agricultural sector, especially in developing countries; and
- Financial events/actions such as the depreciation of the dollar, lower interest rates and speculation.

4. COUNTRY CONTEXT AND IMPACTS OF HIGH COMMODITY PRICES ON MARKETS AND TRADERS

Rice production and consumption in Liberia

Nationally, local production for milled rice is estimated at only 169,000MT in 2010 against a national requirement of about 476,000MT.⁹ As shown on **Figure 3**, no single county is self-reliant in Liberia, with the largest deficit noted in Montserrado County and the lowest in Lofa. The country must meet the huge deficit (64 percent) through importation. The deficit is attributed to slow growth of the agricultural production sector due to factors such as

limited market opportunities, poor infrastructure, including feeder roads, lack of improved seed quantities, poor farming techniques etc. In addition, the population is growing at a faster rate (2.1



percent) compared to a one percent growth in rice production between 2009 and 2010. This increases Liberia's vulnerability to price volatilities in the international markets.

Cassava consumption

Cassava production, while seemingly high, does not make up the gap in cereal production deficiency. Production of fresh cassava in 2010 was estimated at 493,000 MT.¹⁰ With post-harvest losses at estimated 30 percent,¹¹ only 345,100 MT of fresh cassava would be available for consumption. FAO further estimates the cereal equivalent of fresh cassava based on calorie content¹² at only 30 percent, leaving only about 103,530 MT available to meet the gap in cereal production (Table 1).

⁹ 2010/11 Crop Harvest Assessment-MOA/LISGIS

¹⁰ Ibid.

¹¹ The 2006 Crop and Food Security Assessment in Liberia (CFSAM)

¹² Source: FAOSTAT: Food consumption tables for international use

Table 1: Rice and cassava balance sheet- May 2011

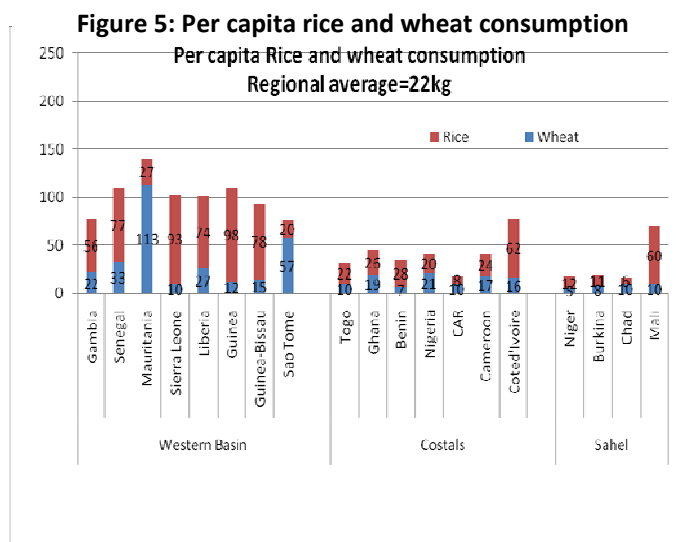
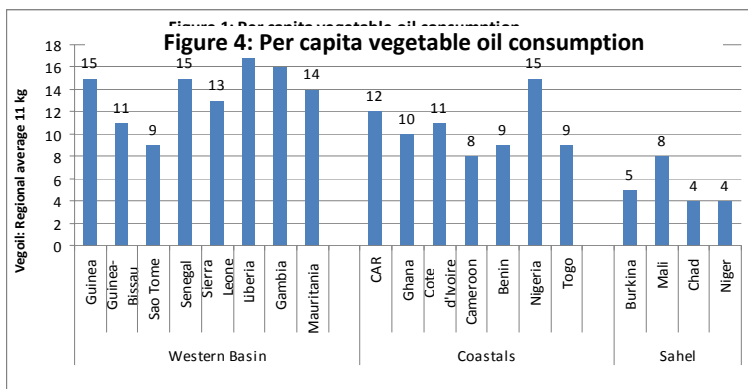
	UNIT	2008/9	2009/10	2010/11
RICE				
Total Production (Paddy)	MT	279,000	292,950	296,090
Local rice milled (65%)	MT	167,570	169,363	169,363
Needs – Requirement	MT	450,800	476,367	487,473
Deficit	MT	283,230	307,004	318,110
Importation				
Opening stock	MT	59,514.50	37,209	45,000
Commercial (Jan –April)	MT	62,135	26,414	73,150
Non-commercial (food aid)	MT	6,319.15		10,000
Estimated shortfall				190,000
CASSAVA				
Production of Fresh cassava	MT	496,290	495,300	493,000
Post-Harvest losses (30% CFSAM 2006)	MT	148,887	148,590	147,900
Fresh cassava available	MT	347,403	346,710	345,100
Cereal calorie equiv. (30% of fresh cassava available) for consumption	MT	104,221	104,013	103,530

Consumption of Food Imports in Liberia

More than 60 percent of food items consumed in the country are imported. Local production of rice, the staple food in Liberia, is currently meeting just a third of the national consumption requirements with the

shortfall met by imports. The country imports nearly 90 percent of its meat requirements. Other main food imports into the country include wheat, vegetable oil, pulses and oil.

A recent analysis of FAO data shows that Liberia has the highest per capita consumption of vegetable oil at 17kg in West Africa.¹³ The country also records one of the highest per capita



¹³ WFP Regional Bureau-Regional analysis of High food prices March 2011

consumption of rice in region (Figure 5). With a per capita wheat consumption of 27 kg, Liberia is only fourth to Mauritania, Sao Tome and Senegal respectively. Wheat is not locally produced in the country. Thus, national consumption requirements are met by imports. In Liberia, wheat products are primarily consumed by urban populations although consumption of products such as bread is widespread.

Both rice and wheat importation figures into Liberia indicate a rising trend in the last four years. For wheat, such high consumption requirements against non-existent or minimal local production make Liberia particularly vulnerable to shocks.

Domestic retail prices of imported rice: Current domestic imported “butter”¹⁴ rice prices have increased during the past year in all markets of Liberia. Butter rice accounts for nearly two-thirds of imported rice consumed in the country. The consumption is even much higher for the poor households in Monrovia and rural areas of Liberia. Across board, prices have increased between 12 and 41 percent (mean increment of 30 percent) above the April 2010 prices (Table 2). Monrovia has witnessed the most dramatic price rise over the period. Nonetheless, it is still cheaper to buy the imported rice in Monrovia than any other place in Liberia.

Also significant is the price differential between import price (CIF) and micro-retail prices. Whereas the import price (CIF) has increased by a modest 17 percent in the last one year, the retail price in Monrovia has increased by 41 percent.

Micro-retailers serve over 80 percent of Liberian consumers. Thus, price differentials have the greatest effect on households. Price increases in Liberia are occurring despite fairly

Table 2: Price changes for 50kg bag of imported rice (April 2010 -April 2011)

	Apr-10	Apr-11	% change
Buchanan	1,779	2,350	32%
Bo Waterside	1,871	2,325	24%
Pleebo	2,550	3,000	18%
Red Light	1,625	2,300	41%
Saclepea	1,747	2,350	35%
Tubmanburg	1,747	2,400	37%
Zwedru	2,221	2,600	17%
Gbarnga	1,929	2,450	27%
Voinjama	2,383	2,667	12%

stable global prices for rice. It is also notable that Liberian domestic prices for imported rice remain higher than pre-2008 levels. The discrepancies between domestic prices and international prices may be partly explained by rising fuel costs. However, it is also possible that importers may employ crude means to ensure increases in prices. It is already known that current stock orders will arrive at substantially increased prices, further darkening domestic price prospects.

Table 2 shows that markets in Maryland, Lofa and Grand Gedeh counties report substantially higher prices than markets in central Liberia. The prices of a 50kg bag of rice are 36 percent and 18 percent higher in Maryland and Grand Gedeh County respectively than the prices of the same quantity in Monrovia. It is significant that these are the same counties with the least purchasing power, as reflected in their high poverty incidences.

¹⁴ The 25 percent short grain rice from China

Other factors contributing to the domestic rise in rice prices include the “China effect.” As the main source of imported rice in Liberia, China has begun to purchase rice to increase their domestic stocks and in the process reducing the amount of rice available for export, which may starve the international market and result in price increases. Furthermore, traders have historically hoarded stocks with expectations of price increases.

Price increases in refugee-affected counties are even more dramatic, with prices of most commodities rising between 50 and 180 percent in Nimba County (Table 3). The influx of refugees has increased localized demand. Coupled with heightened pressure of overall prices, the retail prices (micro-retailing) increased even before the lean season. Farming communities in Nimba County are already reporting depletion of their rice stocks before the typical onset of lean season.

Table 3: Price changes in refugee affected areas

Commodity	Price changes between October 2010 and April 2011			
	Unit	October 2010	April 2011	% Change
Local rice	1kg	40	80	100
Bonny fish	500grams	25	70	180
Sachet of salt	2lb	35	60	71
Palm oil	400grams	20	30	50
Gasoline	1gallon	300	500	67
Kerosene	1snap	15	30	100
Exchange rate	\$LD to \$US	\$70LD to \$1USD	\$70LD to \$1USD	No Change

Prices of other commodities in Liberia

The price of fresh cassava, the second most consumed staple product, also rose by up to 10 percent in the last year. Nimba and Grand Gedeh counties noted the biggest rise over the period.¹⁵ This also coincides with declining cross-border trade on “gari”. Traders at Bo-waterside, the main entry point of “gari” from Sierra Leone reported low volumes of trader—estimating the decline by up to 40 percent.

Table 4: Gallon of gasoline

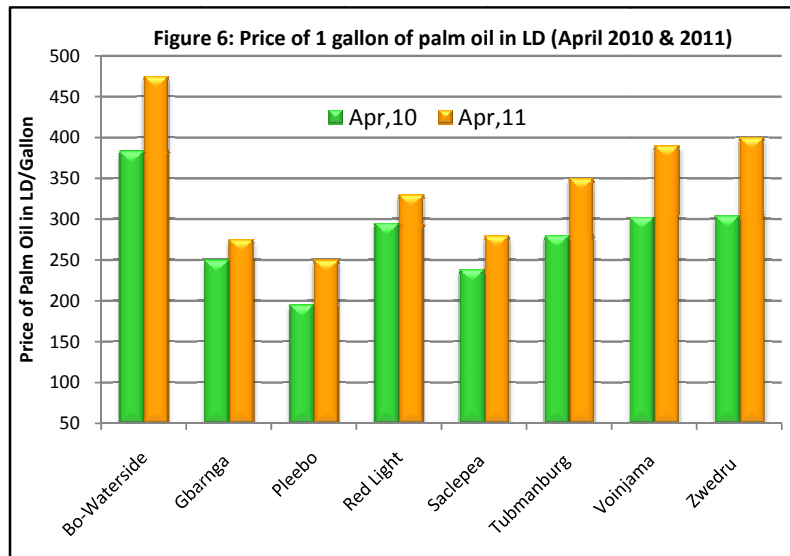
Market towns	Gallon of Gasoline		
	April 2011	October 2010	% Change
Bo-waterside	363	275	32
Zwedru	393	333	18
Toe	440	360	22
Foya	400	350	14
Voinjama	380	300	27
Harper	450	500	-10
Butuo	450	370	22
Ganta	350	287	22
Redlight	310	229	36
Duala	318	275	15
Water-side	313	268	17

Gasoline, with large volumes traditionally imported from the Middle East and essential for most households, especially for lighting by the urban poor, has also risen by an average of 28 percent (range 12 -

¹⁵ Draft Liberia Market Price Bulletin-May 2011

36 percent) in the last six months. Increases in fuel prices are bound to be reflected in increased transportation costs with a ripple effect on the economy. The increasing gasoline prices with consequent increase in the cost of transport has pushed up domestic food and other commodity prices sharply, creating a further deterioration in access to food and other basic supplies.

Palm oil, a major income source for smallholders, especially in Lofa and parts of Nimba, noted increased prices in all markets in comparison to the same period last year (Figure 6). Focus group discussions with traders revealed that increasing transport costs as a result of high gasoline prices coupled with growing regional demand, especially by Guinean traders, are factors



responsible for prices. Palm oil prices are expected to increase in the coming months due to low seasonal availability coupled with the effects of the rainy season.

Terms of Trade

The terms of trade (TOT) reported here reflect the amount of rice in kilograms that households may purchase in exchange of earnings from their daily work, either in construction (Red Light and Buchanan Markets) or in agriculture (currently brushing, which is primarily undertaken by men).

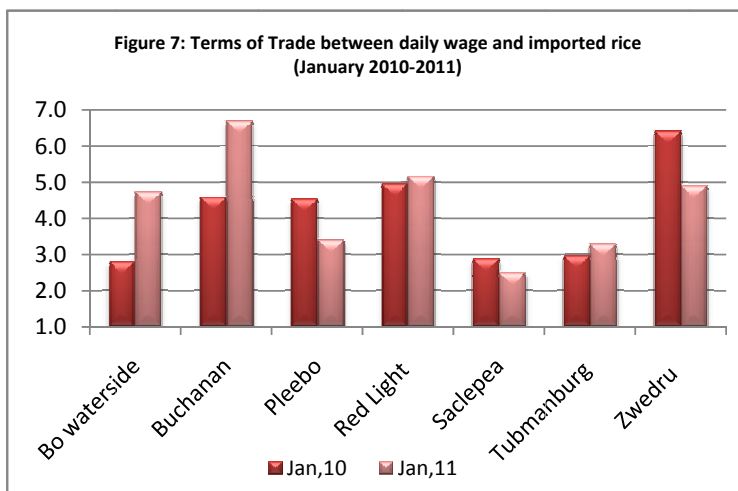


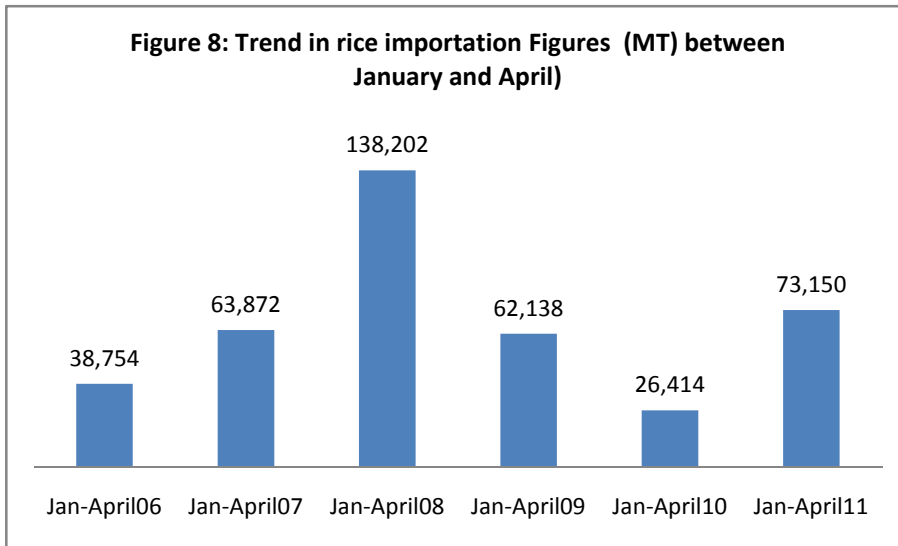
Figure 7 shows that terms of trade for casual labourers in exchange for a kilogram of rice has deteriorated in Pleebo, Saclepea and Zwedru markets compared to the same period last year. The markets are located in the counties of Nimba, Grand Gedeh and Maryland which have been characterized by influxes of population, ready to take on any income generating activity, amidst

dwindling opportunities for agricultural labour. Although there is improvement in terms of trade for casual labourers in Monrovia, opportunities are limited; only a third of households' assessed reported accessing casual work. The survey also noted improving terms of trade

for palm oil producers—a positive indication for household food security especially for smallholders in Lofa and Nimba Counties that have witnessed increased cross-border demand from Guinea.

Flow of imported rice in Liberia

Domestic food prices in Liberia are driven by world prices. Indeed, the 2008 food price shock



illustrated the effect of global prices in Liberia. An analysis of the possible extent of another international rice price shock on Liberia reveals a beta correlation coefficient of 0.79 when domestic price of imported rice

was correlated to FOB price in China.

Traditionally, up to 80 percent of the imported rice consumed in Liberia originates from Asian countries, with China as the dominant source of these imports. Of the approximately 73,000 MT of imported rice into the country since January 2011, 62 percent was sourced from China, locally called *butter* rice. Some 20 percent is from USA while Thailand accounted for 16 percent.

The current stock levels totaling 100,000 MT are expected to meet consumption requirements up to September 2011. However, this estimation does not account for refugee influxes that may lead to an earlier consumption deficit than estimated by the government. As shown in Figure 8, the rice imports between January and April 2011 has greatly increased although are far much lower than the 2008 crisis import levels.

