

Comprehensive Food Security and Vulnerability Analysis (CFSVA)

The Gambia



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Republic of The Gambia



World Food Programme



The European Union



Foreword

During the period of soaring global food prices in 2008 and the subsequent following period of global financial crisis, The Gambia was regarded as one of the 30 most vulnerable countries to these events. Its high dependency on imports of staple food supplies (60% of its needs were imported), and its population's significant dependency on remittances and the income from tourism made the country and the households especially vulnerable. The rising food prices and declining income sources provided a toxic mix in The Gambia and people were seen to be struggling. The extent of their plight and the implications needed to be better understood.

With the majority of the population being classified as living below the poverty level it was clear that many people were seriously affected even when small shocks occurred. Who these groups were that were hit the hardest, which ones were more affected and less likely to have diversified income or support systems, and which shocks and combinations hurt which people the most, were all questions that needed a systematic understanding in order to devise effective and well targeted strategies to reduce the more serious aspects of the shocks. Who were the most vulnerable and how did people across the country cope were critical questions. They were also ongoing ones as floods and continuing price changes also impacted the people of the country.

It was at the request of the government that WFP was asked to bring in its expertise and experience in addressing these questions at the national level and assist the country to set up a system for assessing and monitoring food insecurity and vulnerability.

I am very pleased that WFP has been able to do this with the funding assistance of the EU. A critical part of this process has been The Gambia Comprehensive Food Security and Vulnerability Analysis which WFP undertook in early 2011. The intention was to determine what the key factors were for the population in meeting their family's food requirements and devising coping strategies in the event of sudden hocks. In addition, the process was designed to be a very collaborative approach and was used to build up the capabilities within the key intuitional structures in the country. All of the key stakeholders were involved from the outset to shape the study, to determine what the relevant food security indicators and coping factors might be, and to undertake the survey using innovative survey approaches developed by WFP in other countries.

The results of the survey highlighted how people cope at a particular point in time, which was a relatively food abundant period at the end of the harvests. It shows us what are some of the key survival elements that people rely on and allows us to monitor these to see whether they can provide a secure future and if they cannot, how they can be complemented or improved to ensure that no one in the population is ever at risk from going hungry. We hope that through this work a system is designed to ensure that no groups are put at risk to food insecurity.



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Currency Equivalents

Currency Unit = Dalasi (GMD)

US\$1 = 25.5 GMD (as of 1 Jan 2011)

List of Acronyms

CFSVA	Comprehensive Food Security and Vulnerability Analysis
CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse
CSI	Coping Strategy Index
DoW	Department of Water Resources
EA	Enumeration Area
FAO	Food and Agriculture Organization of the United Nations
FCS	Food Consumption Score
GBOS	Gambia Bureau of Statistics
GNAIP	Gambia National Agriculture Investment Plan
GoTG	Government of The Gambia
LGA	Local Government Area
MoA	Ministry of Agriculture
MUAC	Mid-Upper Arm Circumference
NaNA	National Nutrition Agency
NASS	National Agriculture Sample Survey
NERICA	New Rice for Africa
UNICEF	United Nations Children’s Fund
WFP	World Food Programme

1. Acknowledgments

WFP The Gambia would first like to thank Gambian individuals, families and communities who took their time to receive the survey teams and answer questions, allowing us to better understand their lives and livelihoods. This report is dedicated to them and all of the Gambians who are in need of support in overcoming present and future food security challenges.

We are grateful to all of our national partners and counterparts who participated in the process of conducting this survey starting from planning to data collection and provided inputs to the final analysis. These include Gambia Bureau of Statistics (GBOS), Department of Agriculture (DoA), National Nutrition Agency (NaNA), National Disaster Management Agency (NDMA), Department of Water Resources (DoW), Concern Universal, Gambia Red Cross Society (GRCS), Action Aid The Gambia, FAO, UNICEF and UNFPA.

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2. Executive Summary

The 2011 Comprehensive Food Security and Vulnerability Analysis (CFSVA) is based on a nationally representative sample survey to update the knowledge base on food security and vulnerability at the household level in The Gambia. It is covering both urban and rural areas and takes into account the recent natural and economic shocks experienced by the population.

A total of 2,592 households were interviewed in 336 communities. Households were asked questions regarding food consumption (food frequency and dietary diversity); income and expenditure; coping strategies; assets and livelihoods; seasonality of food insecurity and employment including migration patterns. In addition, community interviews were carried out in eight randomly selected communities to obtain contextual information about access to health and sanitation services, infrastructure, shelter, roads, markets and recent shocks and coping mechanisms.

The 2011 CFSVA found that at the national level, about 145,119 persons (based on 2003 population estimates) are food insecure or vulnerable to food insecurity representing approximately 11% of the total population. There is a notable variation within the country where:

1. a significantly higher proportion of food insecure or vulnerable population well above the national average level was found in areas that are predominantly urban;
2. areas with high poverty levels were more likely to have a higher proportion of food insecure and/or vulnerable households; and
3. the highest incidence of food insecurity and vulnerability was found among whose primary livelihood sources are non agricultural wages, production and sale of cash crop and self employment.

The majority of Gambian households do not earn more than 40,000 Dalasi annually and monthly household expenditure is approximately 7,860. Average household expenditure on food accounts for approximately 58 percent of the total expenditure. They largely rely on purchase of food for consumption, have family members who work away from home for more than six months during the year who contribute to household income by sending remittances, depend on informal credit sources (e.g. neighbors, relatives, traders) when borrowing money. Rising food prices and natural disasters are the most prominent factors that have negatively impacted Gambian households' food access and put them at risk of becoming food insecure in recent years.

The 2011 CFSVA was conducted during the period of the year when food is generally more available and there are less access constraints at household level and thus the number of food insecure households will increase as the lean season approaches. Medium to long-term interventions are required to protect and strengthen livelihoods of the food insecure and vulnerable and increase their resilience to future shocks. The 2011 CFSVA recommends some broad strategic interventions by WFP and partners in the area of food security monitoring, poverty and chronic malnutrition, disaster preparedness and response and social safety net.

3. Background

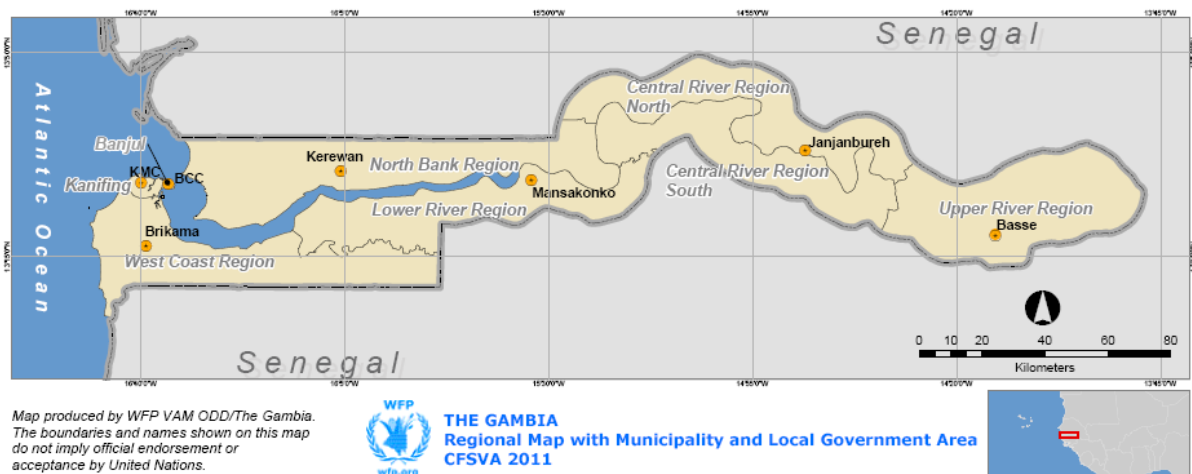
3.1 Country overview

The Gambia is the smallest country in continental Africa stretching along the banks of the Gambia River for approximately 400 km, varying in width from 24 to 48 km. Bordering with Senegal, it is almost an enclave except for the western border on the Atlantic Ocean and has an area of 11,295 sq km.

The topography is largely unvaried consisting of riverine flats and mangrove swamps intersected by tidal creeks and savannah woodland with shrub and grass. The climate is Sudano-Sahelian (semi-arid) marked by a rainy season between June and October which often result in flash floods and heavy rainfalls and a dry spell from November to May. Average annual rainfall is about 860 mm (1991-2009 DoW estimates).

Administratively, The Gambia is divided into municipalities/Local Government Areas (LGAs), wards and districts. At the highest administrative unit, there two municipalities: Banjul City Council (BCC), the capital city, and Kanifing Municipal Council (KMC) and five LGAs : West Coast Region (WCR), North Bank Region (NBR), Lower River Region (LRR), Central River Region (CRR) and Upper River Region (URR) -. At the lowest administrative unit, there are a total of 39 districts.

Map 3-1: The Gambia



The Gambia today has an estimated population of 1.7 million inhabitants with an annual growth rate of 2.7 per cent (UNFPA, 2010). There are more than nine ethnic groups with the major tribes being Mandinka, Fula, Wollof and Jola. The majority are Muslims (95 percent) and there is a small proportion of Christians (4 percent) and followers of other indigenous religions.

Since independence in 1965, The Gambia has been governed through a multi-party democracy and enjoyed political stability. At the same time, the country faces a number of development challenges including high poverty levels with approximately 53 percent of the population living

below the US\$2 per day poverty line (World Bank, 2005) and low human development, ranking 151 out of 169 according to the 2010 Human Development Index¹.

Subsistence agriculture is the main source of livelihoods for the majority of the population. The country relies heavily on food imports, especially for rice, the main staple food, foreign exchange through groundnut exports, tourism and remittances. The relatively undiversified economy makes The Gambia highly vulnerable to external shocks which pose the country's food security at risk.

This became painfully evident during the food price crisis in 2008: the country was severely hit by the consequences of the high oil and food prices, which led to the shortage and high costs of rice in particular. Furthermore, the global financial crisis in 2009 negatively impacted tourism and remittance levels reducing resource poor households' purchasing power while heavy rains and floods in 2010 resulted in deterioration of household food security due to damages to food stocks and productive as well as non-productive assets.

3.2 CFSVA Objectives

The 2011 Comprehensive Food Security and Vulnerability Analysis (CFSVA) is based on a nationally representative sample survey (see Technical Note on Methodology for details) to update the knowledge base on food security and vulnerability at the household level in The Gambia taking into account the recent natural and economic shocks experienced by the population. It is the first survey of this type carried out in both rural and urban areas.