Typically, imported rice enters Liberia through Monrovia. The imported rice is then distributed to inland areas of Liberia mainly through road transport. Sea transport is used to a limited extent, mainly to service the coastal cities of Buchanan, Green Ville and Harper. Prior to the political crisis in Cote d’Ivoire, small quantities of rice came through the southeastern border towns, in particular, Pleebo. However, since late 2010, no commercial rice imports have been noted from Ivory Coast.

There is a well established distribution network run by the traders that serves the whole country. In parts of the country, market demand for rice is seasonal. For example, Foya

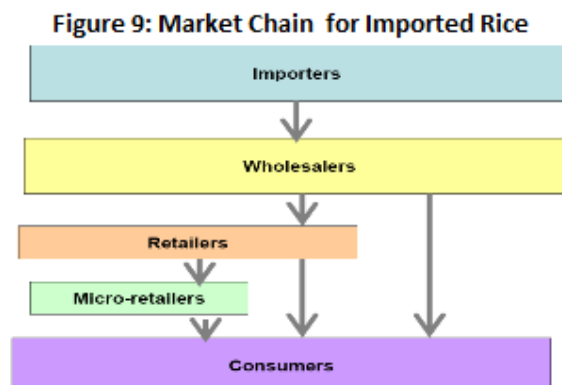


town in Lofa County has only a limited demand for imported rice during nearly nine months of the year. The map on the left shows the typical distribution pattern of rice in the country.

Imported rice market chain

A high level of market concentration is observed in the country. There are seven rice importers in Liberia, though one trader, Supplying West Africa Trading, Inc. (SWAT), imported 70 percent of all rice in 2011. Three traders control 90 percent of the market.

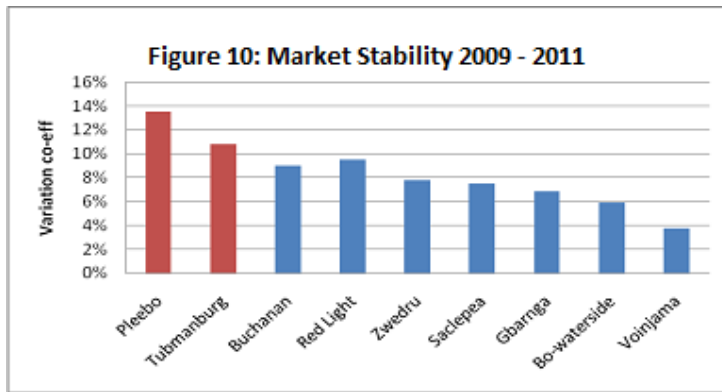
The typical market chain for rice is fairly short (Figure 9).¹⁶ From importers, the rice stocks are sold to wholesalers who also double as the main distributors. These distributors have countrywide network and are linked to the large scale retailers in all major towns of the country. In most cases, the large scale retailers sell to the micro-retailers (who tend to afford only limited amounts of stocks—mostly 2-3 bags at a time).



It is estimated that more than 80 percent of consumers purchase their rice from the micro-retailers. Purchase at this level is mainly on small scale—a couple of cups at a time. From the large-scale retail price to micro-retail level (or to consumer price), the marginal increase in price averages 5-10 percent per 50-kg bag of rice—when the small cups are converted into the standard quantities of measurement. This margin does not take into account the transport costs which leads to variation of prices based on distances from the port of entry. Thus, prices are higher in interior areas far-off from Monrovia. Whereas the retail price of a 50-kg bag of butter rice averaged USD 34 in Monrovia, it averages USD 37 in Lofa, Nimba, and most parts of south eastern counties.

The Government keeps a close watch on the imported rice market due to its strategic nature. The Ministry of Commerce and Industry is involved in market regulation with the

¹⁶ Source: Impact of High Food Price on Household Food Security Situation in Liberia, July 2008



aim of keeping prices accessible to the consumer. However, micro-retailers are not directly subjected to price ceilings set by the government.

Traders expect further rises in food prices towards lean season (demand shifting to imports) as price of fuel continues to increase. No

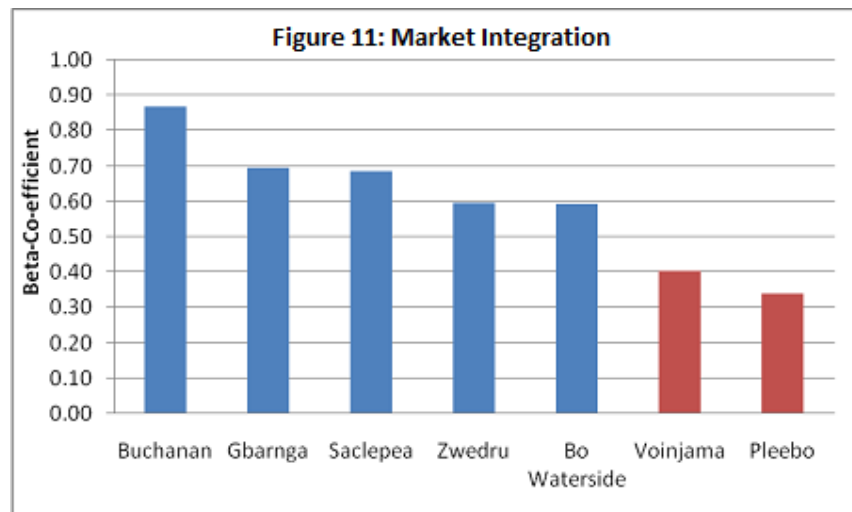
imported rice has been seen in Foya market (Lofa County) yet, but is expected by July 2011, the peak of the lean season.

Market Stability and Integration

A review of the Liberia Market Information statistics shows that southeastern parts of the country, represented by Pleebo market (Figure 10) is the most unstable place to buy rice, which tends to heighten food insecurity. The central belt of the country, represented by Red Light, Gbarnga, Saclepea, and Buchanan markets, shows relative price stability in 2011.

The central belt markets also show better market integration than southeastern and Lofa County (Figure 11). Indeed, the lowest correlation coefficients for the price of butter rice are in remote markets of Pleebo and Voinjama (Lofa County).

Lofa County is poorly integrated into markets because local production reduces dependence on imported rice, but also as a result of the poor road network.



Impact of Ivorian crisis and cross-border trading

Liberia's cross-border trade links are particularly strong with Guinea, Cote d'Ivoire and Sierra Leone. Pulses are mainly sourced from Cote d'Ivoire and Guinea while processed cassava comes from Sierra Leone. Additionally, trade of palm oil with these countries is a major

income source to rural households. As such, the upheaval in Cote d'Ivoire has significantly eroded an important source of food imports for Liberia.

Traders reported reduced cross-border food inflows from neighbouring countries due to instability in Cote d'Ivoire and restrictions of food exports by Guinea and Sierra Leone. Traders in Pleebo and Harper (Maryland) indicate that they have stopped buying rice in Cote d'Ivoire due to the recent crisis. Furthermore, they claim that imports from Cote d'Ivoire had become more expensive even before the recent crisis. These traders buy their rice from Monrovia, which also involves high transaction costs. However, one main trader currently controls over 60 percent of the Maryland market by obtaining stocks via sea transport to avoid the high costs of road transport. Rural traders pay cash on delivery to their Monrovia suppliers, forcing some to sell their entire stock before being able to afford to re-supply. 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.

5. IMPACTS OF HIGH COMMODITY PRICES ON HOUSEHOLD FOOD SECURITY

5.1 The urban poor in Monrovia

General socio-economic situation of the study population

This assessment covers only the urban poor of Greater Monrovia. About one quarter (23.5 percent) of the surveyed households are headed by women.

Most of the households reported having access to improved sources of drinking water (94 percent). Water sources include piped water into dwelling/yard (45 percent), public tap/stand pipe (32 percent) and protected well/pump/spring (17 percent). A smaller majority of the households (53 percent) have improved access to toilet facilities. Of the 47 percent who have un-improved toilet facilities, 36 percent have no facility at all and use open areas. This is an extremely high percentage for an urban area with high congestion. This predisposes the population to communicable diseases, as evidenced with frequent reports of diarrheal episodes.

Agricultural activities are not practiced among the surveyed households. Only one percent has access to farm land. Although markets are generally accessible, only two-thirds of the households report having some purchasing power that enables them to access commodities at the markets.

Changes in food consumption

At the household level, research has shown that dietary diversity and frequency¹⁷ are good proxy measures of food security. Using a 7-day recall period, information was collected on the variety and frequency of different foods and food groups to calculate a weighted¹⁸ food consumption score. Weights were based on the nutritional density of the foods. Cut-off points or thresholds were established to enable analysis of trends and to provide a benchmark for success. Households were then classified as having either 'poor', 'borderline', or 'acceptable' consumption based on the analysis of the data. Use of the food consumption score also allows for comparisons of dietary quality and diversity between populations.

The survey indicated that households with '**poor**' consumption managed to eat the equivalent of only cereals and vegetables on a daily basis. This is considered a bare minimum and is a sign of extreme household food insecurity. Households with '**borderline**' consumption eat the equivalent of cereals and vegetables on a daily basis plus pulses and oils about 4 times per week. Those with '**acceptable**' consumption eat a similar diet but some items more frequently.

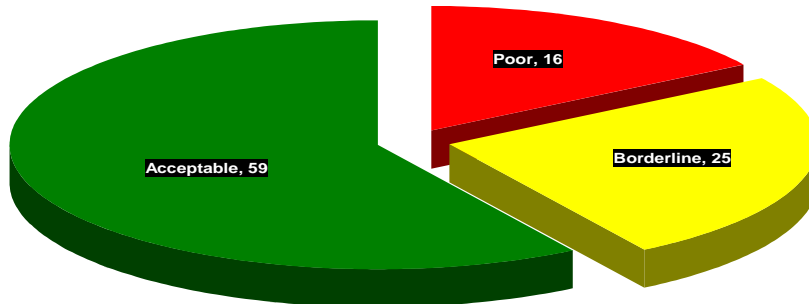
The survey confirmed that households in Greater Monrovia are heavily reliant on imported food for consumption, particularly rice, but also for cassava and vegetables. Household production plays a very minor role as a food source. This high market dependency makes the urban population particularly vulnerable to price shocks.

¹⁷ The number of different foods or food groups consumed by the household over a given period of time.

¹⁸ Animal proteins = 4; pulses = 3; cereals/roots/tubers = 2; fruits and vegetables = 1; oil and sugar = 0.5

Sixteen percent of poor residents in Monrovia were found to have poor dietary intake and an additional 25 percent with borderline consumption (Figure 12).

Figure 12: Food consumption groups in urban poor parts of Monrovia



Though not directly comparable, the 2010 Comprehensive Food and Nutrition Survey, which included all residents in Monrovia, found only eight percent reported inadequate food consumption levels. Nonetheless, there are indications that food consumption has deteriorated in Monrovia in the past months.

Some of the characteristics of the households with poor consumption score are presented in Table 5. Households with poor food consumption score were likely to have consumed only one meal in a day, to have been unemployed, to have been headed by females, to have experienced difficulties accessing food in the seven days preceding the survey etc.

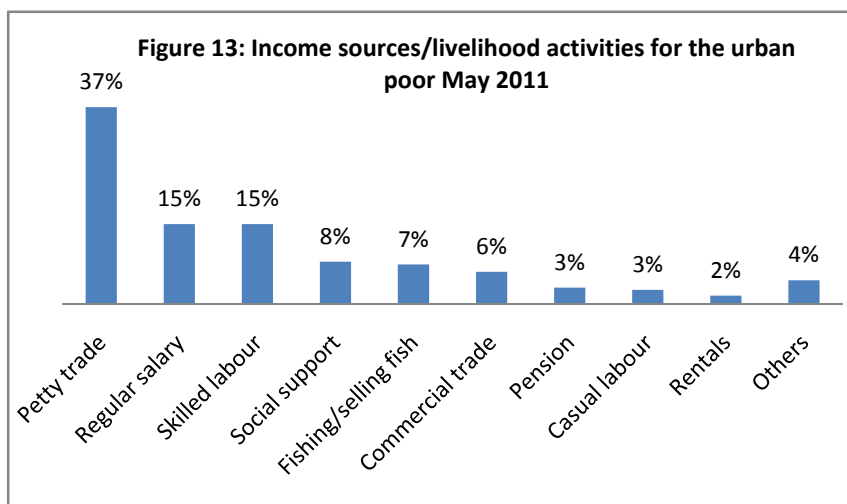
Table 5: Characteristics of households with poor and acceptable dietary intake

Characteristics of households	FCS Groups	
	Poor	Acceptable
Adult consumed only once a day	75%	27%
Children under 5 consumed only once a day	32%	10%
% employed during past 3 months	4%	18%
Skilled labour	7%	70%
Involved selling fish	43%	14%
Regular salary from professional labor	11%	69%
Shop owner / business / trade	6%	71%
Female headed households	36%	18%
Experienced difficulties in accessing food in the Past 7 days	86%	61%
Access to markets	50%	68%

Changes in livelihood/income sources

Poor households in Greater Monrovia mainly depend on petty trade and street vending as their main source of livelihood (as reported by about 37 percent). Skilled labour and regular salary from professional employment follow at 15 percent respectively (Figure 13).

Daily unskilled labor opportunities were found to be scarce for the urban poor households in Monrovia, with only three percent of the surveyed population reporting it as a livelihood source.



For those with work, the daily wage rate averaged 220 LD (ranging from 75LD to 350LD).

Analysis of perceived income changes between January-April 2010 and January-April 2011 further revealed that income of the 55

percent of surveyed households has decreased. About a quarter of the households felt that their income during the past one year remained unchanged. For households reporting reduced income levels now compared to last year, lower wages (34 percent) and lower profit/reduced sale (26 percent) were given as the main reasons. It is significant that eight in 10 households reported constant or decreased income levels despite increasing cost of commodities.

Changes in food and non-food expenditures

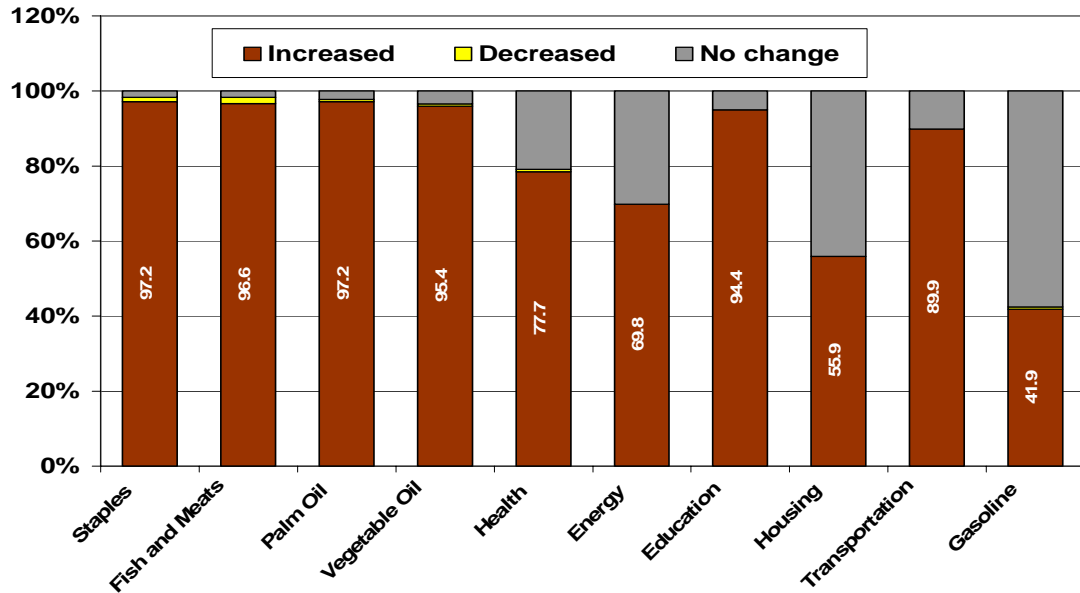
Earlier food security studies in Liberia, CFSNS 2006, LFSNS 2008 and CFSNS 2010¹⁹, revealed that food expenditures account for more than a half of overall household expenditures. Rice, fish and oil/butter are the main food items bought by households. Rice alone accounts for at least one-fifth of overall household expenditures. Of non-food expenditures, households mainly spend on transport. Transport costs are dictated by the price of oil fuel, the conditions of roads and distance from the port of entry and destination points. Liberia imports gasoline products from the OPEC countries –and the prevailing civil strife in the Middle East and the attendant disruptions in supply of fuel is a concern to the country.