The specific objectives of The Gambia CFSVA were as follows:

1. Estimate the proportion of the food insecure in the eight regions (LGAs or Local Government Areas) of the country;
2. Describe the profile of households and individuals affected by food insecurity;
3. Illuminate the immediate and underlying causes of food insecurity;
4. Forecast the evolving food security situation in the immediate and longer-term future and describe the groups most likely to be food insecure;
5. Identify targeting criteria for the food insecure in rural and urban settings; and
6. Recommend selection of surveillance sites and indicators that should be monitored at community and household levels to follow up the evolution of the food security and vulnerability of the rural and urban poor.

¹ For comparison with neighbouring countries: Senegal (144), Guinea (156), and Guinea Bissau (164).

Technical Note on Methodology:

The CFSVA was carried out based on a nationally representative sample survey covering both urban and rural areas.

After consultations and reviews with partners (especially Gambia Bureau of Statistics), a stratification procedure was used similar to the one which was adopted during the 2003 Integrated Household Survey: a total of 39 districts have been regrouped into 16 strata taking the urban/rural nature of the area and geographic proximity as the two main criteria.

Based on this sampling frame (with 95% level of confidence and a design effect of 1.6 or precision 10%), a total of 2,592 households were interviewed in 336 communities. Data collection took place during 16 – 26 Jan 2011.

Households were asked questions regarding food consumption (food frequency and dietary diversity); income and expenditure; coping strategies; assets and livelihoods; seasonality of food insecurity and employment including migration patterns. A small health and nutrition module was included for women of reproductive age only in order to explore the linkages between household food security and nutrition outcomes.

Mid-upper arm circumference (MUAC) measurements were taken from a total of 2,991 women aged between 15 and 49. However, the number of women whose MUAC measurements fall under the cut-off point 21 centimetres for acute adult malnutrition as per WHO standards was very low (34 cases) and in the absence of any local other local reference, the results could not be used for the analysis as originally envisaged.

In addition to interviewing households, community interviews were carried out in eight randomly selected communities – one for each municipality and Local Government Area (LGA) – to obtain contextual information about access to health and sanitation services, infrastructure, shelter, roads, markets and recent shocks and coping mechanisms. The data from community questionnaires was used to complement the findings of the household survey.

The final analysis is a result of triangulating the available secondary data and primary data collected through the survey using WFP's Food and Nutrition Security Conceptual Framework (2009). In particular, the level of food security was determined by taking into account household's food consumption (dietary diversity and frequency) and ability to access food (physical and economic access). The Food Consumption Score (FCS), a commonly used proxy indicator to describe the current food security situation was cross tabulated with food access indicators relevant for the Gambian context to determine three food security categories – food secure, vulnerable to food insecurity and food insecure. More details on the Food and Nutrition Security Conceptual Framework, calculation of the FCS, and the criteria for defining food security categories are provided in the Annexes.

4. Prevalence of Food Insecurity and Vulnerability²

At the national level, about 145,119 persons are food insecure or vulnerable to food insecurity representing approximately 11% of the total population³.

Table 4-1: Prevalence of food insecurity

Strata	Total population	% of households food insecure	Population food insecure	% of households vulnerable	Population vulnerable	% of households food insecure + vulnerable	Total population food insecure + vulnerable
Banjul	35,061	0.5%	180	5.0%	1,759	5.5%	1,939
Kanifing	322,735	0.0%	-	7.4%	23,793	7.4%	23,793
Kombos	340,348	0.6%	2,190	7.1%	24,325	7.8%	26,515
Fonis	49,246	1.4%	701	18.8%	9,257	20.2%	9,958
Kiang	29,002	0.0%	-	13.4%	3,873	13.4%	3,873
Jarra West	24,220	0.0%	-	7.1%	1,723	7.1%	1,723
Jarra Central and East	18,945	0.7%	133	14.8%	2,803	15.5%	2,936
Lower Nuimi	44,611	0.0%	-	7.0%	3,112	7.0%	3,112
North Bank West	42,830	0.6%	237	8.8%	3,764	9.3%	4,001
North Bank East	85,394	0.0%	-	10.9%	9,306	10.9%	9,306
Lower Saloum	13,564	2.1%	289	22.0%	2,979	24.1%	3,268
Central River North	64,927	0.0%	-	10.5%	6,845	10.5%	6,845
Niamina	31,823	0.0%	-	11.4%	3,642	11.4%	3,642
Janjanbureh	75,389	0.0%	-	18.2%	13,733	18.2%	13,733
Fulladu East	98,078	0.0%	-	4.9%	4,796	4.9%	4,796
Upper River North	84,508	1.2%	983	7.7%	6,516	8.9%	7,499
The Gambia	1,360,681	0.4%	5,101	10.3%	140,018	10.7%	145,119

Source of Population figures: GBOS, 2003

Households with vulnerable traits in socio-demography and sanitation are more likely to be food insecure and/or vulnerable to food insecurity as shown in Table 4-2: female headed households, households with illiterate household heads, unimproved source of drinking water and sanitation facility are more likely to be vulnerable to food insecurity. This will be discussed in more detail in the next sections (7.6 and 7.7).

Table 4-2: Household food security status by vulnerability criteria

		Food insecure	Vulnerable to	Food secure
		Row%	Row%	Row%
Gender of household head	Male	0.4	9.8	89.8
	Female	0.3	13.0	86.7
Literacy of household head	Illiterate	0.4	12.7	86.9
	Literate	0.4	8.6	91.1
Source of drinking water	Unimproved	0.9	12.7	86.4
	Improved	0.3	10.0	89.7
Sanitation facility	Unimproved	0.5	25.6	73.9
	Improved	0.4	9.2	90.4

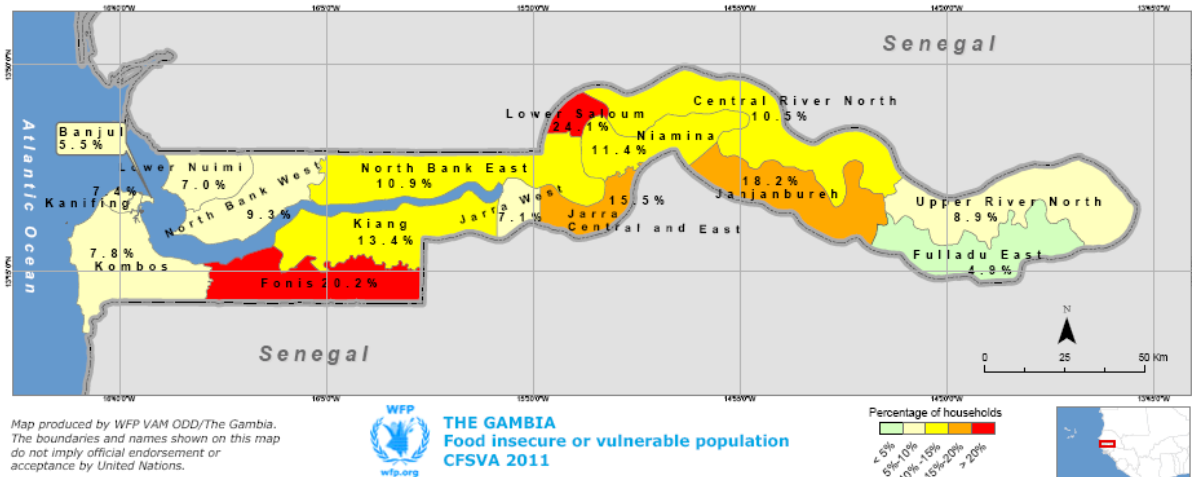
Source: 2011 CFSVA The Gambia

² The food insecure groups are defined as having currently poor food consumption and insufficient food access whereas the vulnerable groups may or may not have currently poor food consumption but have nevertheless insufficient food access and are therefore most likely to become food insecure in the event of a shock or a crisis. For a more detailed definition and methodology, see Annex-B.

³ The estimates of food insecure or vulnerable to food insecurity are weighted to take into account the relative population size of each stratum. It should be noted, however, that population estimates are based on 2003 census data so the total number of persons who are food insecure or vulnerable to food insecurity today would be arguably higher as the total population increased from 1.3 million to 1.7 million in the meantime (approximately 31 percent increase).

There is also notable variation across strata: a significantly higher proportion of food insecure or vulnerable population well above the national average level was found in Lower Saloum (24 percent), Fonis (20 percent), and Janjanbureh (18 percent) strata. All three strata can be characterized as predominantly urban, having sizable urban settlements as defined by GBOS⁴. By contrast, Fulladu East (5 percent) and Banjul (6 percent) have the lowest proportion of food insecure and vulnerable although Banjul has an above average proportion of food insecure population together with Lower Saloum and Upper River North strata. Map 4-1 shows the distribution of food insecure and vulnerable population across strata.

Map 4-1: Proportion of food insecure or vulnerable households at strata level



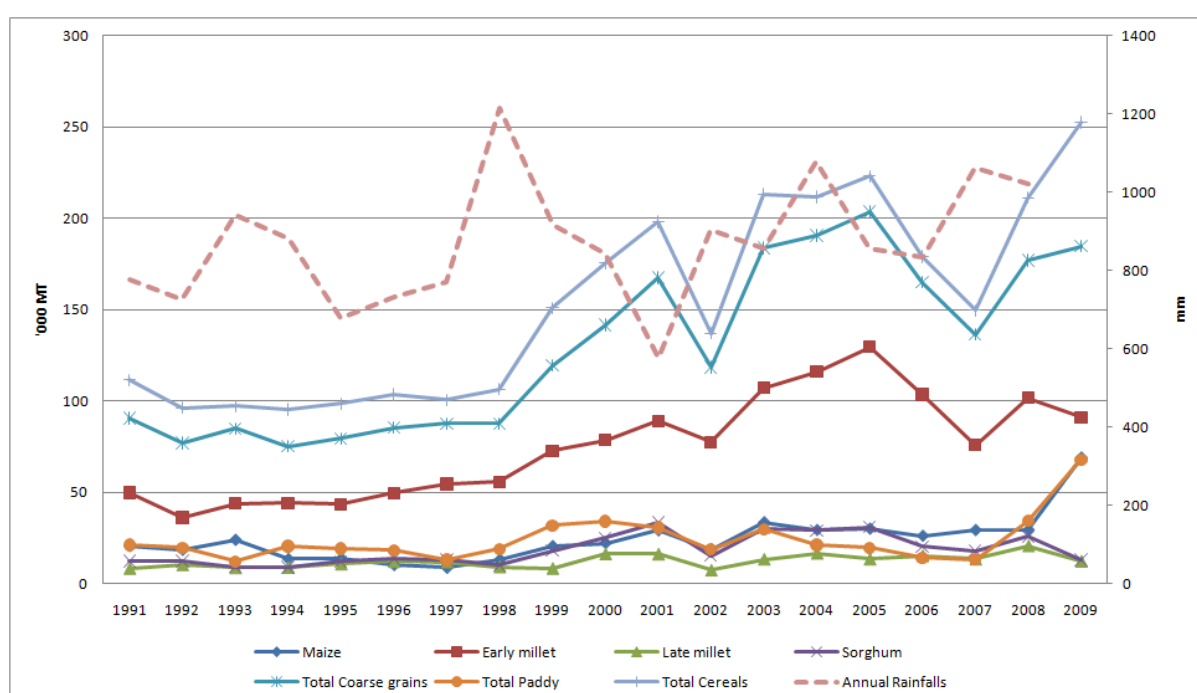
⁴ GBOS classification uses the following criteria to define an urban settlement: commercial importance; institutional importance; majority of the population in non-agricultural occupation; total population 5,000 and above; high density; some degree of infrastructure available.

5. Food Production and Markets

5.1 Local food grain production

In the last ten years, overall cereal production has been increasing with an annual average growth rate of 4.4 percent and production figures more than doubled from 111,200 metric tonnes (MT) in 1991 to 252,600 MT in 2009. Production levels had a notable sharp drop in 2002 and 2007 due to poor rainfalls the year before (see Graph 4-1). Traditionally, coarse grains have accounted for over 80 per cent of total cereal production and millet is the primary crop produced. However, rice is the preferred staple food in The Gambia and therefore considered as the most critical crop that determines Gambia's food self sufficiency.

Graph 5-1: Total crop production 1991-2009, The Gambia



Data source: Planning Services-MoA

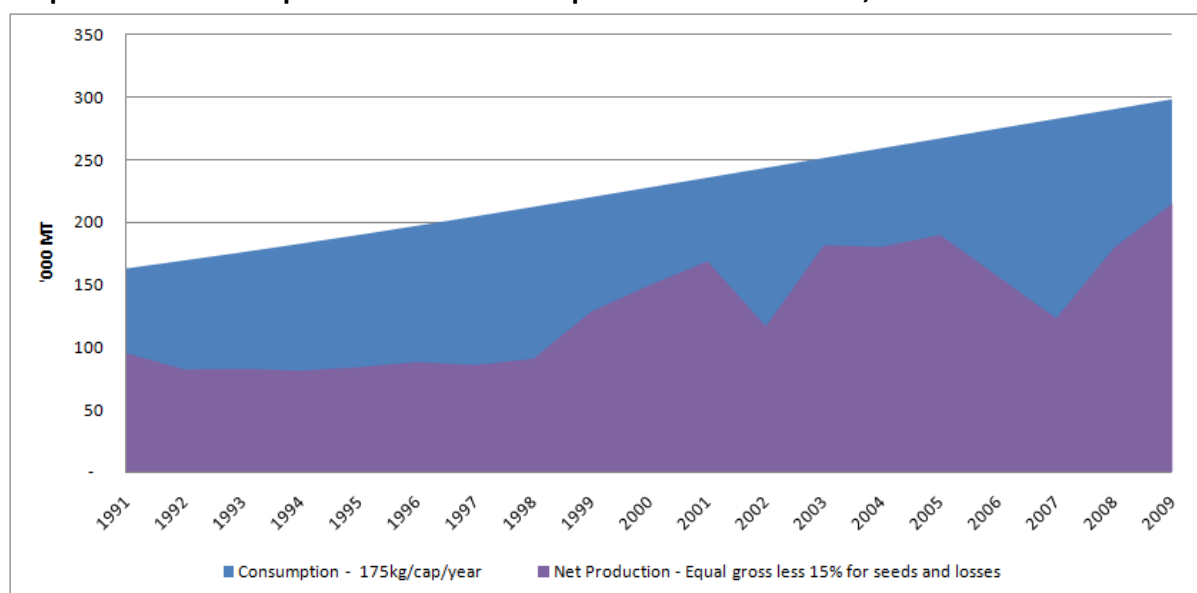
Rice is produced throughout The Gambia, although rice cultivation can be classified broadly into two different agro-ecological categories – upland and lowland rice. Upland rice has traditionally been grown mainly in Western Coast Region and to a lesser extent Lower River, North Bank and Upper River Regions. Yields have been low with an average of 0.7 MT per hectare for local and 1 MT per hectare for improved varieties. Lowland rice is grown in deep-flooded or inland valley/saline mangrove swamps and under tidal irrigated or pump-irrigated systems. Average yields are almost double of upland rice yields; in particular in Central River Region where irrigated rice cultivation is practiced with year round fresh water, potential yields range from 3 to 6.5 MT per hectare with improved varieties assuming double or even triple cropping. A WFP assessment on local rice market estimated that with a land area of over 100,000 ha where irrigation is feasible, local rice production could reach up to 300,000 to 650,000 MT, although this potential is yet to be realized (WFP, 2010). Currently a very limited area (an estimated 6 per cent of the arable land) is under irrigation.

To date, both upland and lowland rice production is rainfall dependent and thus paddy rice production has remained relatively static during the last ten years with annual production figures varying between 12,000 Mt and 34,000 Mt. Only recently has rice production started to pick up due to government and other supply side actor interventions through projects by the World Bank, Taiwanese Mission and IFAD amongst others: production reached a record level of 67,800 Mt in 2009 resulting in an increased share of rice to over 25 percent of total cereal production. The sharp increase in rice production since 2007 was mainly driven by the increase in area cultivated (in particular upland NERICA⁵ rice, one of the improved varieties) rather than due to increase in yield. In fact, yields for paddy rice remain very low at less than 1 MT per hectare and decreased even slightly (5%) to 0.89 MT per hectare in 2009 from 0.95 MT per hectare in 2008.

5.2 Cereal balance and food imports

Despite the increase in overall production levels, The Gambia remains a food deficit country where domestic production of major grains has traditionally covered up to only 60% of consumption requirements on average in the last ten years with the remaining gap filled by commercial imports and a small proportion of food aid (see Graph 5-2).

Graph 5-2: Net cereal production vs. consumption needs 1991-2010, The Gambia



Data source: Planning Services-MoA

Looking at rice imports only, The Gambia is the second largest net-importer after Senegal in the Western Basin region together with Guinea-Bissau where rice import share amounts to 30 percent of total cereal needs (see Table 5-1).

⁵ NERICA, or New Rice for Africa, varieties are cross products between high yielding Asian varieties and traditional African varieties which are more drought tolerant than traditional high yielding varieties and are less dependent on fertilizers and are thus especially well adapted to upland farming conditions. Since 2005, the use of NERICA varieties has been heavily promoted through the African Development Bank funded 'NERICA Dissemination Project' which aims to increase domestic rice production and import substitution.

Table 5-1: Rice imports and their contribution to cereal needs (Average 2003 – 2007)

Country	Cereal consumption needs ('000 tons)	Rice imports ('000 tons)	Rice import share of total cereal needs (%)
The Gambia	278	84	30
Guinea	2,000	218	10
Guinea-Bissau	188	57	30
Mali	2,658	177	7
Mauritania	465	47	10
Senegal	1,889	869	46

Source: Cross-border Trade and Food Security in West Africa, WFP, 2010

To date, The Gambia has traditionally re-exported some imported goods, and it is assumed that there is also some quantity of imported rice flowing into Senegal although the true scale of such cross-border rice trade is unknown as official reports are not available. At the same time, the government closely monitors rice import stocks and price levels and if necessary intervenes with price regulations to ensure sufficient overall food supply. For example, in response to the high food prices crisis in 2008, the Government took swift measures to reduce the tax on imported rice to five percent initially and eliminated it altogether in May 2008 (compared to 15 percent in July 2007). Imported rice prices started to decelerate only after reaching the peak in December 2008 at D20 per kilo, an increase by more than 50% compared to the previous year (GoTG/ISFP, 2008). The five percent import sales tax on rice was reinstated in January 2010 and although inflationary pressures have been largely contained to single-digit levels to date (IMF, 2011), The Gambia's high dependence on food – particularly rice – imports makes the country highly vulnerable to international market price volatilities.

5.3 Domestic rice markets and prices⁶

There is a big divide between the channels through which locally produced and imported rice is traded. Imported rice is available throughout the country and all year round. It is brought into the country by five major trading companies that are located in the capital Banjul and account for 90 percent of the market. It first reaches the nearby urban consumer markets and is thereafter distributed throughout the country, sold in daily provincial and weekly rural markets (known as lumos).

While market concentration usually has negative effects over consumers as it allows a small number of actors to control prices, in the case of the Gambia it seems rather to allow the government to oversee traders' activities and effectively negotiate to contain local prices (CILSS, 2010). In fact, this was the experience during the food price crisis in 2008 when the president called upon the rice importers for an agreement to check rice price levels and avoid further increase in the market.

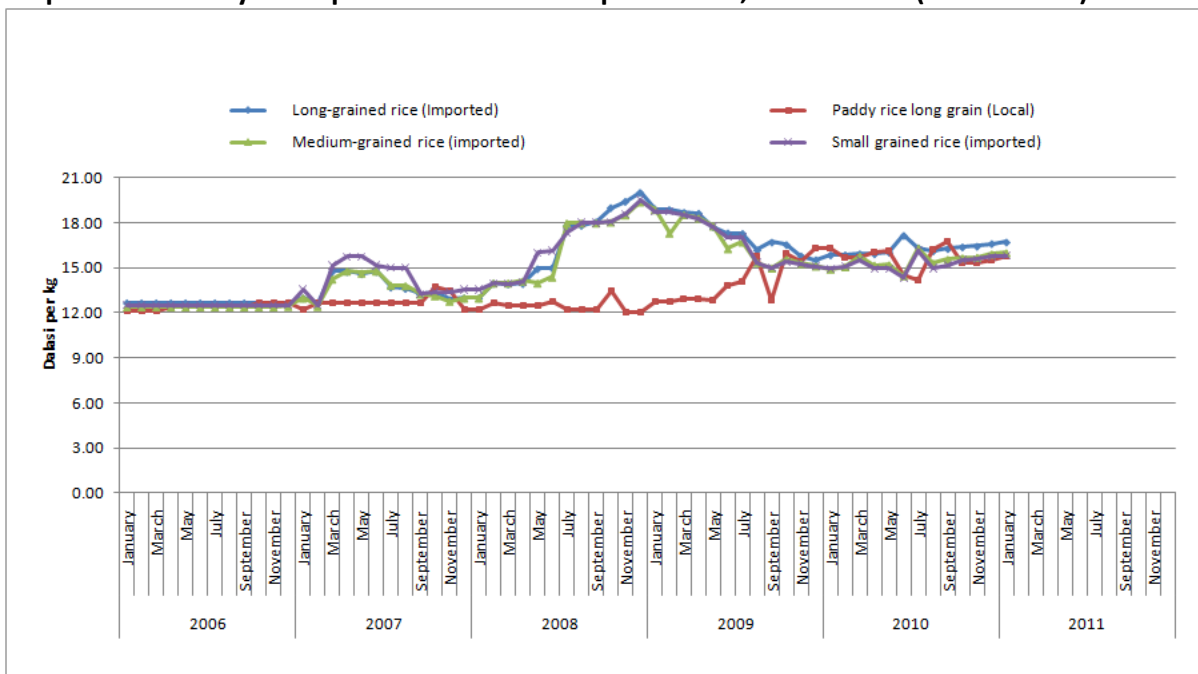
On the other hand, the availability of local rice is highly seasonal – mostly during the post harvest period from October to January – and can hardly be found in markets outside the rice producing areas. Most if not all of the locally produced rice is retained for household consumption while only limited surpluses are marketed by farmers through underdeveloped

⁶ This section summarizes the key findings of the 2010 WFP assessment on local rice market in The Gambia.

trading networks. Farmers sell hand-milled rice in small quantities (per cup which is equivalent to 250 g) either to neighbours or in the nearest lumos where it is bought directly by consumers or by retailers from other markets. These traders assemble between one and three bags (usually up to 50 kg) of rice per week from various sellers and then transport the rice by public transport to bigger markets such as Brikama or Bakau for retail.