This survey found a further increase in share of food expenditure among poor households since 2010, reported at 61 percent in April 2011 as compared to only 50 percent in the 2010 CFSNS. Despite the differences in sampling (the April 2011 survey included only poor households while the 2010 CFSNS covered all of Monrovia); the results give significant insight into understanding expenditure changes. The graph below depicts more details on the changes in expenditure on various food and non-food items.

¹⁹ Comprehensive Food Security and Nutrition Surveys of 2006, 2008 and 2010. Government of Liberia.

The survey found that expenditure on food increased much more than on non-food items. Overall, 97 percent of the urban poor in Monrovia indicated that their food expenditures increased, particularly for staples, palm oil, fish and meats. About 90 percent of the surveyed households noticed an increase in transport costs, usually a reflection of rising fuel prices (Figure 14).

Figure 14: Household expenditure change

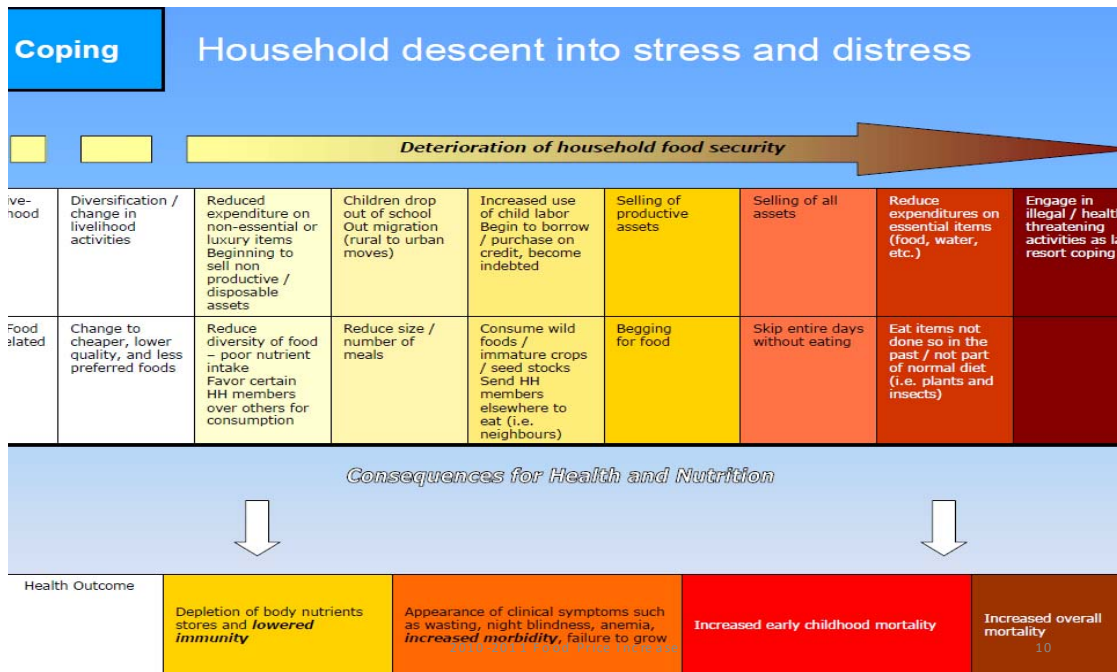


The survey shows that about 27 percent of the households had access to credit. The dominant reasons for taking loans were to purchase food (33 percent), meet educational expenses (23 percent) and cover health costs (eight percent). About 42 percent of the households further indicated that they have increased the amount of the credit they have taken when compared with previous year.

Coping strategies

When a community experiences a shock, various types of responses are put in place, depending on the type and magnitude of the problem as well as the level of vulnerability the community has experienced. These coping strategies range from short-term and less destructive, to longer-term irreversible and highly damaging mechanisms that include consumption-related measures. Figure 15 demonstrates types of coping mechanisms that households might take during emergency situations.

Figure 15: Typical progression of coping strategies



This assessment found that for those experiencing a shock in the past month, the most common coping strategies were related to changes in food consumption behaviour such as:

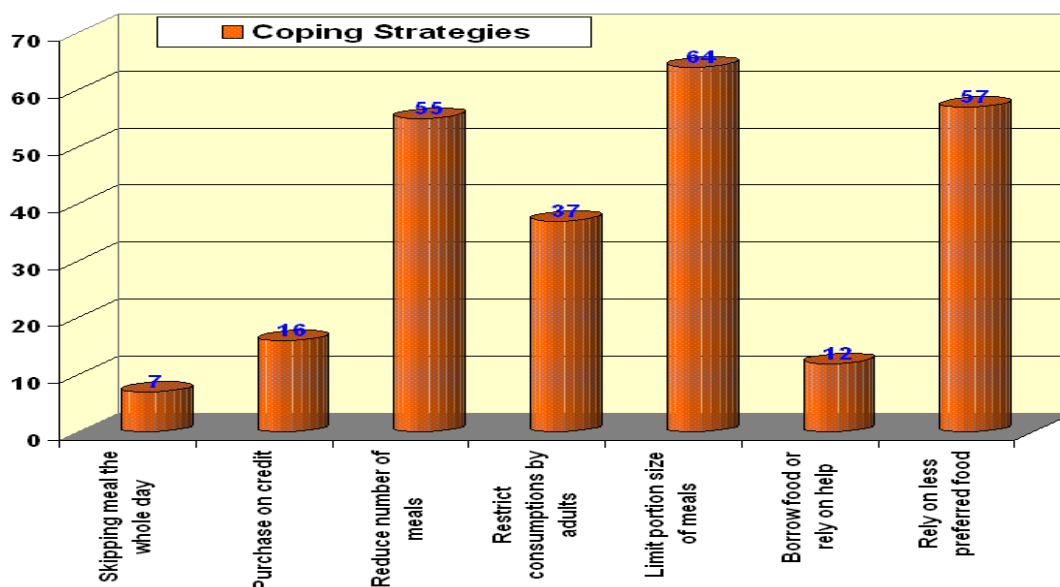
- eating less preferred or less expensive foods,
- limiting portion size at meal times, or
- reducing the number of meals eaten per day.

These were followed by strategies to increase purchasing power and therefore access to food such as:

- borrowing to buy food,
- buying food on credit,
- increasing working hours,
- seeking alternative employment,
- borrowing food, or
- decreasing expenditures on healthcare.

Most households were indeed found to activate stress coping measures in response to the difficulties they were facing. Both the residents and refugees are increasingly dependent on adverse coping strategies including reduced consumption, borrowing and skipping a day’s meal. For instance, approximately 7 percent of the households are skipping meals for the whole day. Limiting the size of meals is also reported as most common type of coping strategy among the poor households of urban Monrovia (Figure 16).

Figure 16: Coping strategies used by urban poor households in Monrovia



Humanitarian assistance

One of the inquiries included in the survey was to know what types of assistance have been provided to the most vulnerable resident households in urban poor localities of Greater Monrovia. Respondents indicate that minimal humanitarian support reaches the urban poor. The most common humanitarian assistance was free health care at 12 percent followed by supplementary feeding programmes/therapeutic feeding programmes (SFP/TFP) and micro credit (3 percent each). There are no any other types of support given to the affected people.

5.2 Impacts in refugee affected counties of Grand Gedeh, Nimba and Maryland

General socio-economic situation of the study population

Of the 1,079 households (HHs) covered by the survey, half are refugee households and half are residents (with some 22 percent of the HHs hosting refugees). The findings of the survey represent both refugees and rural residents within the three counties.

Table 6: Surveyed households by residence status and county

County		Refugees	Residents Hosting Refugees	Residents not hosting refugees	Total
Grand Gedeh	Count	180	76	104	360
	%	50.0%	21.1%	28.9%	100.0%
Maryland	Count	188	25	146	359
	%	52.4%	7.0%	40.7%	100.0%
Nimba	Count	173	137	50	360
	%	48.1%	38.1%	13.9%	100.0%
Total	Count	541	238	300	1,079
	%	50.1%	22.1%	27.8%	100.0%

The average family size was found to be nine for residents and seven for refugees. The family size is higher than the average of the counties (5-6 members) and is explained by the high numbers of refugee populations hosted by residents. About 50 percent of the resident households and 44 percent of refugee households have 5-10 members. Refugee households have more households headed by women (32 percent) compared to the residents (19 percent). Table 7 presents the range of family members.

Table 7: Household characteristics by county and residency status

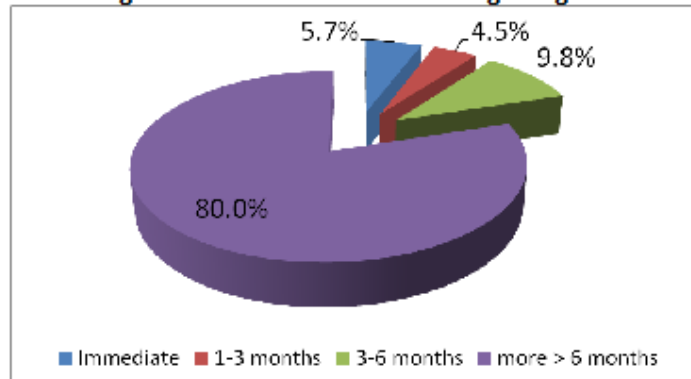
County	Number of member of households									
	Average HH Size		Below 5 members		5-10 members		More than 10 members		Female headed HHs	
	Residents	Refugees	Residents	Refugees	Residents	Refugees	Residents	Refugees	Residents	Refugees
G. Gedeh	9.0	7.9	23.9	36.1	50.0	39.4	26.1	24.4	17.8	26.7
Maryland	8.7	6.5	25.1	44.7	50.9	46.8	24.0	8.5	26.9	37.2
Nimba	9.6	6.1	19.3	47.4	49.2	45.1	31.5	7.5	13.4	31.8
Total	9.0	6.8	22.7	42.7	50.0	43.8	27.4	13.5	19.1	32.0

The refugees began arriving in the last quarter of last year and showed steady growth through April. Some 14 percent arrived before December 2010 and the remaining 86 percent arrived between January and April: 9 percent in January, 18 percent in February, 25 percent in March, and 34 percent in April. Most of the refugees in Grand Gedeh and Nimba counties arrived in April. The survey team was informed that these later refugees were regarded as the former Ivorian President Gbagbo’s supporters.

There was initial delay in the delivery of relief assistance with refugees receiving assistance largely since February 2011. The dominant humanitarian assistance received by refugees is food, (60 percent) followed by nutrition, shelter and water and sanitation health (WASH).

A majority of the refugees (55 percent) are not planning to go back home, though this varies across the hosting counties. Most refugees in Nimba (89 percent) report they are not planning to go back, compared to 51 percent and 26 percent in Maryland and Grand Gedeh respectively. Refugees in Nimba reported higher proportions already cultivating for the coming season and would be reluctant to leave before the harvest. In addition, Nimba refugees report higher proportions receiving humanitarian assistance compared to the other counties. Even those who are anticipating returning home are not planning to go sooner than 6 months, as reported by 80 percent of refugees (Figure 17). This means that most of the refugees will be staying within the hosting counties during the peak period of the lean season which further aggravates the precarious food insecurity situation in those areas.

Figure 17: Timeframe for returning refugees



The assessment shows 70 percent of the residents host between one and three adult refugees and a similar number of children under the age of 15. The average number of refugees hosted by the residents is 6.1 with variations across counties. Grand Gedeh has the highest number of refugees per hosted per family at 7.6 followed by Nimba and Maryland counties at 5.5 and 5.2 refugees per family respectively. About 43 percent of the hosting households are also sharing their food with the refugees.

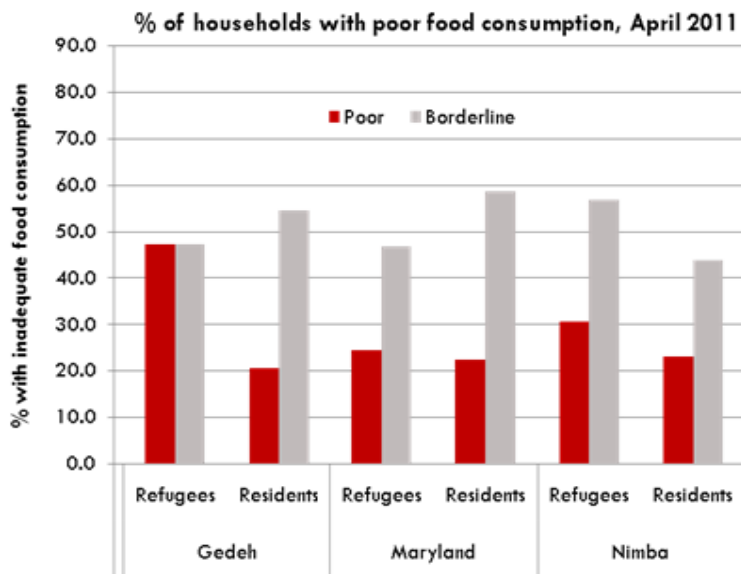
Access to improved water is reportedly better for both the residents (84 percent) and refugees (82 percent). On the other hand, refugees have better access to improved toilet facilities (43 percent) compared to residents (32 percent) with exception of Grand Gedeh County (Table 8).

Table 8: Access to improved water and sanitation facilities by county and residency status

County	% with improved water sources		% with improved toilet facilities	
	Residents	Refugees	Residents	Refugees
Grand Gedeh	90.0	86.1	32.8	24.4
Maryland	87.7	72.9	29.8	58.0
Nimba	75.9	86.1	32.1	45.1
Total	84.4	81.5	31.6	42.7

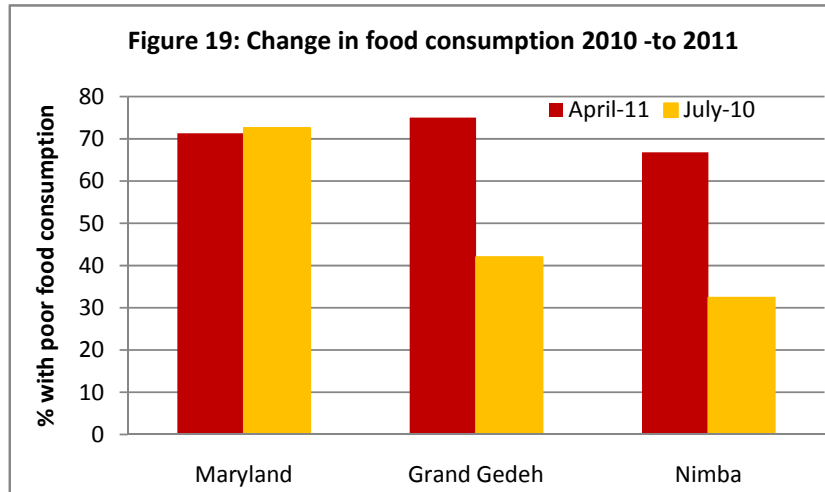
Changes in food consumption

A total of 15 percent of the resident households were found to have poor dietary intake with half of the residents reporting borderline consumption (Figure 18).



On the other hand, 34 percent and 50 percent of the refugees reported poor and borderline food consumption respectively. Refugees in Grand Gedeh report a higher prevalence of poor food consumption compared to other counties.

Figure 19 shows the change in consumption from July 2010 to April 2011 as measured by the food consumption score. It shows that between July 2010 and April 2011, food consumption has declined substantially in all the surveyed areas except in Maryland. The earlier onset of poor dietary intake could be



worsened during the coming lean season. The food insecure households reflected in the food consumption scores are likely to have reported high incidences of income reduction (60 percent), low daily wage rates (below 100 LD), dependency on food purchases, and consuming one meal a day (Table 9).