It is difficult to assess what the potential wholesale prices for local rice would be as local rice is only traded in very small volumes between farmers and individual consumers and/or retailers. Also, it is not clear how retail prices for local rice are set in markets where it is sold. When looking at the monthly retail prices of local and imported rice (see Graph 4-5), local rice prices have been closely pegged to the imported rice prices since late 2009. This is different from other rice importing countries in the region where local rice prices vary according to seasonal availability.

Graph 5-3: Monthly retail prices of local and imported rice, The Gambia (2006 – 2010)



Data source: Gambia Bureau of Statistics (GBOS)

6. Poverty and Livelihoods

6.1 Livelihoods

In a food security analysis, population groups are usually defined according to livelihoods to determine the extent to which a shock can impact household food security. A livelihood group is defined as: “a group of people who share similar basic means of livelihood and life styles – the same main subsistence activities, main income activities and social and cultural practices – and face similar risks to food and nutrition insecurity” (WFP Emergency Food Security Assessment Handbook, 2009).

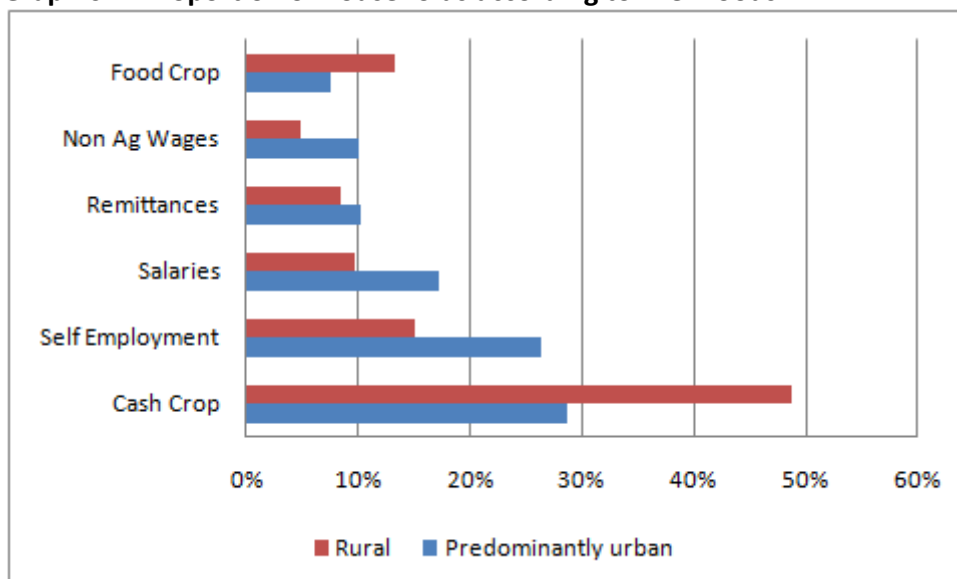
In the 2011 CFSVA, livelihood groups were defined according to the primary productive activity or income. Households were asked to name up to three main sources of income and indicate the relative contribution of each source to the total household income. Based on this information a cluster analysis was performed which identified six main livelihood groups. Each livelihood group was named after the primary source of income which ranged between 60 and 85 percent of the total income (for details on clustering process, see Annex-E). The livelihood groups are as follows:

1. **Cash crop** – including households whose secondary income sources are livestock rearing and/or fishing;
2. **Self employment** – including households whose secondary income sources are aid, gift, rent amongst others;
3. **Salaries** – including households who primarily rely on salaried employment in private or public sectors;
4. **Remittances** – including households who primarily rely on remittances;
5. **Non agricultural wages** – including households whose secondary income sources are sale of firewood and informal sales (i.e. street vendors);
6. **Food crop** – including households who primarily rely on sale of food crops.

At the national level, the three main livelihood groups are cash crop⁷ (36 percent), self employment (22 percent) and salaries (14 percent). There is a notable difference between predominantly urban and rural areas: one in two households depend on sale of cash or food crop as primary source of income in the rural strata whereas the proportion of such households is lower in predominantly urban strata (29 percent) where livelihoods are more diversified. Sale of cash crop is still a major livelihood for households living in predominantly urban areas; however, there are a significantly higher proportion of households whose main livelihood is self employment (26 percent) or salaries (17 percent) compared to rural areas (15 percent and 10 percent respectively).

⁷ The biggest cash crop in The Gambia is groundnut. This will be further discussed in section 7.1.

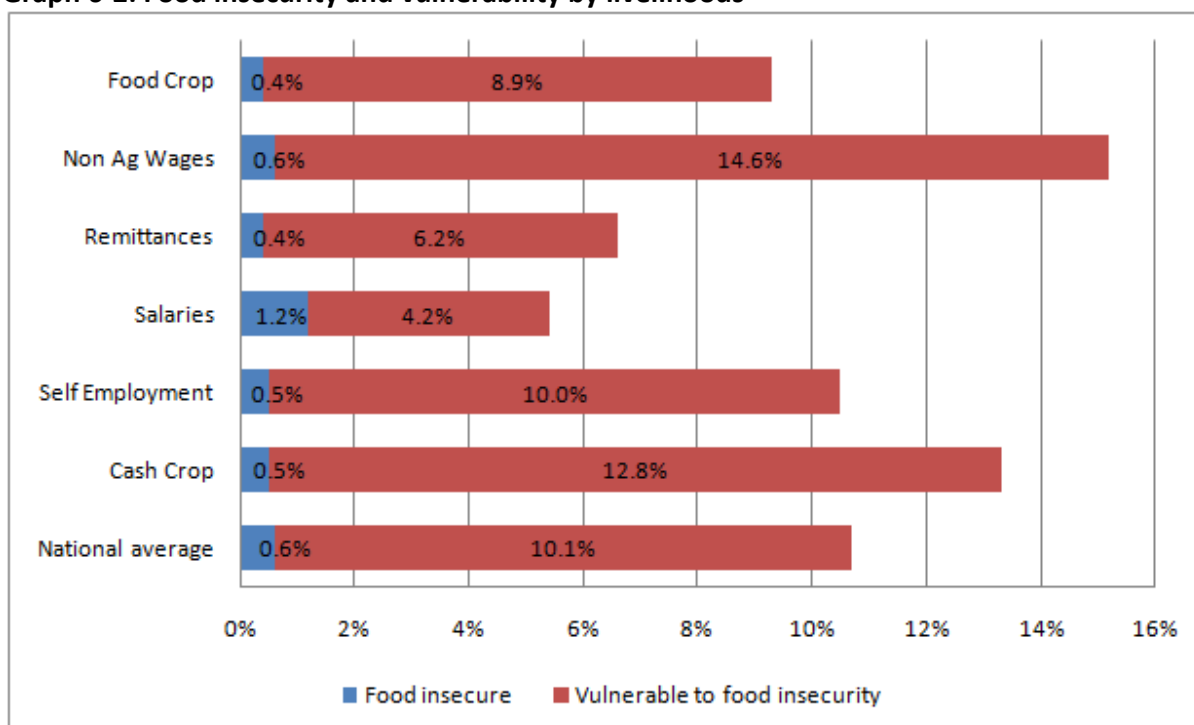
Graph 6-1: Proportion of households according to livelihoods



Source: 2011 CFSVA The Gambia

The highest incidence of food insecurity and vulnerability is found in the non agricultural wages group with approximately 15 percent of households being either food insecure or vulnerable. Cash crop (13 percent) and self employment (11 percent) groups also have an above average incidence of food insecurity and vulnerability. Note that the highest incidence of food insecurity alone is found in the salaries group (1.2 percent), which suggests that households that rely on salaries as main income source are more likely to have current food access constraints and/or poor consumption.

Graph 6-2: Food insecurity and vulnerability by livelihoods



Source: 2011 CFSVA The Gambia

The wage rate of informal labour varies considerably depending on level of skills and performance. However, unskilled labour has a payment range of 50-100 Dalasi while skilled labour (and labour with provision of inputs such as use of cattle to plough the land) has a range of 150-200 Dalasi. With performance pay (e.g. oyster selling), the wage depends on quantity sold and could vary between 25 and 100 Dalasi.

6.2 Poverty and wealth

Poverty is a major development challenge in The Gambia where every other household lives below the poverty line of US\$2 per day and 31 percent live below USD\$1.25 (World Bank, 2005). Resource poor households are particularly vulnerable to economic shocks that might erode their purchasing power such as the rise in food and commodity prices. A number of poverty assessments have already been conducted in The Gambia including a recent World Bank study in 2009, but an attempt was made to measure household wealth in the context of the 2011 CFSVA in order to explore the dynamic between poverty and food insecurity.

Wealth refers to the value of all natural, physical and financial assets owned by a household and is an important determinant of household's access to food. It is measured by a wealth index which typically includes components such as non-productive assets, access to water and sanitation, household utilities etc. which are not representative of any specific livelihood (i.e. livelihood-neutral). In this CFSVA, the measurement of total annual household income was considered to be robust enough to use as a proxy indicator for wealth based on which five wealth groups were developed – lowest (less than 20,000 Dalasi), low (between 20,000 and 40,000 Dalasi), medium (between 40,000 and 50,000 Dalasi), medium-high (between 50,000 and 80,000 Dalasi), and highest (above 80,000 Dalasi) – and therefore no separate wealth index was created (for a detailed justification, refer to Annex-C).

At the national level approximately 70 percent of households are poor accounting for those who fall in the lowest and low wealth groups. There is a notable variation across strata (see Table 6-1): Jarra Central East and Lower Saloum have the highest proportion of poor households (over 90 percent) whereas Banjul and Kanifing Strata have the lowest proportion of poor households (less than 35 percent).

Table 6-1: Proportion of households by wealth groups

	Lowest	Low	Poor (Lowest + Low)	Medium	Medium-high	Highest
Banjul	14.1%	16.0%	30.1%	22.1%	14.9%	32.9%
Kanifing	18.7%	14.3%	33.0%	19.3%	24.6%	23.1%
Kombos	30.6%	37.4%	68.0%	14.9%	10.0%	7.1%
Fonis	55.8%	28.4%	84.2%	9.1%	4.9%	1.8%
Kiang	64.6%	19.6%	84.2%	6.2%	2.2%	7.3%
Jarra West	45.3%	30.7%	76.0%	10.1%	5.6%	8.3%
Jarra Central and East	71.7%	19.0%	90.7%	3.9%	5.0%	0.4%
Lower Nuimi	30.5%	28.0%	58.5%	15.6%	12.7%	13.2%
North Bank West	50.1%	27.2%	77.3%	10.9%	7.3%	4.5%
North Bank East	66.1%	20.5%	86.6%	5.5%	5.6%	2.3%
Lower Saloum	66.6%	28.7%	95.3%	2.3%	2.3%	0.0%
Central River North	49.1%	23.3%	72.4%	12.5%	12.2%	2.9%
Niamina	53.5%	29.8%	83.3%	9.9%	4.2%	2.6%
Janjanbureh	37.9%	26.1%	64.0%	15.4%	16.6%	4.0%
Fulladu East	34.0%	22.0%	56.0%	14.2%	14.7%	15.2%
Upper River North	48.6%	16.9%	65.5%	10.8%	10.1%	13.6%
The Gambia	45.2%	24.5%	69.7%	11.6%	9.7%	9.0%

Source: 2011 CFSVA The Gambia

In order to compare findings from the 2011 CFSVA with previous poverty studies, the results were aggregated at the LGA level. Table 6-2 provides a summary of the estimated poverty rates. Although any comparison should be done with caution as these studies did not use the same methodology to estimate poverty rates, it is interesting to note that

1. Central River Region North appears as the region with the highest estimated poverty rate in all three studies;
2. Western Coast Region and Lower River Region have a higher incidence of poverty in the 2011 CFSVA compared to previous studies; and
3. Poverty rate in Banjul City Council is markedly higher in the 2011 CFSVA compared to previous studies.

Table 6-2 Proportion of households by wealth groups

	2003 IHS	2009 World Bank Poverty Assessment	2011 CFSVA	
Banjul City Council	7.6%	9.3%	30.1%	
Kanifing Municipal Council	37.6%	39.2%	33.0%	
Western Coast Region	56.7%	52.8%	74.7%	
Lower River Region	62.6%	62.5%	82.6%	
North Bank Region	69.8%	79.6%	74.5%	
Central River Region North	94.9%	85.6%	82.8%	
Central River Region South	75.7%	69.7%	74.1%	
Upper River Region	68.0%	74.0%	60.1%	
Total	58.0%		69.7%	

Highest

Second highest

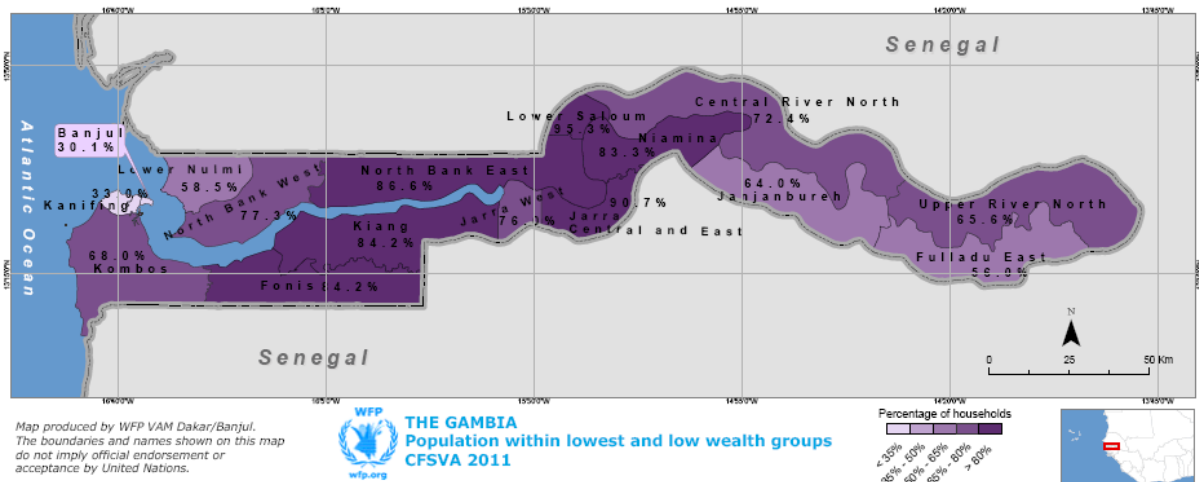
Third

Source: World Bank, 2009 and 2011 CFSVA The Gambia

Further, the 2011 CFSVA found that high concentration of poverty is found both in rural and predominantly urban areas. Although the proportion of poor households is still higher in the

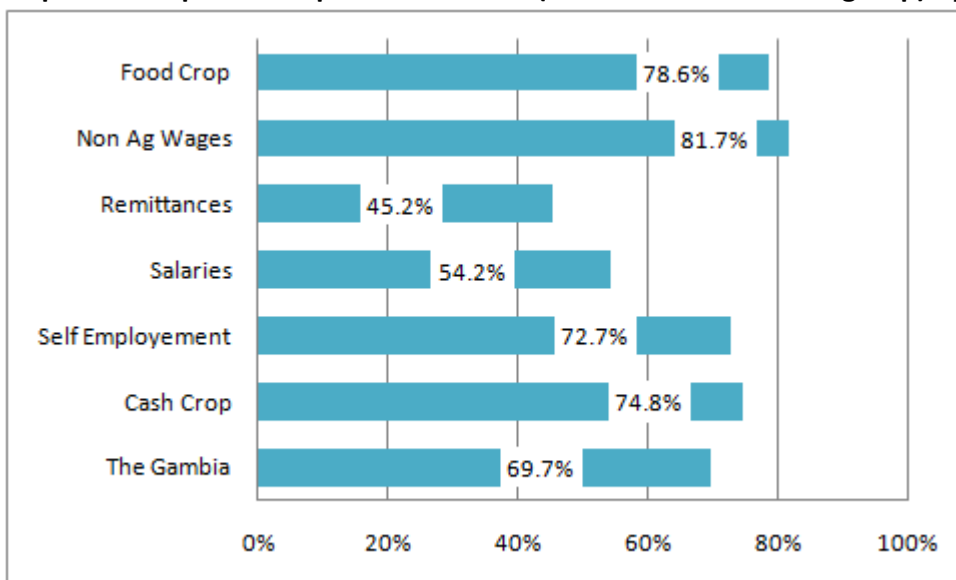
rural areas, approximately 63 percent of households living in predominantly urban strata are poor. This demonstrates that poverty can no longer be considered primarily a rural phenomenon in The Gambia. Map 6-1 further shows the distribution of poor households across strata.

Map 6-1: Poverty levels by strata



Poverty is widespread but there are variations across different livelihoods: poverty levels are highest in the non agricultural wages group (82 percent) followed by food crop (79 percent) and cash crop (75 percent). Not all of the poor households are food insecure or vulnerable to food insecurity but the livelihood groups that have a relatively higher incidence of food insecurity and vulnerability also have above average poverty levels, suggesting the poorer a household, the more food insecure and vulnerable it is and vice versa.

Graph 6-3: Proportion of poor households (lowest and low wealth group) by livelihood



Source: 2011 CFSVA The Gambia

Inadequate housing is a major concern for many resource poor households who regularly suffer damages to housing structure during the rainy season. The 2011 CFSVA found that

approximately 58 percent of households have housing with unimproved wall materials (mud, straw, wood, or plastic) and 12 percent of households have housing with no windows. Communities surveyed unanimously expressed their concern over the generally poor quality housing and reported up to 60 percent of community members have sub-standard housing. During the flood disaster in 2010, destruction or partial damage of housing led to the displacement of 7,640 persons and immediate shelter support was recommended as a critical measure to recover livelihoods in the aftermath of the floods (RJA, 2010).

6.3 Income and expenditure

Two thirds of households have two or more income sources whereby the proportion of such households is notably higher in Kiang (79 percent) and Jarra Central and East (76 percent) strata. This can be explained by the fact that these two strata are the poorest, having the highest proportion of households that are in the lowest wealth group (65 percent and 72 percent respectively).

The number of income sources alone cannot predict a household's food security status as it can be interpreted in two ways: either a household cannot make ends meet with only one income source and therefore relies on additional income sources or a household is more likely to be better off in the event of a shock by being able to spread the risk with multiple income sources. The 2011 CFSVA found that there was not a significant difference in the number of income activities between households who are food secure and those who are food insecure or vulnerable households. On average, households engage in more than two income activities regardless of their food security status.

The most common income sources are sale of cash crop (46 percent), sale of food crop (25 percent) and remittances (25 percent)⁸. This is consistent across all strata with a few exceptions: Banjul where the two other major income sources are salaried employment and business; Kombos where the three major income sources are self employed services, sale of cash crop and salary employment and Lower Nuimi where salaried employment is more common than remittances. The dependence on remittances, at 25 percent, is striking – which is why remittances category is singled out as one of the main livelihood groups as discussed in the previous section.

Approximately 70 percent of households do not earn more than 40,000 Dalasi annually and 45 percent of households reported an average annual household income that is less than 20,000 Dalasi. In both rural and predominantly urban areas the lowest income group (less than 20,000 Dalasi) has the largest share of households, although the proportion was significantly higher in rural areas (57 percent) than in predominantly urban areas (38 percent).

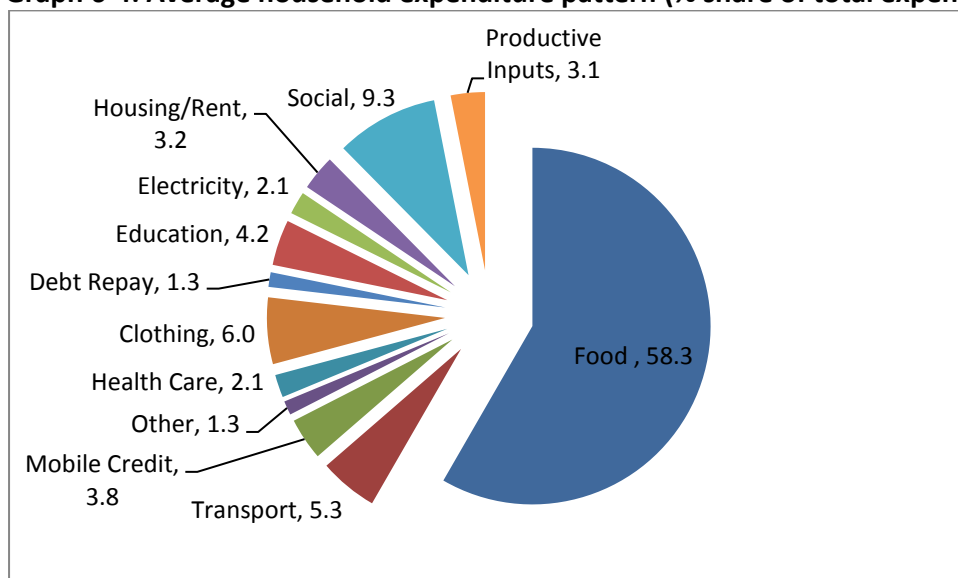
Monthly household expenditure is approximately 7,860 Dalasi and per capita monthly expenditure is estimated at 854 Dalasi. Expenditure on food accounts for approximately 58 percent of the total expenditure. Within the food category, the biggest share of expenditure is allocated for rice (29 percent) followed by fish and meat (16 percent), sugar (15 percent) and oil

⁸ The percentage estimates, when added, exceed 100 percent because households could give multiple responses.