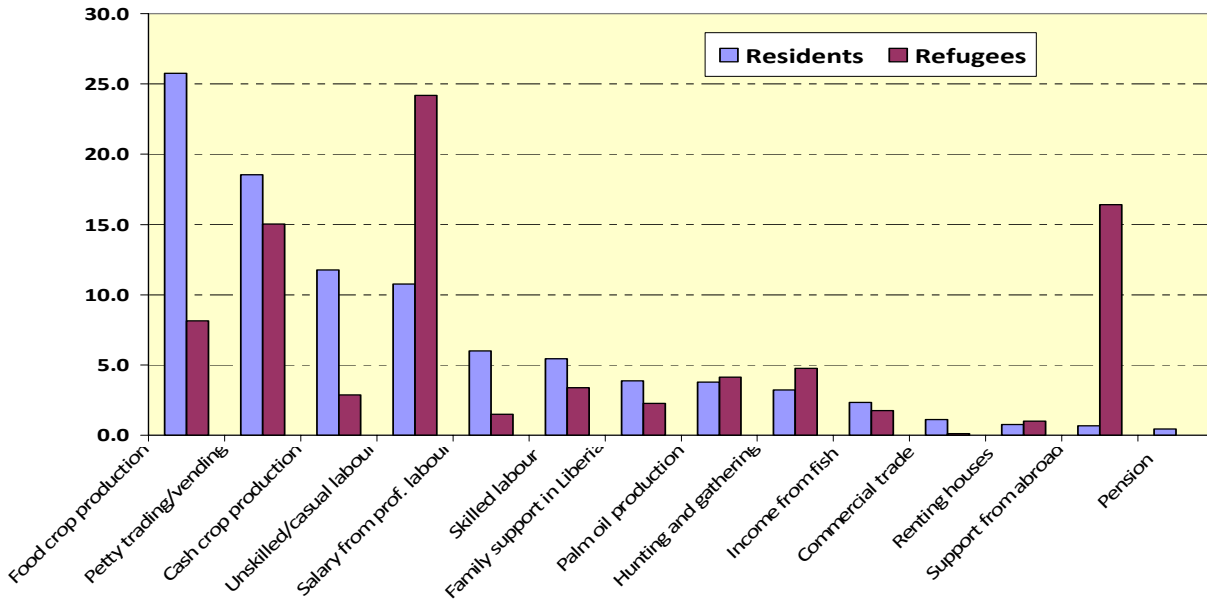
Table 9: Characteristics of households with poor and acceptable dietary intake

Characteristics of households	FCS Groups	
	Poor	Acceptable
Reporting decreased monthly income	60%	47%
% employed during past 3 months	27%	45%
With mean wage rate <100 LD	73%	49%
Female headed HHs	22%	18%
Consuming one meal a day	57%	24%
Dependent on rice purchase	85%	66%
Dependent of rice from own production	10%	32%
Access to markets	59%	73%

Changes in livelihood/income sources

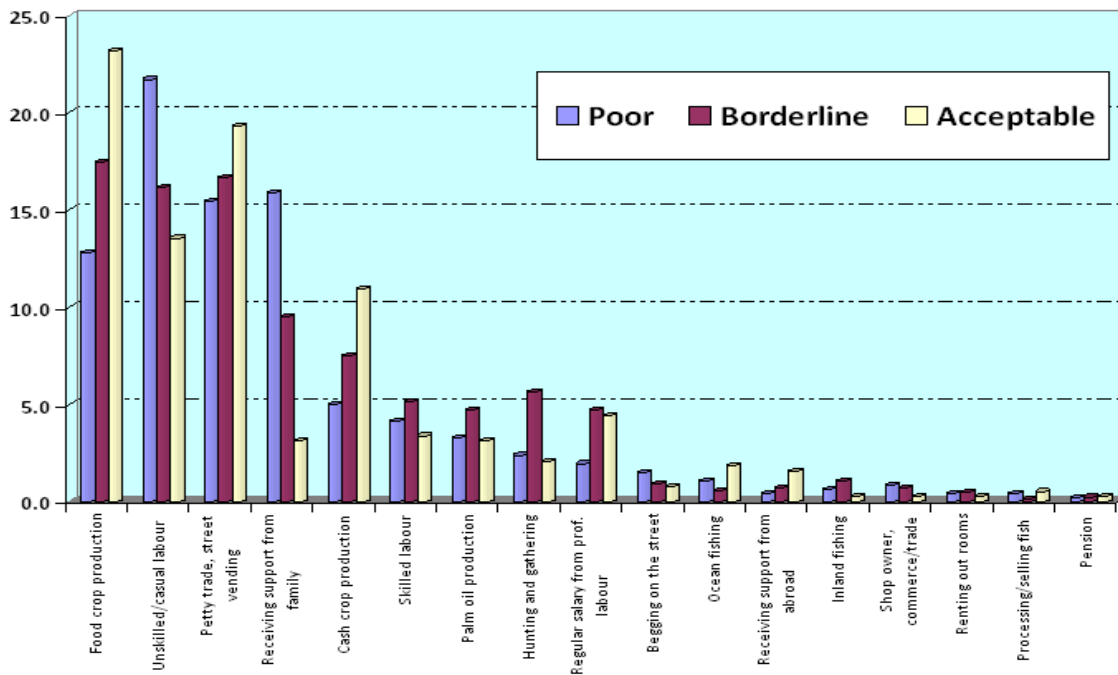
Food crop production, petty trade and cash crop production are three main sources of livelihoods for resident households accounting for about 26 percent, 19 percent and 12 percent, respectively, followed by unskilled/casual labour (11 percent). Petty trading (19 percent), salaried employment (six percent) and skilled work (five percent) are mainly mentioned by urban residents in local cities and towns. On the other hand, the majority of the refugee households depend on unskilled/casual labour (24 percent) and petty trade/street vending (15 percent), social support (16 percent) (see Figure 20 for more details).

Figure 20: Livelihood/income sources of resident and refugee households



Households with borderline dietary intake are mainly engaged in food crop production, unskilled labour, petty trade and support receivers (Figure 21).

Figure 21: Households engaged in different livelihood sources by food consumption groups (%)



The findings indicate low access to income opportunities and low agricultural wages. Only about a third of the households in refugee affected counties have access to agricultural casual labour, with an average daily wage rate of less than \$2USD. Households showing poor food consumption have relatively lower access and low wage rates.

Table 10: Access to casual labour (%) and average wage rate (in LD)

		Access to casual work (%)	Average daily wage rate (LD)
Household status	Refugees	33	112
	Residents	37	129
Food consumption group	Poor	27	114
	Borderline	35	130
	Acceptable	45	132

More than half of the resident households (55 percent) in refugee affected counties indicated that their income has decreased since same time last year. Households with poor consumption scores have suffered from reduced income much more than the other two consumption groups. Only 27 percent of food insecure households (reflected in poor food consumption scores) were able to access agricultural labour. Those in casual work reported an average daily wage rate of 100 LD, lower than Monrovia, with an average of 220LD.

The main reasons of a decrease in income among the refugee affected residents were: lower outputs (29 percent), lower profit (26 percent) and lower wages (12 percent). Refugees mainly report lack of employment opportunities and demographic changes at household level as the main reasons for reduced income.

Agricultural production

Traditionally food crop production is the main livelihood source for residents in these counties. The assessment found that 65 percent of the resident households cultivated last year. For the refugees, nine percent report having cultivated in the previous season.

The residents cultivated an average of five tins of seed rice (varying from 3 tins in Grand Gedeh to 7 tins in Nimba County). A tin of seed rice is usually enough to cultivate one acre of land. This implies an average of 1.5 hectares of land cultivated in the previous season. The amount of acreage under cultivation this current season will be similar to last season, with exception of Maryland, which anticipates a reduction (Table 11). It is notable that refugees are planning to cultivate in the current season although at lower acreage than the residents.

Table 11: Average number of tins used last season and upcoming season

County Name	Avg. number of tins of seed rice used - Last Season		Avg. number of tins of seed rice to be used - Upcoming Season	
	Residents	Refugees	Residents	Refugees
Grand Gedeh	3	3	4	5
Maryland	5	5	4	4
Nimba	7	0	7	5

The main sources of seed rice during last season were: purchases (57 percent) and seeds from previous harvest (31 percent). The information is presented in Table 12. Households report that they will rely on the same sources of seed rice in the upcoming.

Table 12: Main source of rice seeds used last season

County Name	Main source of RICE seeds used - Last Season				
	Own harvest	Purchased from neighbors	Purchased from market	External assistance	Other
Grand Gedeh	25%	27%	16%	29%	4%
Maryland	18%	5%	78%	-	-
Nimba	51%	33%	14%	1%	1%

Cereal stocks

Residents report limited availability of rice stocks that may last for the next 2 months (ending in June when the effects of lean season start to be felt). The refugees however, do not have stocks if any; whatever some of them have can only last for about 10 days. Most of the residents will then heavily rely on the substitute staple, cassava which could last for between 3 and 4 months, meaning likely to completely run out any cereal stock by July-August (see Table 13).

Table 13: Number of months rice and cassava stocks may last for by county and residency status

County Name	Number of months current Rice stock lasts for		Number of months current cassava stock lasts for	
	Residents	Refugees	Residents	Refugees
Grand Gedeh	2	0	4	5
Maryland	1	1	4	0
Nimba	2	1	4	0

Changes in food and non-food expenditures

Households' shares of expenditure on food increased from 53 percent in 2010 to 59 percent at the time of the assessment. The patterns in the refugee affected counties are similar to those previously presented for urban Monrovia with increased expenditures noted on food items than on non-food items as shown in Figure 22.

Both the resident households and refugees were asked about their access to credits and the main reason why they are taking loans. In total, about a half (46 percent) of the resident households had access to credit in refugee affected counties. The main reason for taking credits were: buy food (40 percent). Others included meeting health expenses and other family obligations. Half of the respondents noted an increase in amount of credit in the last one year—mainly to respond to their food needs (Table 14). Refugees reported less access to credit facilities at only 25 percent with an overwhelming 95 percent reporting food purchase as the main reason to acquiring credit.

Figure 22: Changes in expenditure for food and non-food items

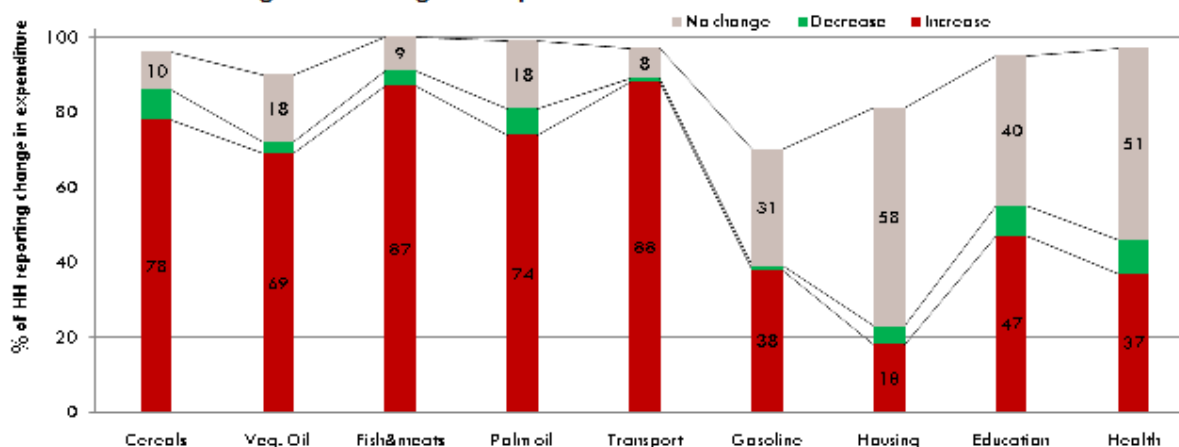


Table 14: Access to credit for resident households

County Name	HHs who have taken credit	Buying food as a reason for crediting	HHs reporting increased amount of credit in the last one year
Grand Gedeh	40%	56%	54%
Maryland	29%	60%	46%
Nimba	56%	44%	58%
Total	46%	40%	50%

**Jan-Apr 2010 compared with Jan-Apr 2011*

Coping strategies

Both the residents and refugees are increasingly dependent on adverse coping strategies including reduced consumption, borrowing and skipping a day's meal. Those with poor dietary intake and refugees rely more on adverse coping strategies such as skipping meals for the entire day. Some residents of Nimba and Grand Gedeh Counties reported intake of seed rice as a coping mechanism. Table 15 shows the different types of coping strategies used in the refugees affected counties.

Table 15: Coping mechanisms used by households

		Coping mechanisms used by households									
	Mean CSI	Less preferred foods	Borrow food	Limit meal size	Restrict meal intake	Reduce number of meals	Purchase on credit	Skip day's meal	Increase wild food intake	Eat seed stocks	
Household status	16 Refugees	77%	53%	70%	48%	64%	25%	23%	15%	2%	
	11 Residents	70%	32%	64%	37%	62%	20%	10%	14%	6%	
Food consumption	16 Poor	75%	54%	69%	55%	70%	26%	20%	18%	4%	
	14 Borderline	78%	40%	72%	41%	68%	21%	15%	13%	3%	
	9 Acceptable	61%	26%	53%	27%	48%	20%	9%	12%	7%	

Humanitarian assistance

Refugee households in all the three counties have received some assistance during the six months since their arrival. The bulk of the assistance is mainly food aid followed by free health and supplementary feeding or therapeutic feeding programmes (SFP/TFP). On the other hand, resident households have also benefited humanitarian support, mainly school feeding and free health assistance. Respondents perceive the humanitarian support as grossly inadequate and coming too late in all the three counties.

Table 16: Percentage of households who have received humanitarian assistance

County	Refugee food	School feeding	SFP/ TFP	Free health	Micro credit	Seeds/ ferti.	Agric. Tools	Other
Refugees in Grand Gedeh	64	6	24	58	2	1	1	3
Residents in Grand Gedeh	9	39	9	63	0	4	4	0
Refugees in Maryland	52	1	2	59	1	0	0	28
Residents in Maryland	2	36	3	68	1	1	2	11
Refugees in Nimba	57	7	15	83	0	0	1	5
Residents in Nimba	27	45	13	76	5	2	5	2

Populations at Risk

Table 17 shows the estimated numbers of households at risk in the refugee-affected counties. The exact number of refugee households is still to be determined during the upcoming WFP/UNHCR Joint Assessment Mission (JAM). For resident households, the average family size from the survey was used together with the projected population figures for the year 2011. Households with poor dietary intake and those with borderline food consumption scores (FCS) were estimated.

Table 17: Estimated number of households at risk by FCS groups, refugee areas

County	District	Pop_2011	FCSG (%)		FCSG (Estimated Number of HHs)		Total HHs
			Poor	Borderline	Poor	Borderline	
Grand Gedeh	Gbarzon	73032	20.6	54.4	1,672	4,414	6,000
	Tchien	34053	20.6	54.4	779	2,058	2,800
Maryland	Harper	40494	22.2	58.5	999	2,632	3,600
Nimba	Gbehlageh	34266	23	43.9	876	1,671	2,600
	Twan River	39914	23	43.9	1,020	1,947	3,000
	Zoegeh	31280	23	43.9	799	1,526	2,300
TOTAL					6,145*	14,249*	20,300

5.3 Impacts on rural households in Bomi and Lofa Counties

General socio-economic situation of the study population

Bomi and Lofa Counties have not been affected by the influx of refugees. Whereas Bomi is chronically food insecure, Lofa has recovered substantially from transitory food insecurity and is on its way to sustainable development. The survey was designed to provide the contrast and explore how these two counties might have been affected by the high commodity prices.

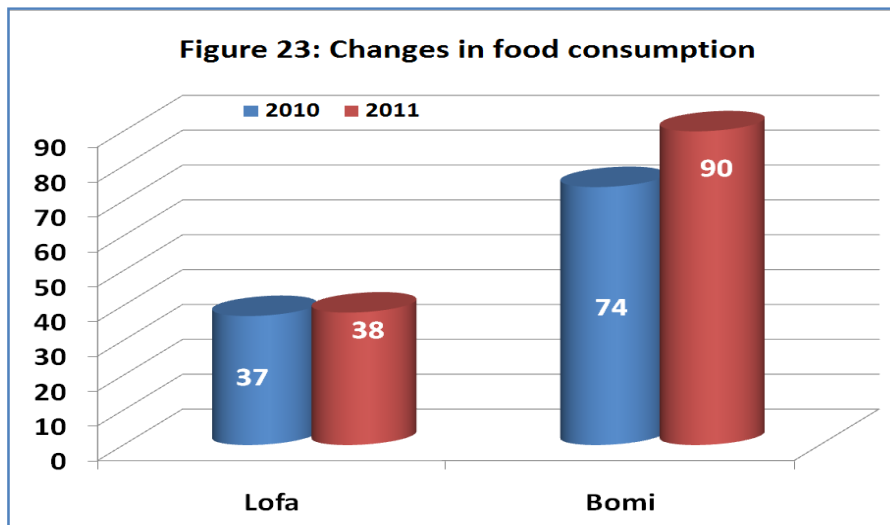
The average family size is 5.8 in Bomi and 6.8 in Lofa counties. Female-headed households are fewer in Bomi (9 percent) compared to Lofa County (23 percent).

The proportion of households with access to improved water sources is relatively low in both counties (51 percent for Bomi and 53 percent for Lofa), when compared to the other four counties covered by this assessment. Access to improved sanitation/toilets is even much lower: 84 percent in Bomi and 76 percent in Lofa indicated no access to toilet facilities. As such, households relieve themselves in bushes.

Changes in food consumption

Seven percent of households in Bomi have poor food consumption scores and up to 80 percent have borderline food consumption. In Lofa County, there were no households with poor food consumption, while those with borderline dietary intake are estimated at 38 percent. Compared to last year, consumption levels in Lofa seem to have improved. The survey was undertaken prior to the lean season, and as expected, Lofa, with significant domestic production of food crops, still had stocks to cushion them against food insecurity. On the other hand, production in Bomi County is minimal and not enough to withstand the lean season. Bomi populations therefore largely depend on market sources for food.