(13 percent). It is noteworthy that approximately 5 percent of the total expenditure is allocated for attaya tea, reflecting the prominence of this non-staple food item in the local custom and diet.

Amongst the non-food expenditure items, social events and clothing together amount to 15 percent of the total expenditure. Debt repayment accounts for only 1.3 percent, although this does not reflect the true magnitude of household indebtedness because in practice, debts are repaid through other means than cash such as exchange of goods and informal credit. Graph 6-4 shows the average household expenditure pattern:

Graph 6-4: Average household expenditure pattern (% share of total expenditure)



Source: 2011 CFSVA The Gambia

The variation across wealth and livelihood groups in terms of proportion of food expenditure comes as little surprise as Table 6-2 demonstrates: the poorer a household the more likely it will spend a larger share of its income on food. Households in the livelihood groups that have the highest incidence of food insecurity or vulnerability (most notably the non agricultural wages group) also spend proportionally more on food compared to those in other livelihood groups.

Table 6-3: Monthly household expenditure by wealth and livelihood groups

		Total expenditure (Dalasi)	Per capita expenditure (Dalasi)	% of expenditure on food	Food expenditure (Dalasi)
Wealth Groups	Lowest	5,208	566	64	3,156
	Low	6,826	742	59	3,805
	Medium	8,569	931	54	4,372
	Medium-high	11,949	1,299	50	5,856
	Highest	17,434	1,895	48	8,025
Livelihood Groups	Cash Crop	6,602	718	60	3,677
	Self Employment	8,541	928	59	4,538
	Salaries	9,136	993	55	4,642
	Remittances	10,776	1,171	54	5,247
	Non Ag Wages	6,834	743	63	4,068
	Food Crop	7,042	765	62	3,993

Source: 2011 CFSVA The Gambia

7. Underlying Causes of Food Insecurity

7.1 Agriculture

Agriculture is the primary livelihood source for the majority of the population in The Gambia. The agricultural sector accounted for about 29 percent of GDP and about 70 percent of export earnings in 2009 (GoTG, 2010). According to FAO, 29 percent of Gambia's land (2,850 km²) is considered arable of which less than 1 percent is currently under irrigation (20 km²).

The agriculture sector is characterized by small-scale and subsistence rain-fed crop production, traditional livestock rearing and semi-commercial groundnut and horticultural production. There is also a large artisanal fisheries and a relatively small cotton sub-sector with little commercial development. The majority of farmers are smallholders planting less than 3 ha and traditional farming techniques are predominant while the use of agricultural inputs is limited.

The majority of Gambians have access to land: 66.1 percent of households reported as having access to land for farming out of which 77.5 percent reported that they own the land. Banjul, Kanifing (and to a lesser extent) Kombos strata have a proportion of households with access to land which is well below the national average, which is accounted by the fact that these are predominantly urban areas where the primary livelihood is not agriculture. The proportion of households that have a vegetable garden or plot is relatively low with a national average of 37 percent, which may be attributable to the fact that vegetable gardens are usually managed at the community level mostly by women groups (kafos⁹).

Crop production is diversified and widespread with no marked geographic concentration of particular crops except for rice which can be either classified as upland rice or lowland rice (irrigated or rainfed swamp). Coarse grains (millet, sorghum and maize) are the main food crops produced throughout the country together with groundnuts and (to a lesser extent) cotton which are the main cash crops.

In order to better understand food production at the household level, the 2011 CFSVA asked households to name four main commodities that they produce ranging from agriculture and livestock to fish produce. Seventy percent of households interviewed reported producing food commodities out of which 22 percent produce groundnuts, 19 percent produce millet¹⁰, 16 percent produce rice and 14 percent produce maize. A smaller proportion of households reported producing vegetables (13 percent) while the proportion of households with livestock or fish produce was minimal (less than 2 percent).

Cereals tend to be consumed by households rather than used for sale: on average, 65 percent of households reported producing cereals for own consumption while only 35 percent reported to produce them for sale or both consumption and sale. This was consistent across all strata and there

⁹ Kafo groups are important village institutions and organized by gender and generation, serving as labor networks for village activities such as construction and maintenance of public infrastructure. Usually women kafo groups are hired to work on farms during the farming season. They also bear the primary responsibility of managing the community gardens.

¹⁰ The proportion of millet producing households seems rather low given the fact that millet has the largest share in annual cereal production at the national level according to government estimates (NASS). A possible explanation for this discrepancy could be that households only reported on crops that they were growing at the time when the survey was carried out in January (by then early millet harvest was already over).

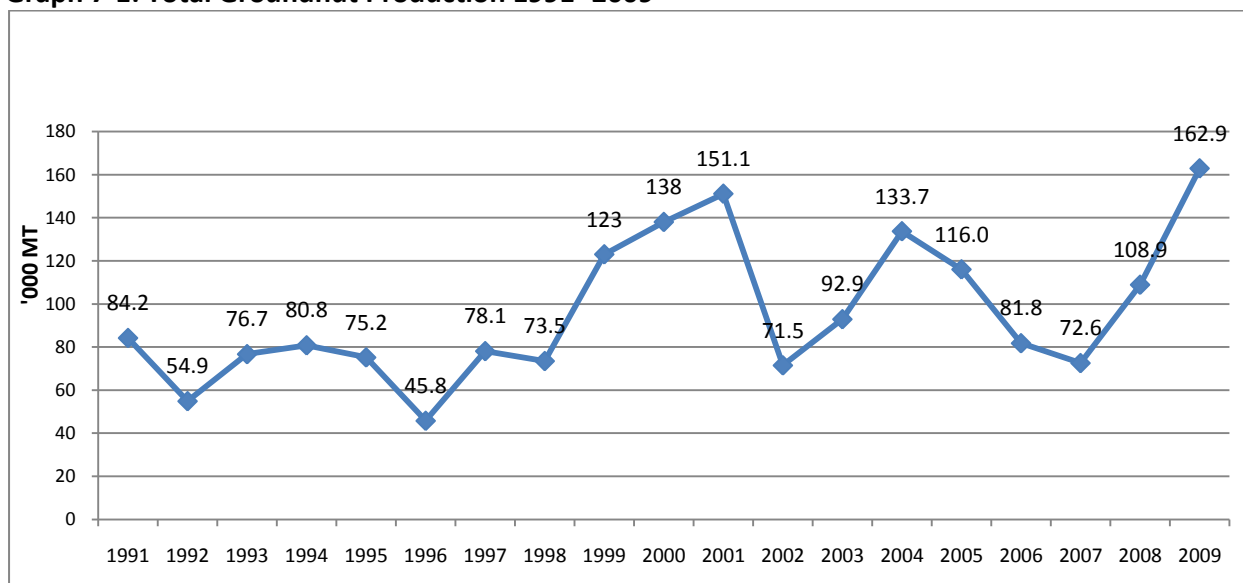
was no significant difference between rural and predominantly urban areas. Groundnuts, reportedly the biggest cash crop, are also produced largely for household's own consumption (59 percent) while other food commodities including fruits and vegetables are more sold than consumed. Nevertheless, household food stocks are not sufficient to meet consumption needs: households reported that the harvest of all major four crops from last year will last up to 6 months maximum (approximately 6 months for millet, 3 months for maize, 4 months for rice and 6 months for groundnuts).

Groundnut is a major contributor to farming household's income and food consumption. Groundnut exports contribute significantly to the national economy, accounting for 60 percent of domestic exports but exports began to collapse and were reduced to USD 9.6million in 2004 – 80 percent decrease compared to 1975 level of USD 49 million – as a result of failures in internal marketing arrangements (GOTG/ISFP, 2008). In recent years, the Government has undertaken measures and started implementing strategic reforms to revitalize the groundnut sub-sector.

However, groundnut farmers, who are traditionally considered to be the poorest in the country, continue to be exposed to risks associated with volatile international prices, poor quality control (in particular high levels of aflatoxin, a toxic and carcinogenic substance the contamination of which occurs before harvest or during storage) and climate variations. The limited processing capacities of the Gambia Groundnut Cooperation (GGC) – the biggest purchaser of groundnut surpluses by smallholder farmers – is an additional risk factor for farmers who are not sure whether they will be able to sell their produce or not. For instance, in 2010 the GGC reported that it was not able to absorb the full quantity of available groundnut produce for sale by farmers and purchased only 85 percent of the available quantity in the market (approximately 40,000 MT) due to limited processing and storage capacities.

One of the major constraints for the agriculture sector as a whole, but groundnut sector in particular, is the high rainfall dependency which leads to variable production levels from one year to the next (see Graph 1). Lack of farming inputs (in particular tractors and heavy machineries), poor seed quality, limited processing and storage capacities which lead to large post harvest losses up to 15 percent of the total produce (NASS, 2004) and other structural bottlenecks in the value chain prevent increased commercialization of agricultural products and reduce households' income opportunities.

Graph 7-1: Total Groundnut Production 1991 -2009



Data source: Planning Services-MoA

Livestock ownership is widespread in The Gambia: 74 percent of households reported owning at least one animal. Upper River North, Kiang, Central River North, Fonis, and North Bank West are among the strata with the highest proportion of livestock owning households (more than 90 percent) which are also the areas with a large livestock population (NASS 2007/2008). The most commonly owned animals are (proportion of households that reported owning the animal in brackets): chicken (87 percent), goat (60 percent), donkey (39 percent), sheep (35 percent) and cattle (27 percent).

At the national level, the livestock sector contributes 33 percent to agricultural GDP (2009 GBOS Estimate). However, the contribution to household income is relatively low: a 2010 study carried out in three sample sites located in Kiang and Central River North strata reported that livestock contributes to only 7.9 percent of the total farm income and 4.9 percent of total household income whereby small ruminants (sheep and goats) were reportedly more important as cash income. Savings and insurance were cited as other prominent reasons for livestock rearing which is indicative of households' coping (International Livestock Research Institute, 2010). Results from the community interview are consistent with these findings: communities surveyed reported that in urban areas only a limited number of small ruminants are kept whereas in rural areas livestock is a much more important livelihoods asset, often sold as a means of coping during times of crisis.

7.2 Access to markets and infrastructure

The majority of Gambians purchase their food regardless of the food security and wealth status: at the national level, 76 percent reported purchasing food for consumption. The proportion of such households is higher in predominantly urban areas such as Banjul, Kanifing and Kombos strata but even more so in some of the rural areas which include Fonis, Kiang and Jarra West strata. This is so despite the fact that these strata have a high proportion of households with agricultural livelihoods (i.e. production and sale of food and/or cash crop), an evidence that even farmer households depend primarily on food purchases for their own consumption.

Given the fact that most Gambians are net buyers of food, access to market is a critical factor to consider in determining household's vulnerability to food insecurity. A WFP survey found out

that access to market tends to be satisfactory for the rural population with 90 percent of sampled villages having access to a market within 5 km of the village and 33 percent having a food market in the village (WFP, 2003).

Communities surveyed reported that they have good access to daily markets and weekly markets (lumos) throughout the year and that the availability of main food items in these markets is good. Local products (e.g. vegetables, cereals, groundnuts and cassava) are available depending on the season whereas imported goods such as rice cooking oil, sugar, onions and potatoes are virtually always available. However, transportation of goods was a major concern for rural communities with farmers who mostly sell fresh produce that are marketable for a short period of time.

At the same time, The Gambia has a relatively good road network connecting the main rural villages and feeder roads that provide access to more remote villages. Although feeder roads are often of poorer quality, access becomes difficult only during the rainy season with high water level and erosion by run-off water. In fact, during the rainy season in 2010, flood related damages on roads occurred more in the urban centres (and to a lesser extent in main rural towns) due to poor maintenance and blockage of the draining system caused by illegal waste dumping over the years (RJA, 2010).

All in all, physical access to markets seems not to be an obstacle to food access as such. Rather, the challenges for households – who spend on average 58 percent % of their expenditure on food – are associated with the increasing and fluctuating food prices which erode purchasing power and therefore food access. Rising price of oil further pushes food prices up due to increases in production and transportation costs. At the time of report writing in January 2011, global food prices were higher than their peak in 2008 and oil prices were also edging up to USD100 per barrel, reaching their highest level in two years. In fact, significant price increases in non-cereal staples such as vegetables and vegetable oil have been reported in the local markets. GBOS consumer price index (CPI) estimates for vegetables recorded 17.5 percent in February 2011, the highest for the food category followed by sugar (11.8 percent) and oils/fats (9.6 percent). By comparison, CPI estimates for vegetables and oils/fats were 5.9 percent and 2.1 percent respectively in February 2010. Given these food items are mostly imported in The Gambia, the rise in CPI estimates is likely to be the result of a positive transmission effect from high global prices to domestic prices.

Furthermore, as many Gambian farmers have very limited storage facilities and tend to sell the bulk of their produce immediately after harvest at low prices in order to earn cash for immediate expenditure, they are trapped in a vicious cycle. In fact, rural communities surveyed reported that storage facilities are available but of limited use due to poor maintenance. As a consequence, farmers and rural households are forced to purchase food during the lean season when prices are the highest once they have depleted their stocks. This pattern is not untypical for a country with a large number of small holder subsistence farmers; however, it is further exacerbated in The Gambia by the structural constraints due underdeveloped marketing structures/practices and in-country trading networks as discussed previously.

7.3 Education and unemployment

Numerous studies have proven that there is a strong correlation between poverty and household head's level of education. Poverty in turn, is a strong contributor (albeit not the sole cause) of food insecurity which is also the case in The Gambia.

The 2011 CFSVA did not examine the status of household food security according to a detailed breakdown of the head's education level – however, it found out that 13 percent of households with illiterate heads are food insecure as opposed to 9 percent of households with literate heads. There is also a marked difference between female and male headed households: the proportion of households with illiterate heads was higher among female headed households (75 percent) compared to male headed households (36 percent). At the same time, 13 percent of female headed households were found to be food insecure as opposed to 10 percent of male headed households. The findings are consistent with the common assumption that households with illiterate heads affected by food insecurity are higher than those who are literate. At the national level, adult literacy rate was estimated at 58 percent (estimates by other studies in the past are much lower - e.g. 45 percent according to UNESCO Institute for Statistics, 2008)¹¹.

Significant efforts by the government and donor agencies have increased net student enrolments in primary and secondary school from 46 percent in 1991/92 to 94.9 percent in 2008/09, and gender parity has been accomplished. Further, Gambia's average primary completion rate compares favourably vis-a-vis other low-income African countries: in 2009, Gambia's average completion rate is 7.6 years of schooling, compared with only 6.9 years for other low-income African countries (School Feeding Impact Evaluation, WFP, 2010). Education, together with health, is the only area where The Gambia is expected to meet the MDG targets by 2015.

However, there is a serious underperformance in tertiary education which has implications for unemployment, in particular youth unemployment. Official unemployment data is unavailable in The Gambia but it is generally understood that there is a large youth population among the unemployed. Approximately 42 percent of the total population is aged 0-15 years and the median age is 18.8 years (UNFPA, 2010). As farming becomes increasingly less attractive to the youth population, there is a mass exodus of this group from rural to urban areas.

The poverty implication of this phenomenon is twofold: first, resource poor rural households are likely to become poorer due to limited agricultural labour availability and there will be a resultant decrease in agricultural production; second, the youth who migrate to urban areas seeking for a better future are likely to fall into a poverty trap themselves because many of them lack adequate skills and vocational training and fail to find suitable employment. The government in partnership with the private sector, is currently retooling and training the youth to increase their employability in trades, vocational skills and business management (GNAIP, 2010).

7.4 Migration and remittances

There are two types of migration¹² in The Gambia: seasonal migration within the country from rural to urban areas and overseas migration for a prolonged period of time. At least one in three

¹¹ This discrepancy may be due to the fact the 2011 CFSVA addressed the literacy question to heads of households only whereas adult literacy rate is usually defined as the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life.

¹² There is a third wave of migration - the movement of refugees which is not addressed by this CFSVA. The first major influx of Senegalese refugees from the Casamance region occurred in August 2006 when some 6,500 refugees fled into The Gambia in the aftermath of intensified hostilities between the Senegalese army and rebel groups. The situation has been stabilized over the course of the past few years and although there are reports of anew refugee arrivals in The Gambia at the time of the report writing in January 2011, the caseload remains small. As of December 2010, there are approximately 7,300 refugees from Senegal living in

households reported having family members working away from home. The proportion of such households was particularly high in Kiang and Upper River North strata (55.9 percent). Among the households that have members working away from home, approximately 17 percent have seasonal migrants (away for less than 6 months) only, 70 percent have prolonged migrants (away for more than 6 months) only and 13 percent have both seasonal and prolonged migrants. On average, a household has 2.07 prolonged migrants and 0.68 seasonal migrants out of a total of eight or more members.

Seasonal migrants are more likely to be away during the dry season or the post-harvest season: at least 50 percent of households who have family members as seasonal migrant workers reported they are away during the months from January to May. By contrast, November is the month when seasonal migration is the lowest. This corresponds to the empirical evidence that seasonal migration from rural to urban areas takes place mostly during the peak tourist season and post-harvest period when there is no farm work. Interestingly, Banjul and Kanifing strata were exceptions to this seasonal pattern suggesting a more complex migration dynamic in predominantly urban areas.

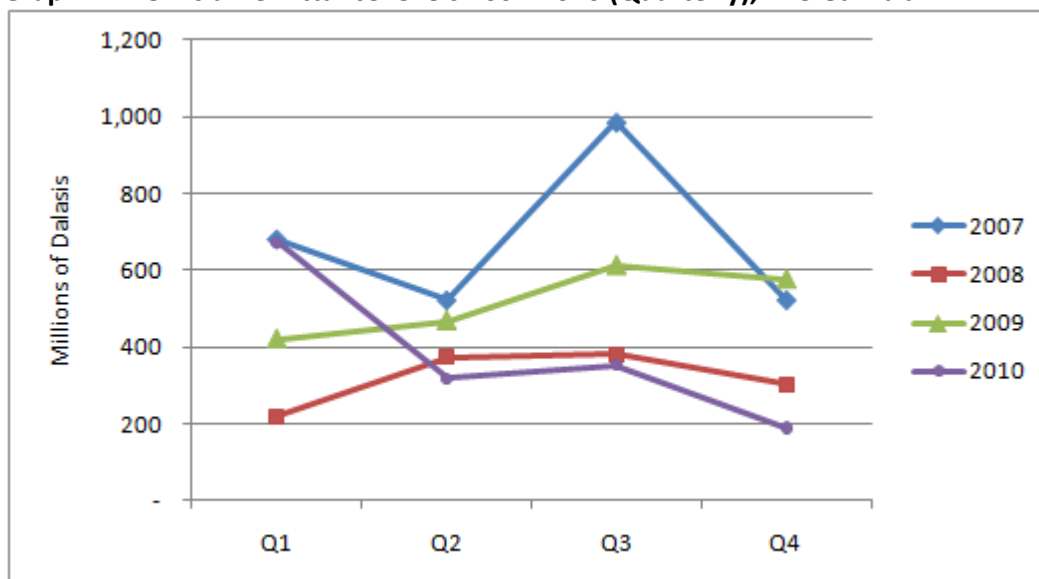
Communities surveyed confirmed the rural to urban migration flow mainly driven by economic motives although they perceived that there had been some return of urban migrants recently to the rural areas because of the government's back-to-the-land initiative, a national campaign to promote agricultural development by providing incentives and production inputs to farmers. Banjul on the other hand, was reported to experience outward migration losing its population to Kanifing, due to high rent prices and congestion¹³. In Western Coast Region, seasonal migration of Senegalese fishermen is reportedly common in a number of fishing communities.

Having family members as migrant workers has mixed impact on household food security. It may negatively impact resource poor rural households due to reduction in labour availability. At the same time, a significant contribution to household income is realized through remittances which can increase household's purchasing power and therefore food access. Looking at the overall trend at the national level, the official remittances have decreased significantly in the past few years to an unprecedented level: the estimate for the last quarter of 2010 was less than 200 million Dalasi, a whopping 67 percent drop compared to the previous year (see Graph 7-2).

The Gambia according to UNHCR records. For more information on Senegalese refugees from the Casamance region, see UNHCR-WFP The Gambia Joint Assessment Mission report (2009).

¹³ Banjul, being the capital, has the highest population in the country.