Figure 23: Changes in Food consumption



Changes in Livelihood sources/income sources

Food crop, palm oil and cash crop production are the main sources of livelihoods sources for residents of Bomi and Lofa Counties. In Lofa, these livelihood incomes account for 33 percent, 18 percent and 15 percent respectively. The proportions follow similar trends in Bomi with 26 percent, 25 percent and 12 percent respectively. The refugee affected counties, on the other hand, reported significant levels of petty trading, with palm oil production playing a less prominent role. It is notable from the market analysis that smallholder households involved in palm oil production enjoy improved terms of trade compared to the previous years, thus cushioning them against adverse impacts of food insecurity.

Table 18: Livelihood/income sources for Bomi and Lofa residents

County	Bomi	Lofa	Total
Food crop production	26	33	30
Palm oil production	25	18	22
Cash crop production	12	15	13
Petty trading/vending	6	12	9
Unskilled/casual labour	6	8	7
Skilled labour	4	2	3
Hunting and gathering	1	5	3
Salary from prof. labour	2	3	2
Support from family in Liberia	4	1	2
Income from fish	2	1	1
Commercial trade	0	1	1
Support from abroad	0	0	0
Renting houses	0.0	0.3	0.1

As a majority of the residents in these two counties are involved in farm related production, it is not surprising that they are the most food insecure in Bomi County.

Agricultural production

Compared to other counties, Lofa reports the highest proportions of households with access to farm land at 94 percent followed by Bomi at 92 percent. Crop production was reported as the main source of livelihood for many rural resident households both in Lofa (66 percent) and Bomi (63 percent). More than three-quarters (76 percent) of residents in Lofa cultivated their farmland in the last season

On average, households planted 2.5 hectares (measured by tins of seed rice planted) in the previous season (higher than was reported in refugee affected counties). While farmers in Lofa reported that they will increase their acreage under cultivation in the upcoming seasons, those in Bomi are likely to cultivate less.

Framers in Lofa mainly use seed stocks from previous harvests for their cultivation, complemented with limited purchases of seed rice (10 percent). On the other hand, farmers in Bomi mainly purchase seed stocks, but with the rising costs of living, their income levels

may only allow them to buy lesser quantities for cultivation than was the case in 2010 (Table 19 and Table 20).

Table 19: Main sources of rice seeds used during last season, Bomi and Lofa

County Name	Main source of RICE seeds used - Last Season				
	Own harvest	Purchased from neighbors	Purchased from market	External assistance	Other
Bomi	20%	24%	49%	4%	4%
Lofa	34%	35%	26%	1%	4.4%
Total	34%	29%	27%	7%	3%

Table 20: Main sources of rice seeds used during upcoming season, Bomi and Lofa

County Name	Main source of RICE seeds to be used - Upcoming Season				
	From previous harvest	Purchased from neighbors	Purchased from market	External assistance	Other
Bomi	5%	13%	79%	1%	2%
Lofa	79%	10%	9%	2%	0%
Total	39%	19%	34%	4%	5%

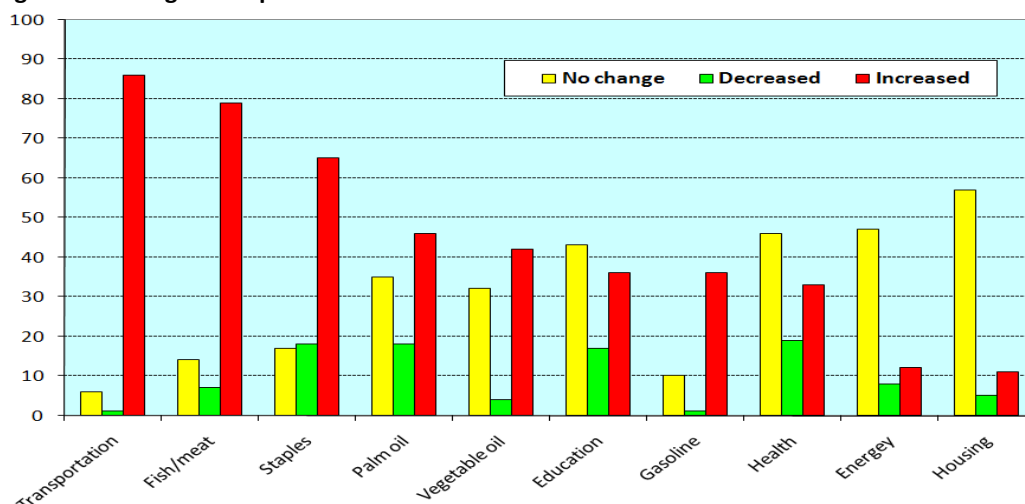
Cereal stocks

The current rice stock in Lofa County may only take them for the next 2 -3 months while Bomi no longer has any stock. Lofa has enough cassava to last a further four months, meaning a gap exists between August and September.

Changes in food and non-food expenditures

As with the rest of the surveyed populations, households in Lofa and Bomi report increased expenditures on food items. Lofa residents report significantly less increases in food expenditure (less than 50 percent with exception of meat products) compared to the rest of Liberia that noted huge perceived increases ranging from 85 to 97 percent. Instead, the rise in expenditure was more pronounced on non-food items.

Figure 24: Changes in expenditure of essential commodities and services in Bomi and Lofa Counties



Forty-six percent of the households have access to credit. The use of credit is however very different in the two counties. In Lofa, families rarely took credit to purchase food. Instead, the credit was mainly used to acquire other basic necessities.

Table 21: Access to credit for resident households

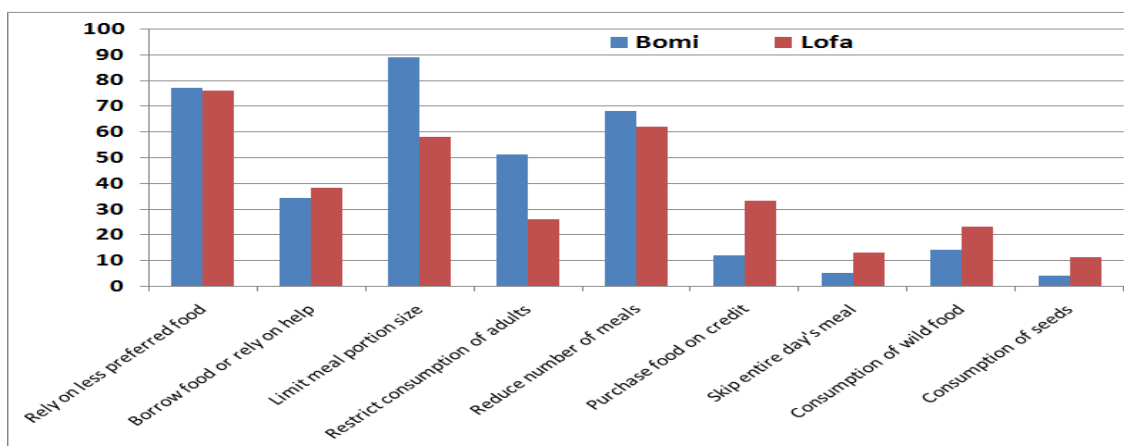
County Name	HHs who have taken credit	Buying food as a reason for crediting	HHs reporting increased amount of credit in the last one year
Bomi	47%	57%	38%
Lofa	78%	14%	53%
Total	46%	40%	50%

**Jan-Apr 2010 compared with Jan-Apr 2011*

Coping strategies

As shown in Figure 25, more households in Bomi County use diet-related coping mechanisms than those in Lofa County.

Figure 25: Coping strategies in Bomi and Lofa Counties



Humanitarian assistance

As with other residents of Liberia, the most common humanitarian assistance in Bomi and Lofa counties are in school feeding (78 percent and 42 percent respectively) and free health care (88 percent and 42 percent respectively). Lofa County also reports support of agricultural tools and inputs (15 percent).

The survey team calculated the households at risk that may require support for a period between 2 months in Lofa and 4-5 months in Bomi County as presented in Table 22.

Table 22: Estimated number of households at risk by FCS groups, Bomi and Lofa

County	District	Pop_2011	FCSG (%)		FCSG (Estimated Number of HHs)		
			Poor	Borderline	Poor	Borderline	Total
Bomi	Suehen	18644	7.2	82.8	231	2,662	3,000
	Mecca						
Lofa	Foya	78074	0	37.8	0	4,340	4,000
	Voinjama	45570	0	37.8	0	2,533	2,500
TOTAL					231	9,535	9,500

6. RESPONSE ANALYSIS

In 2007-2008, a number of actions were adopted by the Government of Liberia to mitigate adverse effects of dramatic global price increases on the population. The price rise impacted access to food by the most vulnerable populations, including women and children whose nutritional status was threatened by changes in dietary patterns.²⁰

Actions taken by the Government in 2008 included suspension of consumer tax (2.10 USD) on a 100 pound bag of rice and the suspension of tariffs on agricultural equipment, materials and supplies through the end of 2008. Cash was made available from the rice stabilization fund to purchase and distribute local seed rice to farmers and to buy paddy rice to be milled for sale. A nationwide address by the President drew attention to the rising food prices and need for Liberians to return to the soil.

Friendly governments and international organizations were engaged to tap into resources to meet the immediate and long-term challenges of the global food prices. An institutional framework was developed to monitor food security and nutrition, and the Liberia/ UN Joint Programme was formulated to implement safety nets.

Since the start of 2011, global prices of food commodities and fuel have been consistently rising, which is likely to impact the people of Liberia, including thousands of refugees from Cote d'Ivoire. The refugees arriving in November 2010 during the rice harvest posed additional stress on limited resources in counties with fragile food security. Already the majority of families rely heavily on imports to meet food consumption requirements, making the country highly vulnerable to price shocks. Domestic production of staples can barely meet one third of the consumption requirements of the population.

Scenarios on foreseen impacts

Likely scenario: Supply of food, particularly rice, is maintained by the Government and its partners through production, aid and importation of sufficient quantities to accommodate the current refugee population. However, increases in transport costs will impact food prices, especially rice during the rainy season. But the rice harvest offsets prices in the rural areas, which helps to reduce vulnerability of refugee affected populations. The urban poor continue to bear the brunt of the rising prices.

Worst scenario: Imported rice stocked for end of September 2011 is depleted and the Ministry of Commerce and Industry and main importers fail to maintain agreed wholesale price of rice. There is shortage of rice and more refugees arrive. Food gap widens because refugees do not indicate a willingness to return home immediately. The food crisis becomes a political crisis.

Intervention Objectives

The Government's strategy is to i) ensure adequate supply, ii) increase production and iii) protect vulnerable groups. Based on this, the following objectives will be pursued:

²⁰ High Food Price (HFP) Impact Assessment, 2008.

- improve the food pipeline situation
- increase local food production
- discourage food exports
- encourage dietary diversification
- improve market performance
- create income opportunities

Government Interventions

To ensure coordination and efficiency, the Government will focus on strengthening existing and planned interventions, taking into consideration the refugee population:

Immediate to Short-term (July to December 2011)

- Continue suspension of tariff on wholesale price of rice
- Restrict export of rice, palm oil and gari
- Increase imported rice stock for 6 months, before onset of the rainy season
- Support urban agriculture
- Engage friendly governments and international organizations for support

Medium to long-term (2012 – 2013)

- Implement LASIP to boost agriculture production
- Invest in local rice purchase and seed bank project
- Build food safety net systems
- Create emergency grain reserve through donations and government allocations etc.
- Encourage pre-positioning of imported stocks outside Monrovia

Partner Interventions

Immediate to Short-term (July to December 2011)

- Scale up food assistance to support urban poor and refugee-affected populations
- Strengthen existing food/ cash safety nets e.g., food for work (FFW), cash for work (CFW), school feeding and nutrition
- Support urban agriculture production through inputs distribution

Medium to long-term (2012 – 2013)

- Support LASIP to boost agriculture production
- Continue support to Government of Liberia/UN Joint Programme
- Support employment
- Support nutrition programmes.

Operational Environment

<p>Strengths</p> <ul style="list-style-type: none"> • Government strategy on response to food crisis in place • Operational coordination mechanisms • Strong UN and NGO presence and capacity • Experience in urban and rural programming, both for high food prices and refugee influxes • Good knowledge base on household food security in urban and rural areas • Better urban banking capacity • Availability of stocks in markets 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Low food aid stocks. • No formal transfer mechanism • Weak rural market performance and integration • Poor rural infrastructure • Limited rural banking infrastructure
<p>Opportunities</p> <ul style="list-style-type: none"> • Strong government backing for a response to high prices • Existence of operational plans to respond to food crisis in urban Monrovia and refugee affected districts • National price monitoring in place • UN and Government coordination forum • Agriculture Investment Plan in place 	<p>Threats</p> <ul style="list-style-type: none"> • Increasing inflation, making cash programs problematic. • Supply crunch, a possibility during rainy season problematic for market based responses. • National election hype • Procurement of food internationally is difficult • Lean season has already started; response will have to be rolled out quickly. • Rising fuel and therewith transportation costs • Increasing smuggling of rice to neighbouring countries

7. CONCLUSION AND RECOMMENDATIONS

Conclusion: Liberia's Food Security prospects

- Global contexts, such as the Arab re-awakening, China's possible reduction of rice export, and the ongoing drought in Europe that may reduce food exports are likely to continue the mounting price pressures on Liberia's food market;
- Staple food prices in Liberia will continue to increase due to concurrent increases in fuel prices, continued pressure from refugees for food and other services, and the onset of lean season;
- Household food security is likely to deteriorate sharply, unless immediate mitigation measures are put in place, due to continued rises in costs of transport, restricted movement of commodities, and incidences of diseases further exacerbated by the effects of rainy season;
- The urban poor will continue to bear the brunt of the rising prices;
- Additional demands for food and services will likely to maintain the present pressure on local prices in refugee hosting counties. Refugees indicated that they will not return back any time soon.

Recommendations for unmet needs—Response options

Short term responses

- Initiate immediate measures to further increase stock levels, especially before the onset of rains, e.g. encouraging importers to increase stock levels, pre-positioning food stocks to serve as emergency grain reserve, through making government budgetary provision or encouraging donations from bi-lateral partners;
- Encourage pre-positioning of imported stocks outside Monrovia using the trader distribution network with a specific focus on food emergency management and response capacity at policy and institutional levels;
- Expand food assistance host communities in the three counties currently hosting refugees to cover some 18,000-20,000 families with poor dietary intake for six months, with general food distribution particularly during critical months of July-September, subject to revision of the numbers and duration through a follow up assessment in October 2011;
- Expand ongoing employment /production-based programmes such as rural based productive safety nets, provision of agricultural inputs, etc. Using vulnerability criteria, cover an estimated 17,000-25,000 families between July and December 2011 and shift to strictly productive safety nets from January 2012;
- Expand ongoing production-based programmes to increase rice /cassava production and diversified cropping, particularly focusing on productive safety nets;
- Target an estimated 15,000 to 22,000 urban poor and per-urban families around Monrovia through cash/food/voucher system from six months beginning July 2011 as urban based social safety nets (review assessment necessary to determine duration and numbers);
- Strengthen food security and market monitoring systems.

Medium/long term actions (2011/2)

- Continue investments in the food crop sector to decrease Liberia's dependency on food imports and enhance the agricultural value chain.
- 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.

ANNEX I: Overview of existing interventions

Specific Outputs	Partners	Activities
Support for Agriculture Sector Rehabilitation		
Support to vulnerable groups in rice production and productivity; agro-enterprise development in rice and cassava; saving and internal lending communities	CRS	10,000 farmers
Food Security through Commercialization of Agriculture (FSCA)	MOA/FAO	2,700 direct beneficiaries (16200 indirect beneficiaries)
Home Gardening pilot project	ACF	200 households
EC Food Security Facility		6,000 beneficiaries include 350 farmer
Livelihood Asset Rehabilitation	ADRA	1,700 farmers
Building capacity in food security through increased food production in rural communities	AFRICARE	2,520 women
Strengthening farmer association and youth cooperative development	CHILDFUND	5,250 youth (for youth coop development) 15,000 smallholders (Farmer Associations)
IFAD project	MOA	10,080 farmers

Specific Outputs	Partners	Activities
Support for Access to Markets and Factors of Production		
Access to means of production, productive assets, and small-scale mechanisation broadened + secured in the remaining districts - FAO	MOA/CARI, LPMC, MIA FAO/UNDP/ WFP /UNMIL / WB	Ensure supply of quality planting materials (60 kg/farmer) + production-related inputs for 1,000 farmers per remaining district (52) total = 3,100 MT of improved seed Y2=20 districts, Y3= 22 districts. - Expand IPPM programme in 42 districts; - Expand production of agro-machines incl. power tillers and small tractors at five centres

Specific Outputs	Partners	Activities
		- Capacity building for agriculture coordinators and 179 farm-based organisations (FBO) covering 27,000 farmers
Protein-rich food sources and production increased -FAO	MOA, MOPW FAO/ WFP/ UNMIL/ WB	- Establishment of 50 poultry houses in 50 districts, - Restocking small ruminants in 20 districts - Restocking 60 fish ponds in 30 districts - Identification and assessment of areas for intervention
Agricultural productivity enhanced to raise production primarily through increasing yields and reduced post-harvest losses - WB	MOA, CARI FAO Agricultural Infrastructure Development Project (IDA H3270) International Institute for Tropical Agriculture (IITA) WARDA (Benin)	- Scaling up existing components of the AIDP in three counties – Lofa, Bong and Nimba; - Seeking opportunities for quick impacts through post-harvest infrastructure; - Helping farmers to concentrate on the 2009 and 2010 planting seasons; - Capacity building of CARI and country-level extension system Target = 150,000 small farmers over the three years
Post-harvest processing and storage services improved - FAO	MOA, MOPW, MOHSW (QC), MOGD FAO / UNDP / UNOPS / WFP / UNMIL	- Establish community-based technology-transfer centres (TTC) including storage in the remaining 32 districts – Y2= 20, Y3= 12; - Expand local fabrication of agro-processing equipment from the current two TTC (in Tubmanburg, Zwedru) to five TTC (new – Lofa, Nimba, River Cess)
Storage buildings improved - UNDP	:	- GOL selection of sites for TTC incl. warehouses; - Construction of 32 TTC incl. warehouses, - Install + commission food

Specific Outputs	Partners	Activities
		processing equipment (by FAO), - Training in mgmt and maintenance of facilities (by FAO)
<p>Agriculture related, employment-intensive schemes with special focus on women and youth supported - WFP</p> <hr/> <p>Income support provided to vulnerable households in rural and urban areas through demand-driven community infrastructure using local labour - WB</p>	<p>MOL, MOA, MYS</p> <p>WFP/FAO/UNDP/UNMIL/WB</p> <hr/> <p>Liberia Agency for Community empowerment (LACE)</p> <p>Community Empowerment Project II (CEP II)</p>	<p>- Provide 6,360 MT of food to support food-for-work activities in agriculture-related infrastructure and skills training for 40,000 youth and community dwellers per year</p> <hr/> <p>- Prepare annex to existing LACE manual on Work Employment Programme Guidelines; - Hire a Head of Work Employment Programme - Organise and hold workshop on labour-intensive public works; - Identify local priority infrastructure; - Implement project works</p> <p>Target is to create 533,000 person-days temporary jobs in Years Two and Three</p>
<p>Agricultural market facilities at county level improved - UNDP</p>		<p>- Local selection of sites for rural markets; - Construction of rural markets –Y2= 15, Y3= 15; - Install + commission services; - Training LMA in mgmt and maintenance of facilities</p>
<p>Farm-to-market (FTM) roads + bridges rehabilitated using a labour-based approach - UNDP</p>	<p>MOA, MOPW, LMA, MCI, MOGD</p> <p>UNDP / UNOPS / WFP/ FAO/ UNMIL</p>	<p>- Rehabilitate and/or reconstruct 1,350 km of FTM roads incl. bridges in various counties - Y2= 600 km, Y3= 750 km</p>
<p>Local procurement initiative at county level initiated - WFP</p>		<p>- Purchase of food (rice/farina) for WFP school feeding programme - Conduct training in business and marketing skills (including packaging, storage, quality control, negotiating skills)</p>

Specific Outputs	Partners	Activities
		- Monitoring of the procurement and distribution process
Rehabilitation of micro-dams in priority districts to enhance lowland rice production -FAO	MOA, MOPW, EPA FAO / UNMIL	- Assess damaged dams (target = 60, over three years) nationwide, - Establish priority list - Prepare cost estimates - Rehabilitate prioritised dams – Y2 = 27, Y3= 27
Support for Access to Basic Services and Safety Nets		
Access to quality education at primary level improved by school feeding WFP	MOE,MOA WFP/UNDP/UNICEF/ UNMIL/WB NGOs (local + int'l)	Provide 20,912 MT of food commodities as hot meals for pre- and primary school children to 300,000 children in Year Two and to 250,000 children in Year Three. Provide 4,716 MT of food as take-home rations for 12,500 girls in Year Two and for 10,000 girls in Year Three.
Access to quality primary education improved by targeting PTAs of regular primary and ALP schools - UNICEF	MOE, MOA WFP / UNDP / UNICEF / WB / UNMIL NGOs (local + int'l)	- Social mobilization of Parent Teachers Associations/ School Mgmt Committees for increased understanding and commitment to school meals; - Production of educational materials for use by peer educators to improve understanding and adherence to school feeding programmes and strengthen community participation in programme implementation; - Support MOE in the publication and dissemination of PTA manual; - Provide support to CEOs / DEOs for monitoring and supervision through school visits
Access to quality education at primary level improved through school gardens programme	MOE, MOA WFP / UNDP / UNICEF / WB /	- Initiate pilot projects of 2 schools in each of the 15 counties; in Year One - Train agriculture instructors; - Training of school teachers;

Specific Outputs	Partners	Activities
- FAO	UNMIL NGOs (local + int'l)	- Distribute materials and implement to p/p; - Evaluate pilot projects; - Scale up in Year Two to 3 new schools in all 15 counties; - Scale up in Year Three to 4 new schools in all 15 counties; Target: (9 schools x15 counties) = 135 schools Target: (135 schools x 300 pupils)= 40,500 pupils
Access to safe water and sanitation increased through FS&N initiatives - UNICEF	MOHSW, MOPW, UNICEF / UNDP / UNMIL	- Provide WATSAN support for 45 – 60 schools across the country in 500 communities reaching 250,000 people; - Facilitate the process of community based maintenance of the WATSAN activities through sensitization and awareness raising; - Support community dialogue with targeted populations on best practices against risky hygiene behavior
Capacity to deliver a cash transfer programme for vulnerable groups, including pilot programme for vulnerable families - UNICEF	MOHSW, MOGD, MPEA UNICEF/ WFP/ UNDP/ UNHCR/ UNIFEM/ UNFPA/ /UNMIL	- Capacity building of government officials on delivery of cash for vulnerable families by MOHSW; - Development of a government cash transfer pilot programme; - Exchange visit to Ghana; - Implement pilot programme
Access to health services increased - WHO	MOHSW WHO/ UNICEF /UNMIL / WFP	- Provision: Therapeutic Feeding guidelines - Training of trainers - Prepare std package of materials for mgmt of severe acute malnutrition - Monitor implementation
ENA introduced and operational in 130 facilities in three years UNICEF	MOHSW, MOE, MOA, MOGD, MIA, MICAT, UNICEF/ WHO/ WFP	- Train health and community workers (8 x 130) in promotion of infant and young child feeding and in delivery of ENA; - Develop and implement strategy for

Specific Outputs	Partners	Activities
	<p>USAID</p> <p>NGOs (local + int'l)</p>	<p>provision of micronutrient supplements at community and facility level;</p> <ul style="list-style-type: none"> - Support community based growth monitoring and promotion - Support management of severe (2,000 no.) and moderate (12,000 no.) malnutrition at community and facility level, targeting yearly: <ul style="list-style-type: none"> - 175,000 children aged between 6-11 months, with Vitamin A, at facility level, - 175,000 pregnant women, with Iron and Folic Acid, at facility level, - 175,000 lactating mothers, with Vitamin A, at facility level, - 630,000 children aged between 6 – 59 months with twice-yearly Vitamin A and de-worming tablets, at community level
<p>Support management of acutely malnourished children and pregnant and lactating women at facilities and at community level</p> <p>- WFP</p>	<p>MOHSW, MIA, MOGD</p> <p>UNICEF/ WHO/ WFP / WB</p> <p>ECHO</p>	<ul style="list-style-type: none"> - Provide food support for management of severe + moderate acute malnutrition targeting 24,000 children under five; - Provide food support for 24,000 pregnant and lactating women Provide food support for 9,000 PLWHAs and TB patients attending treatment
<p>Standard Community Therapeutic Care (CTC) approach developed and disseminated</p> <p>- WHO</p>	<p>MOHSW, MIA,</p> <p>UNICEF/ WHO/ WFP NGOs (local + int'l)</p>	<ul style="list-style-type: none"> - Review and adapt CTC Field Manual to national context - Print and distribute
<p>Standard Community Therapeutic Care (CTC) approach operationalised</p> <p>- UNICEF</p>	<p>MOHSW, MIA,</p> <p>UNICEF/ WHO/ WFP NGOs (local + int'l)</p>	<ul style="list-style-type: none"> - Carry out training of trainers (TOT) - Extend support and advice to programme roll-out
<p>Information and skills needed to influence behavioural change towards</p>	<p>MOHSW, MOE, MOA, MIA, MICAT,</p>	<ul style="list-style-type: none"> - Develop BCC strategy, - Develop BCC materials and tools, - Provide training,

Specific Outputs	Partners	Activities
child and maternal nutrition including diversifying diets in Liberia identified, Behavioural Change & Communication (BCC) package developed and implemented, facility and community-based service providers trained in nutrition counselling - UNICEF	UNICEF / WHO/ WFP /UNFPA NGOs (local + int'l): AFRICARE, CRS, MTI	- Undertake community-based BCC activities
Support for National Leadership and Coordination		
The FS&N Coordination Council, Technical Committee (TC) and Secretariat instituted and operationalised plus capacity building - FAO	MOA, MOHSW, MPEA FAO / UNDP/ UNICEF/ UNHCR / WFP / WHO / WB	- Provide experts to work with FSNCC and TC as required, - Facilitate ongoing support for FSNCC secretariat, - Facilitate work of TC including updating of Action Plan
FS&N monitoring system (FSNMS) established and operationalised, including capacity building - WFP	MOA, MPEA WFP / FAO / UNICEF/ UNHCR / UNDP/ UNMIL	- Establish national institutional framework for Food Security and Nutrition monitoring system - Develop and pilot methodology - Support data collection (household, nutrition and market surveillance) activities in Greater Monrovia and 15 counties - Capacity building for FSN analysis and reporting
Predictable and stable food imports and national production monitored - FAO		- Undertake annual crop assessment + food balance sheet; - Support monthly reports on food availability and prices
Human capacities at key ministries increased to implement FS&N strategy, coordinated with wider capacity building initiatives - FAO	MOA, MOHSW, MPEA, MCI WFP / WHO / UNICEF/ UNMIL / WB USAID	- Undertake capacity assessment and Training Needs Analysis in 4 ministries and 15 counties - Conduct training with national + int'l experts for 5 staff /ministry and 20 staff/county under two workshops/year held in five regional centres (10 workshops in total for 320

Specific Outputs	Partners	Activities
		staff) - Provide reinforcement to embed knowledge and skills in coordination with other partners
Programme Coordination and Management -UNDP	MOA, MPEA WFP / FAO / UNICEF/ UNHCR / UNMIL	- Programme coordinator and assistant for coordination, quality assurance and monitoring of implementation - Management and administration
Support for the Development of FS&N-related Policy, Legislation and Guidelines		
Nutrition Policy framework and implementation strategy developed - UNICEF	MOHSW WHO / UNICEF / WFP	- Undertake situation analysis - Policy outline + first draft after consultation - Stakeholder review + revision; finalize
Food and Agriculture Policy and implementation strategy framework developed - FAO	MOA FAO / WFP / WB USAID	- Develop sub-sector policies – fisheries, livestock, crop production; - Support implementation of policy (projects, etc)
Law and policy framework developed to deliver social safety nets for vulnerable groups - UNICEF	MOHSW UNICEF /FAO /WFP / UNDP / UNMIL / WB	- Undertake situation analysis - Policy outline + first draft after consultation - stakeholder review + revision; finalize
.Communal agricultural property resources safeguarded - FAO	Land Commission FAO / UNMIL/ WB	- Support to the new Land Commission; - Land tenure guidelines - support for capacity building of LC personnel

ANNEX II

TOR FOR EMERGENCY FOOD SECURITY AND MARKET ASSESSMENTS

Background

The FAO food price index reached a record level in February 2011 surpassing the 2008 peak, driven by increases in the prices of wheat (75%), maize (73%), rice (17%) vegetable oil (50%) and sugar (73%) since June 2010. Although rice prices have increased less than other cereals, the reported “panic responses” by some governments may eventually see the global rise in the price of the commodity. For instance, Burma has imposed restrictions on rice exports while Vietnam has imported quotas on the amount of rice available for export. In West Africa, neighbouring countries such as Sierra Leone and Guinea have responded by restricting all food movements across their border.

Liberia is highly vulnerable to high food price shocks as happened in 2008. The country remains heavily reliant on food imports to meet domestic requirements. The food imports range from staple foods to fats and oils, vegetables, pulses, chicken, meat and condiments. According to the 2009/10 Crop Harvest Assessment (MOA/LISGIS 2010), the country produced only 168,000MT of milled rice in 2010, hardly a third of the food consumption requirements. In Monrovia, the main urban city in the country, close to 95 percent of food requirements is imported. Furthermore, Liberia has the highest per capita consumption of vegetable oil and ranks one of the top countries in per capita consumption of rice in West Africa. Three factors heighten Liberia’s vulnerability to the impacts of high food prices: i) the fragility in Cote d’Ivoire has not only weakened the traditional cross-border trade but also adds pressure on limited local resources due to huge refugee influxes in the country ii) the election year is prone to anxieties that may be easily heightened by high food prices iii) the preexisting high rates of poverty, food insecurity and malnutrition mean that the poorest Liberians would have difficulty coping with the shock. Indeed, expenditures on food, estimated at more than 50 percent, have been high even prior to any price shock.

Purchase remains the main food access modality for both rural and urban households (nationally over 60 percent of food consumed at household level is purchased²¹). 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 urban poor, daily wage laborers and the majority of small farmers.

The government is concerned of the rise in food prices considering that Liberia social safety nets programmes were greatly eroded during the 14-year of conflict. Although Policies and strategies have been put including the safety net activities outlined in the Liberia Agriculture Sector Investment Programme, the draft Social Welfare Policy spearheaded by MOHSW and a number of actions suggested by the PRS, implementation is still slow given the myriad challenges facing the economy. Unclear understanding of the scale and implications of current high food prices on the domestic economy is also slowing designing of appropriate programmes that can mitigate impact of the price rises. The government through ministries

²¹ 2010 Comprehensive Food Security and Nutrition Survey

of Agriculture, Commerce and Industry and LISGIS has formally asked WFP CO to enhance their capacity on market intelligence.

The government's request for assistance in designing programs that would mitigate any adverse effect of the rising food prices and the Ivorian refugee Influx calls for a more robust understanding of the potential impact of rising prices on household food security. Thus, the need for i) Emergency food security assessment in refugee affected areas and well as among the urban poor and ii) Market analysis as a follow up of the 2008 study on impact of high food price in Liberia. The assessments will be undertaken concurrently.

Activities proposed

- Analyze current and future outlook of food and fuel prices;
- From the review of existing and primary data, evaluate the current and foreseen impact of high market prices in Liberia;
- Undertake an emergency food security assessment among refugee affected villages and urban areas of Liberia

Objectives of the studies

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 and refugee influx on food security of vulnerable groups, and;
3. Recommend immediate and longer-term response options in urban and rural Liberia.

Methodology

- Review of secondary data from i) Liberia Market Information Systems ii) Import statistics from Ministry of Commerce iii) The 2010 Liberia Comprehensive Food Security and Nutrition Survey iv) The 2008 Impact of High Food price Report v) Recent assessments within the refugee affected areas and v) other relevant materials
- Primary data collection at household level: Statistical viable methodology –sample procedure and size.
- The same communities covered during the 2010 Comprehensive Food Security and Nutrition Survey conducted in May-August 2010 will be revisited to enable the comparison of key food security indicators with pre-crisis baseline information.
- Market Assessment: 1) Trader questionnaire with importers and wholesalers and retailers focusing on demand changes, traders' capacities to respond to shocks, traders ability to support specific interventions esp. cash and voucher system etc 2) Market questionnaire through Focus group discussions with traders focusing on availability/stock levels, storage and market infrastructure, market structure and operations etc. An FGD will be held in each market visited, namely: Bo-waterside, Redlight, Voinjama/Foya?, Ganta, Zweddru and Harper.
- Response analysis will be conducted involving collection of intervention data from stakeholders, discussion of agency-specific preliminary short-term interventions and responses to higher prices.

Geographical Area (Six counties)

1. Monrovia---understanding the supply chain, impact of HFP on urban poor etc
2. Lofa: Understanding local production prospects in an area not affected by refugees
3. Grand Gedeh, Maryland, and Nimba Counties—to understand impact of refugees. Additionally, Harper provides an understanding on the transmission of price shocks to Southeastern parts of the country and limited border trading with IVC due to conflict
4. Bomi—one of the most food insecure—understand the transmission of price shocks outside Monrovia

Potential Critical Markets for Analysis

The critical physical markets for potential analysis are: Duala and Redlight (Monrovia), Ganta and Butuo (Nimba), Zwedru and Toe (Grand Gedeh), Voinjama and Foya (Lofa), Bo-waterside (Grand Cape Mount) and Harper (Maryland).

The following commodities are deemed critical for analysis:

- Rice (local and imported): as main staple crop for both communities and refugees,
- Palm oil: as main fat source and source of income (cash crop)
- Local labor : agricultural labor

Teams

Approximately 24 enumerators and a number of participants from agencies involved:

- Six (6) team of consisting of four monitors for each (24 field monitors)
- 1 leader s (MOA, MOCI, WFP, FAO)

All participants speak English and all local staff speaks local language.

Facilitation/training will be primarily in English.

Duration of assessment and working Hours

- 10 days from April 19 to 29 April (schedule below)
- Participants should be prepared for long working hours.
- All participants should agree to work the length of assessment, without a break if necessary to complete the work on time. Please inform us if this is likely to be difficult or if there are any outstanding issues that need addressing

Timeline

- **12 - 15 April:** Initial consultations
- **12 - 23 April:** Secondary data analysis / instrument design and field-testing
- **19 April:** Enumerator training
- **21 April – 29 April:** Primary data collection
- **29 April – 6 May:** Data processing and analysis
- **12 May:** Validation workshop
- **18 May:** Finalization of draft report

Output

- Consultations held with all relevant stakeholders;
- Well developed analytical report on potential impact of high food price on Liberian economy;
- Key government staff trained on basic market analysis; and
- Documented response options outlining advantages and disadvantages of each.

ANNEX III

Household Food Security Survey Methodology

The target population for this survey is all households residing in the purposively selected districts/segments of the six counties. The six counties:-Bomi, Grand Gedeh, Lofa, Maryland, Montserrado and Nimba are selected based on their specific vulnerability to either refugee impact or to transmission of high global food or fuel prices. Lofa County, in particular is selected due to its production agricultural potential and how their production capacity may respond to price volatilities given its limited integration to Monrovia. The table below summarizes the areas selected, reasons for selection, sample size and procedure. Segments or districts selected in the county will collectively form a sampling frame for purposes of this survey.

	Purposively selected areas	Reason for selection	Sampling method	Sample size No. of HHs	Days: 6 Days data collection
Montserrado/ Monrovia	Clara Town Zone New Kru Zone	Main entry port, urban poorest with poor food security indicators	Multi-stage cluster design using probability proportional to size (PPS).	180 HHs 18 EAs	2 HH enumerators 1 Market enumerator
Bomi	Suehn Mecca District	Highly food insecure, limited production thus vulnerability	Multi-stage cluster design using probability proportional to size (PPS).	180 HHs 10 EAs	2 HH enumerators 1 Market enumerator
Lofa	Voinjama and Foya Districts	Lack of integration with Monrovia and potential for production	Multi-stage cluster design using probability proportional to size (PPS).	180 HHs EAs	2 HH enumerators 1 Market enumerator
Maryland	Harper District	Refugee influx, transport cost, trade ties with IVC	Multi-stage stratified design using PPS. Stratification:-Refugees Vs normal residents	180 each from refugees and resident HHs 18 EAs each	4 HH enumerators 1 market enumerator
Grand Gedeh	Tchien and Gbarzon Districts	Refugee affected areas	Stratification:-Refugees Vs normal residents Two stage cluster sampling (Villages-1 st stage and HH at 2 nd stage)	180 HH each from refugees and resident HHs 18 EAs in each	4 HH enumerators 1 market enumerator
Nimba	Zoe-Gbao and Twan River Districts	Refugee affected District and agric. Potential area	Stratification:-Refugees Vs normal residents Two stage cluster sampling (Villages-1 st stage and HH at 2 nd stage)	180 HHs each from refugees and resident HHs 18 EAs in each	4 HH enumerators 1 market enumerator
Total data collectors ***At least one supervisor per county to be seconded by participating agencies					24 enumerators

A two-stage cluster sampling approach will be used as follows:

- Stage 1: Seventeen to nineteen enumeration areas (EAs) at the selected areas level will be randomly selected, using probability proportional to size (PPS), in order to ensure that each household in the population, whether from a small or large village, has an equal probability of being selected;
- Stage 2: 10 households within each EA will be selected using systematic random sampling methodology.

The interviews will be done at household level with a responsible member of the household, preferably the head or a spouse. The households will be selected using the systematic random sampling procedure. In this case a random starting point will be selected within a cluster of households. From that point the interviewers mainly skip households (based on the sampling interval) until the sample size for that cluster/community in the district is achieved. In cases where a responsible respondent is not available for interviewing, the field

interviewers will make at least 3 callbacks. If after the third callback the required respondent is still not available for the interview, the field interviewer will substitute that household for another.

Strict quality control measures for data collection were applied. The fieldwork Supervisors will make a minimum of 15% on-site back checks and accompany a minimum of 10% of all interviewers' calls, while the field managers will make 2% back-checks. These back-checks will be made within the same day of interviewing

Training of data collectors was conducted for two days (20 and 21 April) followed with the fieldwork from 25 April to 4 May 2011.

Example of sample size calculation: This was done for all the locations

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

n=required sample size

D=Design effect

Z=z-score of confidence coefficient (=1.96 for 95%)

p=Expected prevalence of the indicator of interest

q=(1-p)

d=precision

Scenario 1-Using food insecurity Maryland	
Estimated prevalence for food insecurity	75%
Confidence interval width (Precision)	(+/-) 10%
Confidence coefficient	95%
Design effect	2
<hr/>	
Number of HHs	158.2
Non Response Rate (5%)	7.9098544
Total	166.1

**ANNEX IV
MARKET SURVEY METHODOLOGY**

There will be 11 markets to be surveyed: Duala, Waterside and Redlight (Monrovia), Ganta and Butuo (Nimba), Zwedru and Toe (Grand Gedeh), Voinjama and Foya (Lofa), Bo-waterside (Bomi) and Harper (Maryland).

During the survey one interview was done per location, and per market chain, a total of at least six traders, including two retailers, two wholesalers and two collectors. In Monrovia, three rice importers were also interviewed.

In all markets, the following traders were interviewed:

1. Imported rice traders: Two wholesalers, three retailers, 3 importers (only in Monrovia)
2. Local rice traders: Two large retailers, three small retailers and two *gobaychops* (collectors)
3. Palm oil traders: Two *gobaychops* (collectors); three retailers

The table below summarizes the number of interviews to be conducted for each value chain in each market. This leads to 190 interviews with market traders.

Market		Importers	Gobaychops (collectors)	Wholesalers	Large scale traders	Small-scale retailers	Total
Duala	Imported rice	2	-	2	3	0	7
	Local rice	0	2	0	2	3	7
	Palm oil	0	2	0	3	0	5
Red Light	Imported rice	-	-	2	3		5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3		5
Waterside -Monrovia	Imported rice	1	-	2	3		6
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3		5
Ganta	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
Butuo	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
Zwedru	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
Toe	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
Bo-waterside	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
Voinjama	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5

Foya	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
Harper	Imported rice	-	-	2	3	-	5
	Local rice	-	2	-	2	3	7
	Palm oil	-	2	-	3	-	5
TOTAL		3	44	22	88	33	190

The **actual selection of the trader on the spot was randomly** conducted, and cover the selected products (i.e. Imported rice, local rice and palm oil). A list of the names of the traders was sought from the market leaders but if not available, get an estimate of the total number of traders present, per market chain. Divide the number by traders to be interviewed per chain. Then select the first trader randomly followed by system sampling based on the sampling interval calculated.

In addition to the trader survey, there were **focus group discussions** with market leaders/officials (market survey questionnaire) in each market or selected key informants who understand the market condition for each chain. In this regard, three focus group discussions may be required.

ANNEX V
Rapid Household Food Security Assessment on HFP and Refugees April 2011

Questionnaire number: |_|_|_|_|_|_|_|_|_|_|_|_|

Household Rapid Assessment Questionnaire

County: _____	District: _____	Community name: _____	HH number: _ _
Date of interview: _ _ / _ _ / 2011 <small>day month</small>		Enumerator name: _____	Enumerator code: _ _
Name of HH head: _____		Name of spouse: _____	
Signature of team leader: _____		Date: _ _ / _ _ / 2011 <small>day month</small>	

Consent:
 We are conducting a survey of the **living situation** of families within the communities in Liberia including refugees (where they are). We would like to ask you some questions about your family. The survey usually takes 10-15 minutes to complete. Any information that you provide will be kept strictly confidential and will not be shown to other people. This is voluntary and you can choose not to answer any or all of the questions if you want. However, we hope that you will participate since your views are important. Do you have any questions? May we begin now? *(RESPONDENT SHOULD BE THE HEAD OF HOUSEHOLD, A SPOUSE OR ANY KNOWLEDGEABLE RESPONSIBLE MEMBER OF THE HOUSEHOLD. IF NONE IS PRESENT, MAKE A CALL BACK)*

I – HOUSEHOLD COMPOSITION

1.1	How many persons in total are currently living in the household?	_ _ persons																		
1.2	How many children and adults are currently living in the household? <i>(Provide the sex and age breakdown of all household members)</i>																			
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>0 – 4</th> <th>5 – 14</th> <th>15 - 59</th> <th>60 plus</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>Male</td> <td> _ </td> <td> _ </td> <td> _ </td> <td> _ </td> <td> _ _ </td> </tr> <tr> <td>Female</td> <td> _ </td> <td> _ </td> <td> _ </td> <td> _ </td> <td> _ _ </td> </tr> </tbody> </table>		0 – 4	5 – 14	15 - 59	60 plus	TOTAL	Male	_	_	_	_	_ _	Female	_	_	_	_	_ _
	0 – 4	5 – 14	15 - 59	60 plus	TOTAL															
Male	_	_	_	_	_ _															
Female	_	_	_	_	_ _															
1.3	Is the head of household male or female?	1= Male / 2 = Female _																		
1.4	Is the household refugee/host/neither ? If neither then go to Q11	1= Refugee / 2 = Host 3=Normal/not hosting refugee _																		
1.5	If refugee/host , arrival date If interviewing a refugee: Put the date of arrival in the country If interviewing a host: Put the date of arrival with the host	_ _ / _ _ _ _ Month Year																		
1.6	If refugee, have you received any humanitarian assistance (agencies only, NOT from host)?	0= No/ 1= Yes _																		
1.7	If yes, when did you first and last receive any assistance and what was the assistance received if any?	a-First assistance _ _ / _ _ _ _ Month Year c-Last assistance _ _ / _ _ _ _ Month Year b-What was the assistance? 1 _ 2 _ 3 _ d-What was the assistance? 1 _ 2 _ 3 _ 1. Food 2. Shelter/WASH 3. Health 4. Nutrition 5. Other _____																		
1.8	If refugee, are you planning to go back ? If NO , go to 1.11	0= No/ 1= Yes _																		
1.8b	If yes to Q1.8, then when?	1=Immediate 2= 1-3 months 3= 3-6 months 4= more > 6 months																		
1.9	If host , how many refugees do you have in your HH?	Adults _ Children (<15 years) _																		
1.10	Have you been sharing food with refugees	0= No/ 1= Yes _																		
1.11	Where do you mainly obtain your water for drinking at the moment? (select only one)	1 = Public tap/standpipe 2 = Protected well/pump/spring 3 = Unprotected well/pump/spring 4 = Cart with small tank/tanker truck 5 = Piped water into dwelling/yard 6 = River/creek/stream/lake/pond etc 7 = Bottled water/sachet 8 = Rain water _																		
1.12	What is the MAIN type of toilet facility your household uses? (select only one)	1 = Traditional pit latrine - covered 2 = Traditional pit latrine - uncovered 3 = Improved pit latrine 4 = Flush toilet 5 = Toilet over water 6 = No facility (bush/river/beach) _																		

II – AGRICULTURE PRODUCTION

2.1	Do you have access to farming land where you can grow any type of food? (both upland and swampland)	0= No/ 1= Yes	_					
2.11	Did you cultivate any food crop in the last season (i.e in 2010)	0= No/ 1= Yes	_					
NOT to refugees	RICE <i>(Refer to agricultural season 2010)</i>	Number of months that your previous harvest lasted for 99=none	Use (actual + planned) (use proportional piling –20 beans)					How long will your current stock last? <i>(Estimate the number of months your current stock is expected to last from now on, write '00' if no stock available)</i>
			In stock for consumption (in %)	Already consumed (in %)	Sold (in %)	Shared with refugees (in %)	Seeds (in %)	

	c) Palm Oil d) Vegetable oil	<input type="checkbox"/>	<input type="checkbox"/>		
4.4	Energy (cooking, heating, lighting)	<input type="checkbox"/>		4.5	Education
4.6	Housing	<input type="checkbox"/>		4.7	Transportation
4.8	Gasoline	<input type="checkbox"/>			
4.9	Have you taken any credit in the last 3 months? (If NO , Skip to section V)			0= No 1= Yes	<input type="checkbox"/>
4.10	If "yes" what was the main reason for new debts or credit?	1= To buy food 3= To pay school, education costs 5= To pay fines/tax 7= To buy or rent land/dwelling 9= To buy fuel 99= No loan/debt taken out	2= To cover health expenses 4= To pay other loans 6= To buy clothes, shoes 8= To pay for ceremonies/donations 10= Other reason (specify)_____		<input type="checkbox"/> <input type="checkbox"/>
4.11	Compared to Jan to April 2010, how has your access to credit changed in the last 3 months (Jan to April 2011)?			1 =Higher in amount 2 = Higher in frequency 3 = Higher in amount & frequency 4 =Lower in amount 5 =Lower in frequency 6 =Lower in amount & frequency 7=Same as same time in 2010	<input type="checkbox"/>
4.12	In what amount of time do you think you will be able to pay back your loan or credit?			days	<input type="checkbox"/> <input type="checkbox"/>
				or months	<input type="checkbox"/> <input type="checkbox"/>

V- FOOD CONSUMPTION

		Adults		Children below 5 years		
Yesterday , how many meals were eaten by your HH (including rice AND non-rice meals)? (in case of No under-fives, then write N/A for below 5 years)		5.1	<input type="checkbox"/>	5.2	<input type="checkbox"/>	
Comparing April 2010 and NOW , how different is the number of meals eaten in a day?		5.3	<input type="checkbox"/>	5.4	<input type="checkbox"/>	
Focus on food eaten INSIDE the house (if even eaten by just one member of the household and probe for all food items)	# days eaten in previous 7 DAYS?	What was the main source of the food in the last 7 days?				Change in consumption now compared to April 2010
	0 = Not eaten 1= 1 day 2= 2 days 3= 3 days 4= 4 days 5= 5 days 6= 6 days 7= 7 days	1= Own production 2= Hunting/gathering 3= Bought using cash 4= Bought on credit 5= Gifts (friends/relatives) 6= Received as payment 7=Food assistance (Govt/NGO)	1=Same 2=Improved 3=worsened			
Rice	5.5	<input type="checkbox"/>	5.6	<input type="checkbox"/>	<input type="checkbox"/>	
Cassava/tubers	5.7	<input type="checkbox"/>	5.8	<input type="checkbox"/>	<input type="checkbox"/>	
Bulgur	5.9	<input type="checkbox"/>	5.10	<input type="checkbox"/>	<input type="checkbox"/>	
White flour/bread	5.11	<input type="checkbox"/>	5.12	<input type="checkbox"/>	<input type="checkbox"/>	
Fish (small quantities)	5.13	<input type="checkbox"/>	5.14	<input type="checkbox"/>	<input type="checkbox"/>	
Fish (large quantities)	5.15	<input type="checkbox"/>	5.16	<input type="checkbox"/>	<input type="checkbox"/>	
Bush meat (small quantities)	5.17	<input type="checkbox"/>	5.18	<input type="checkbox"/>	<input type="checkbox"/>	
Bush meat (large quantities)	5.19	<input type="checkbox"/>	5.20	<input type="checkbox"/>	<input type="checkbox"/>	
Other meat	5.21	<input type="checkbox"/>	5.22	<input type="checkbox"/>	<input type="checkbox"/>	
Eggs	5.23	<input type="checkbox"/>	5.24	<input type="checkbox"/>	<input type="checkbox"/>	
Beans, peas, lentils	5.25	<input type="checkbox"/>	5.26	<input type="checkbox"/>	<input type="checkbox"/>	
Peanuts	5.27	<input type="checkbox"/>	5.28	<input type="checkbox"/>	<input type="checkbox"/>	
Greens	5.29	<input type="checkbox"/>	5.30	<input type="checkbox"/>	<input type="checkbox"/>	
Vegetables	5.31	<input type="checkbox"/>	5.32	<input type="checkbox"/>	<input type="checkbox"/>	
Fruits	5.33	<input type="checkbox"/>	5.34	<input type="checkbox"/>	<input type="checkbox"/>	
Oil, fats	5.35	<input type="checkbox"/>	5.36	<input type="checkbox"/>	<input type="checkbox"/>	
Sugar	5.37	<input type="checkbox"/>	5.38	<input type="checkbox"/>	<input type="checkbox"/>	

VI – COPING STRATEGIES AND ASSISTANCE

6.1	In the PAST 7 DAYS , have there been times when you did not have enough food or money to buy food?	0=No 1=Yes	<input type="checkbox"/>
-----	---	---------------	--------------------------

If yes to the above, during these times, how many days did your household have to:		0 = Not applied	1 = 1 day
Ask all questions one by one!		2 = 2 days	3 = 3 days
		4 = 4 days	5 = 5 days
		6 = 6 days	7 = 7 days
Rely on less preferred and/or less expensive food?	6.2	_	_
Borrow food or rely on help from friends or relatives?	6.3	_	_
Limit portion size of meals at meal times?	6.4	_	_
Restrict consumption by adults in order for small children to eat?	6.5	_	_
Reduce number of meals eaten in a day?	6.6	_	_
Purchase food on credit?	6.7	_	_
Skip entire days without eating?	6.8	_	_
Increase consumption of wild foods?	6.9	_	_
Eat seeds stock intended for planting?	6.10	_	_

In the PAST 6 MONTHS , has your household experienced a shock that led to difficulties in obtaining food?	6.11	0 =No	1 =Yes	_
If yes to the above, what have been your main difficulties or shocks in the past 6 months?	6.12	6.13	6.14	
Do NOT list, leave the household answer spontaneously. Once done, ask the household to rank the 3 most important ones	1 st difficulty	2 nd difficulty	3 rd difficulty	
	_ _	_ _	_ _	
01 = Loss employment/reduced income	02 = Sickness of HH member	03 = Death of HH member	04 = High food prices	05 = High fuel/transportation prices
06 = Debt	07 = Irregular/unsafe drinking water	08 = Insecurity/displacement/refugee	09 = Heavy rains/floods	10 = Crop failure
		11 = Restricted access to markets	12 = Animal pest/birds destroying crops	13 = Other shock, specify _____
6.15 If high fuel cost is mentioned, how has it affected the household?	1= Unable/reduced ability to purchase food/goods from markets 2= reduced ability to sell goods in the market 3= Unable to go for medication 4= Others—specify--- 5= No impact _			

Specifically ask for each assistance below

Has your household or any of your household members benefited from the following assistance from the Government, NGOs or UN during the past 3 months?
0= No/ 1= Yes

6.16	Refugee food Assistance	_
6.17	Food for school children (eaten at school or take-home)	_
6.18	Food for young/malnourished children or for pregnant/lactating women	_
6.19	Free health care/drugs from an NGO programme	_
6.20	Micro-credit (NGO or other agency programme)	_
6.21	Free seeds, fertilizer	_
6.22	Free agricultural tools	_
6.23	Other assistance (<i>specify</i>) _____	_

VII: NUTRITION OF WOMEN AGED 15 – 49 YEARS (All eligible women in the household)

No	Name	Age in Years	MUAC (in CMS with 1 decimal place)
1			_ _ _ _ . _ _
2			_ _ _ _ . _ _
3			_ _ _ _ . _ _
4			_ _ _ _ . _ _
5			_ _ _ _ . _ _

Section 1: General characteristics of the trader				
1.1	When did you start your trading business? <i>[circle one of the numbers]</i>	1	Less than 1 year ago	
		2	Between 1-3 years ago	
		3	More than 3 years ago	
		99	No answer	
1.2	In what type of trading activities are you involved? <i>[circle all the numbers that apply]</i>	1	Purchase from traders, sell to consumers (=retailing)	
		2	Purchase from traders, sell to traders (=wholesaling)	
		3	Purchase from farmers, sell to traders (=collecting)	
		4	Other (specify: _____)	
99	No answer			
1.3	Please indicate the type of products in which you are operating? <i>[circle all the numbers that apply]</i>	1	Cereals	
		2	Fresh vegetables and/or fruit	
		3	Fuel (Gasoline)	
		4	Other cash crops	
		5	Livestock	
		6	Fish and/or meat	
		7	Other (specify: _____)	
		99	No answer	
1.4	Please indicate the three most important – in terms of quantities - commodities traded normally by you? <i>[write in the empty cells: 1: for the most important commodity 2: for the second most important commodity 3: for the third most important commodity]</i>	1	Imported rice, butter	<input type="text"/>
		2	Imported rice, High quality (parboiled)	<input type="text"/>
		3	Local/Country rice	<input type="text"/>
		4	Cassava- <i>Gari or farina</i>	<input type="text"/>
		5	Cassava-Fresh	<input type="text"/>
		6	Palm oil	<input type="text"/>
		7	Vegetable Oil	<input type="text"/>
		8	Wheat eg. Bulgur wheat	<input type="text"/>
		9	Poultry	<input type="text"/>
		10	Fuel (Kerosene)	<input type="text"/>
		11	-Fuel (Gasoline)	<input type="text"/>
		12	Charcoal	<input type="text"/>
		13		<input type="text"/>
		14		<input type="text"/>
99	No answer			
<i>The questions below refer to main commodity the trader operates in. Please indicate the commodity [_____]</i>				
Section 2: Volumes and flows				
2.1	Please provide an estimate of the number of customers to whom you have sold the selected commodity during the past week; <i>[circle one of the numbers]</i>	1	Less than 10	
		2	More than 10, Less than 70	
		3	More than 70, less than 140	
		4	More than 140	
		99	No answer	
2.2	Please indicate if this number (see 2.1) is higher, lower or the same level compared to the same time last year. <i>[circle one of the numbers]</i>	1	Higher	
		2	Lower	
		3	Same level	
		99	No answer	
2.3	Please indicate if your sales during the last week of the selected commodity has increased, decreased or stayed the same compared to same time last year? <i>[circle one of the numbers]</i>	1	Increased by more than 50%	
		2	Increased by 10-49%	
		3	Increased by 0-9%	
		4	No change	
		5	Decreased by more than 50%	
		6	Decreased by 10-49%	
		7	Decreased by 0-9%	
		99	No answer	
2.4	If the sales volume is higher or lower, please provide the most important reason for this change? <i>[circle one of the numbers]</i>	88	Not applicable (if 2.3 = no change or no answer)	
		1	Better harvest than last year	
		2	Worse harvest than last year	
		3	More institutional procurement	
		4	Less institutional procurement	
		5	More effective demand from other districts/abroad	
		6	Less effective demand from other districts/abroad	
		7	More supply coming from other districts/abroad	
		8	Less supply coming from other districts/abroad	
		9	More demand from consumers in district	
		10	Less demand from consumers in district	
		11	Higher profit margins	
		12	Lower profit margins	
13	Less capital/credit available for trade			

		14	More capital/credit available for trade
		15	Increased risk
		16	Lower risk
		19	Fear of shortage/panic buying
		99	No answer
2.5	If the sales volume is lower than during the same period last year, please indicate when the trader expects that sales will recover to the normal level? <i>[circle one of the numbers]</i>	88	Not applicable
		1	Within one week
		2	Within one week to one month
		3	Within one month to one year
		4	Longer than one year or never
		99	No answer
2.6	What is currently your most important source of the selected commodity (where does the trader buy the commodity)? <i>[circle one of the numbers]</i>	1	Farmers within district
		2	Farmers outside district
		3	Traders within district
		4	Traders in other districts within the country
		5	Traders in other countries
		6	Other (specify: _____)
		99	No answer
2.7	What was your most important source of the selected commodity during the same period last year (where did the trader buy the commodity)? <i>[circle one of the numbers]</i>	1	Farmers within district
		2	Farmers outside district
		3	Traders within district
		4	Traders in other districts within the country
		5	Traders in other countries
		6	Other
		99	No answer
2.8	If the most important source of the selected commodity has changed (compare 2.6 and 2.7), please provide the most important reason for this change? <i>[circle one of the numbers]</i>	88	Not applicable
		1	Better harvest than last year
		2	Worse harvest than last year
		3	More institutional procurement
		4	Less institutional procurement
		5	More effective demand from other districts/abroad
		6	Less effective demand from other districts/abroad
		7	More supply coming from other districts/abroad
		8	Less supply coming from other districts/abroad
		9	More demand from consumers
		10	Less demand from consumers
		11	Higher profit margins
		12	Lower profit margins
		13	Less capital/credit available for trade
		14	More capital/credit available for trade
		15	Increased risk
		16	Lower risk
		19	Other (specify: _____)
		99	No answer
2.9	Do you think the most important source of the selected commodity will change during the coming six months, compared to the current source (see 2.6)? If so, to what source? <i>[circle one of the numbers]</i>	1	No change of most important source
		2	Yes, to farmers within district
		3	Yes, to farmers outside district
		4	Yes, to traders within district
		5	Yes, to traders in other districts
		6	Yes, to traders in other countries
		7	Yes, to other sources (specify: _____)
		99	No answer
Optional: 2.10	Could you please provide an indication of your stock levels (of the selected commodity) compared to the same period last year)?	1	More or less the same level
		2	My stock level is much higher
		3	My stock level is somewhat higher
		4	My stock level is much lower
		5	My stock level is somewhat lower
		99	No answer
Section 3: Constraints and response capacity			
<i>[Questions 3.3-3.7 of this section should only be discussed with the trader IF the selected commodity is an essential food item. If the selected commodity for this interview is a cash crop/product, please pose questions 3.1-3.2 and proceed to the following section.]</i>			
3.1	What are the three most important constraints preventing you to double the amount you sell (of the selected commodity)?	1	Lack of own capital
		2	Lack of credit / credit is too expensive
		3	Low or varying quality of produce (supply)

	<i>[circle three of the numbers]</i>	4	Low or irregular quantity of produce (supply) incl. trade restrictions	
		5	Lack of means of transport	
		6	Poor road infrastructure / transport cost too high	
		7	Too much insecurity	
		8	Lack of storage	
		9	Low profit margin (low sales price, high purchase price)	
		10	Lack of demand	
		11	Competitors would not allow me to grow so much	
		12	Government would not allow me / taxes too high	
		13	Too much food assistance	
		14	Other(specify: _____)	
		99	No answer	
Optional	a. Is there a chance that a solution will be found for these constraints? b. If so, could you please indicate for which of the constraints listed under question 3.1 the solutions will be found during the coming 6 months? <i>[list the codes from 3.1. or indicate no answer = 99]</i>	a. Yes =1; No = 2; No answer: 3 [____]		
3.2		b. The following constraints will be solved: [____]; [____]; [____]		
3.3	In your opinion, would the sale price of the selected commodity decrease, remain the same or increase if demand on this market would in the coming six months be higher with 25%? <i>[circle one of the numbers]</i>	1	No change	
		2	Decrease	
		3	Increase	
		99	No answer	
3.4	If you expect an increase in prices (3.3), do you think that this will be temporary (until supply has increased) or sustained (for the period of the demand increase)? <i>[circle one of the numbers]</i>	88	Not applicable (if 3.2 = no change, decrease or no answer)	
		1	Temporary	
		2	Sustained	
		99	No answer	
3.5	Assume that the demand from your (existing or new) customers for the selected commodity would increase by 25%, would you be able to supply/deliver, and in what time frame? <i>[circle one of the numbers]</i>	1	No	
		2	Yes, within a week	
		3	Yes, within two weeks	
		4	Yes, within a month	
		5	Yes, but only after more than one month	
		99	No answer	
3.6	Aid agencies are considering the use of food vouchers as a means for allowing consumers to purchase food items. Please answer the two questions and insert the following codes in the adjoining column: 1 = yes 2 = no 99 = no answer	<input type="checkbox"/>	a. Have you ever participated in the use of vouchers in the past?	
		<input type="checkbox"/>	b. Would you be willing to participate in a food voucher system in the future?	
3.7	What are the most important concerns that you have when considering participating in a voucher system? <i>[write in the empty cells: 1: for the most important reason 2: for the 2nd most important reason 3: for the 3^d most important reason]</i>	1	No interest in expanding my business	[____]
		2	Constraints to increase volume (including lack of capital, credit, supply, transport, roads, storage or security)	[____]
		3	Reliability of timely payment (voucher into cash)	[____]
		4	Too difficult to administer	[____]
		5	Counterfeiting with voucher	[____]
		6	Food price inflation	[____]
		7	Possibility of having to pay high taxes	[____]
		8	Other (specify: _____)	[____]
		99	No answer	[____]
Section 4: Credit and stocks strategy				
4.1	Do you provide credit to some of your customers? <i>[circle one of the numbers]</i>	1 = yes	2 = no	99 = no answer
4.2	If 4.1 = yes, what share of your total sales is currently in credit? <i>[insert a percentage for credit and one for cash, it should add up to 100%]</i>	Credit: [____]% of sales	Cash: [____]% of sales	88 = not applicable 99 = no answer
4.3	Have there been any changes in the number of people who have been requesting credit compared to same period last year? <i>[circle one of the numbers]</i>	1 = yes, less people	2 = yes, more people	3 = no, same number 99 = no answer
4.4	Do you provide more credit to your customers compared to during the same period? <i>[circle one of the numbers]</i>	1 = yes	2 = no	99 = no answer

		4	Less imports / inflows from surplus zones
		5	More exports / outflows
		6	Less exports / outflows
		7	More food assistance
		8	Less food assistance
		9	Other (specify: _____)
		99	No answer

Fuel Prices

7.1 What is today's sales price of a i) Gallon of Gasoline | _____ | LD aii) What was price of the same quantity 6 months ago? | _____ | LD
 bii) A bag of charcoal | _____ | LD bii) What was price of the same quantity 6 months ago? | _____ | LD
 ciii) A gallon Kerosene | _____ | LD bii) What was price of the same quantity 6 months ago? | _____ | LD

Any other remark?

ANNEX VII
Liberia Market Questionnaire April 2011

Key Informant interviews with market leaders/traders

To be completed by Interviewer		To be completed by Team Leader:	
<i>Please complete before the Interview</i>			
0.1 -	Interviewer ID _ _ _ _ _ _ _	0.9 - Date: _ _ _ / _ _ _ / 2011 Day Month	
0.2 -	Date: _ _ _ / _ _ _ / 2011 Day Month		
0.3 -	Market code: _ _ _ _ _ _ _ _		
0.4	Village name: _____		
0.5	District name: _____		
0.6	Market name: _____		
0.7	Y-coordinate (latitude): N _ _ _ _ , _ _ _ _ _ _ _ _		
0.8	X-coordinate (longitude): E _ _ _ _ , _ _ _ _ _ _ _ _		
		0.10- Team Leader Code _ _ _ _	
		Remarks: <hr/> <hr/> <hr/>	

SECTION 1 – MARKET PRICES AND AVAILABILITY

Item Code	Item	1.a. Is this item normally traded in the market?	1.b. Is this item currently available in the market?	1c. If currently not available, why?	1.d. Compared to <u>one year ago</u> , is market availability in terms of stocks low, normal, or high?	1.e What is the current retail/wholesale price?			1.f What was the retail / wholesale price <u>one year ago</u> ?		
		1 = Yes 2 = No 99 = No answer	1= Yes 2 = No 99 = no answer	1= Worse harvest 2= Less effective demand other areas 3=Less supply from border countries =Less supply from international markets 4=Less demand by consumers 5=Low profit margins 6=Less trade capital 7=Increased risk 8=Less procurement	1 = Low 2 = Normal 3 = High 88 = not applicable 99 = no answer	PLEASE INDICATE IF THE PRICE ARE: [] RETAIL OR [] WHOLESALE PRICES			PLEASE INDICATE IF THE PRICE ARE: [] RETAIL OR [] WHOLESALE PRICES		
						Price (local currency per local measurement unit used for retail purposes) 88= not available in market 99 = no answer	Units	1.e. Price in kilogram in local currency 88= not available in market 99 = no answer	Price (local currency per local measurement unit used for retail purposes) 88= not available in market 99 = no answer	Units	1.f. Price in kilogram in local currency (88= not available in market 99 = no answer
1.01	Imported rice										
1.02	Local rice										
1.03	Cassava										
1.04	Beans/Peas										
1.05	Palm oil										
1.06	Vegetable oil										
1.07	Fuel/gasoline										
1.08											