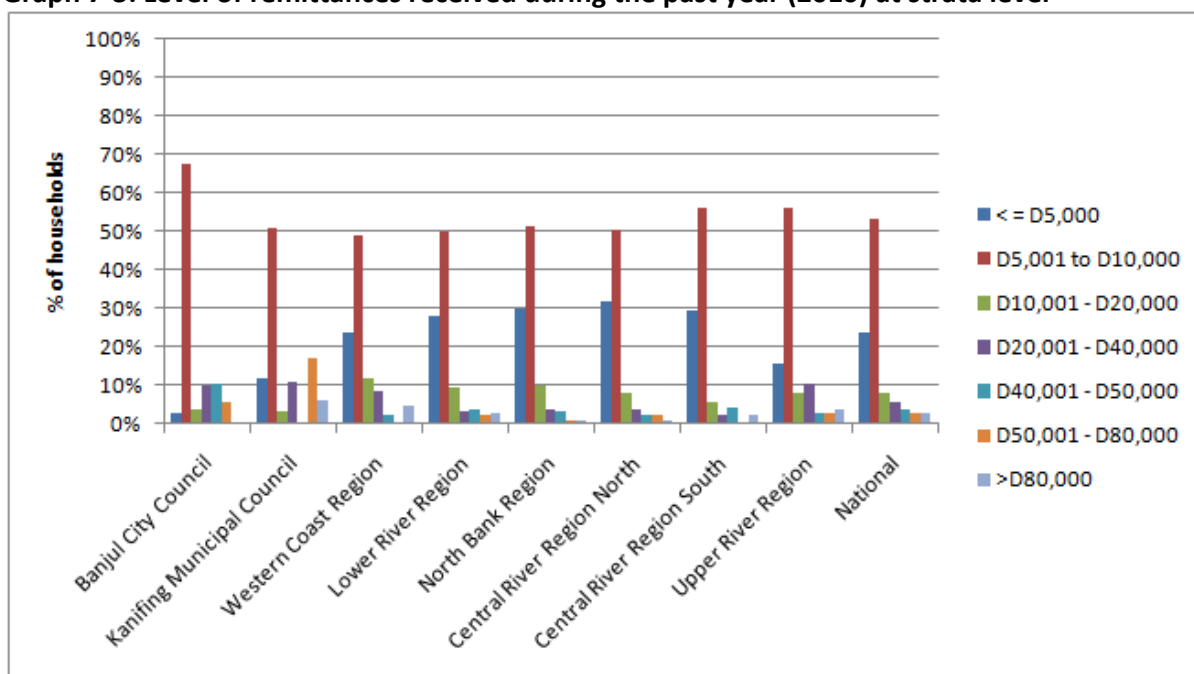
Graph 7-2: Official remittance levels 2007-2010 (Quarterly), The Gambia



Data source: Central Bank

However, there is a large sum of unofficial remittances that is not captured by official estimates. In fact, the majority of households reported no change (34.6 percent) or even increase (39.6 percent) in the remittance amount received in 2010 compared to the year before. Currently, there is no reliable data on unofficial remittances and the true extent of this can only be partially explained by households' credit and borrowing practices (to be discussed in the next section). The 2011 CFSVA found that at least 50 percent of households received remittances within the range of 5,000 and 10,000 Dalasi last year (see Graph 7-3).

Graph 7-3: Level of remittances received during the past year (2010) at strata level



Source: 2011 CFSVA The Gambia

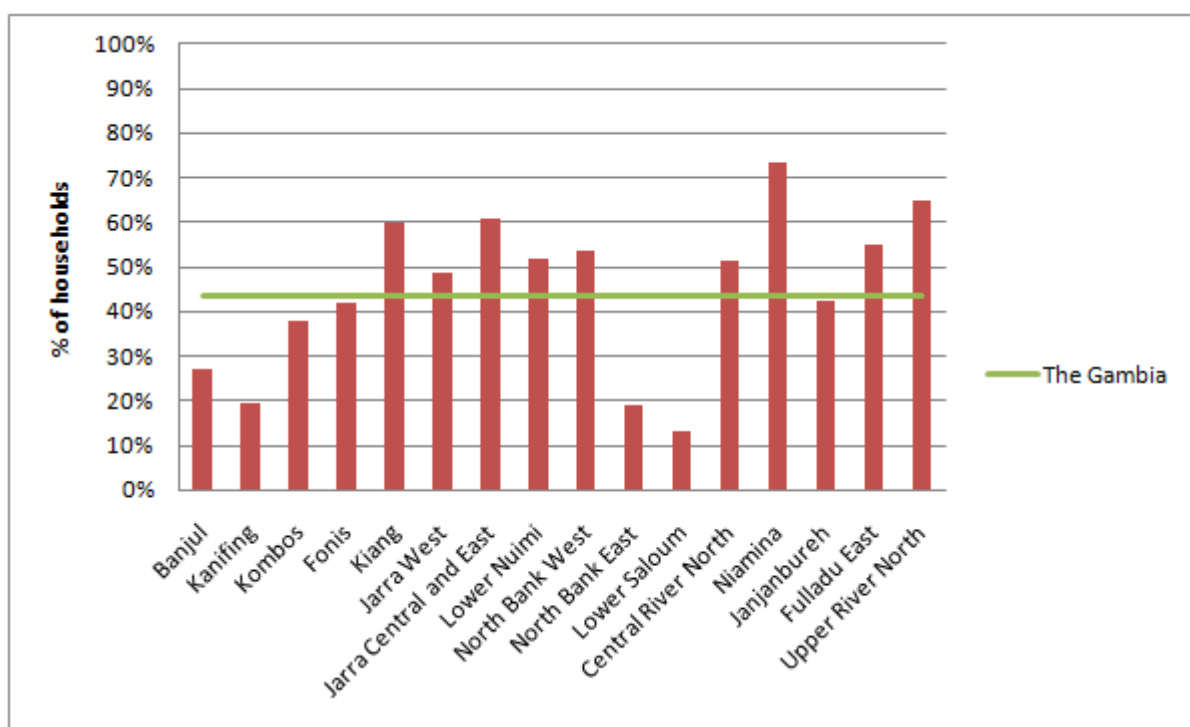
7.5 Borrowing and access to credit

Borrowing money is a common coping practice employed by Gambian households. Communities surveyed reported that borrowing from neighbours, relatives, middle traders (bana banas) and even formal credit institutions is one of the most common coping strategies they rely on when there is insufficient food. At the national level, 60.3 percent of households borrowed money in the last 6 months and 67.8 percent of them used the credit mainly for food. The next two main reasons for borrowing are for business (both agriculture and non-agriculture inputs) investment purposes (10.7 percent of households) and health expenses (8 percent of households).

At the same time, access to credit during normal times is disproportionate across the country. Nationally, 43.4 percent of households reported having access to credit. Niamina (73.5 percent) and Upper River North (64.9 percent) strata have the highest proportion of households with access to credit; Lower Saloum (13.3 percent), North Bank East (18.8 percent), and Kanifing (19.3 percent) that have the lowest proportion (see Graph 7-4).

Communities surveyed reported that access to credit is more difficult in urban areas. Assistance by non-profit micro credit organizations that often have special financing programmes for women is focused mostly in rural areas. Households in urban areas are more dependent on formal credit institutions that require high collaterals and charge high interest rates.

Graph 7-4: Proportion of household with access to credit at strata level

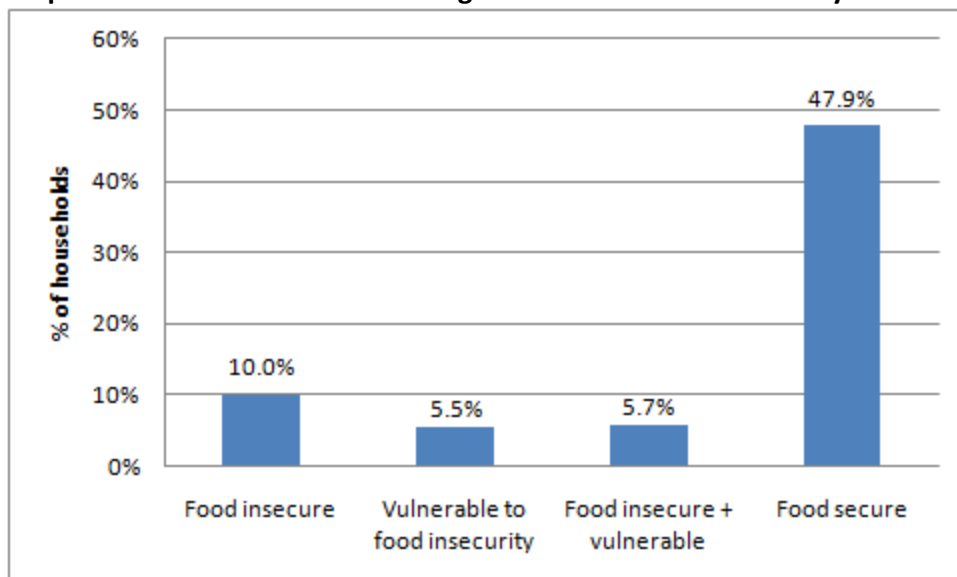


Source: 2011 CFSVA The Gambia

There is a notable difference in access to credits according to household food security status and livelihood. Approximately 48 percent of food secure households have access to credit whereas the proportion is significantly lower for food insecure or vulnerable households with 5.7 percent (see Graph 7-5). Amongst different livelihood groups, the non agricultural wages group, which has the highest proportion of food insecure or vulnerable households, also has the lowest proportion of households with access to credit (36 percent). By contrast, the salaries

group, which has the lowest proportion of food insecure or vulnerable households, has the highest proportion of households with access to credit (51 percent).

Graph 7-5: Access to credit according to household food insecurity status



Source: 2011 CFSVA The Gambia

Gambian households rely more on informal credit sources which account for most of the unofficial remittances as discussed previously. The most common source of credit – is shopkeepers or traders (57.2 percent) followed by family/friends in the country (51.6 percent)¹⁴. Only 16.5 percent of households report having access to credit through a bank, although the proportion of such households in Banjul (72 percent) and Kanifing (56.3 percent) strata are well above the national average. This simply reflects the fact that the provision of banking services is concentrated in the urban areas.

7.6 Demography

Female headed households are slightly more prone to be food insecure: 13 percent of female headed households are found to be food insecure compared to 10 percent of male headed households. At the national level, approximately 14.9 percent of households are headed by women. The proportion of female headed household was highest in Banjul (32.8 percent) and Jarra West (25.7 percent).

Households with a large number of dependants are more prone to food insecurity. According to the latest population census in 2003, the average household size in The Gambia is 8.3. Approximately 76 percent of the households surveyed during the 2011 CFSVA were found to have 8 or more household members. This pattern was consistent across all strata with little variation except for Kiang and Jarra West strata where the proportion of households with 8 or more members was slightly lower than the national average (65 percent and 61 percent respectively). The 2011 CFSVA found that the percentage of dependents to total household members (dependency rate¹⁵) averaged 58.9 percent. At least 25 percent of households reported a high dependency rate (more than 70 percent). In Lower Nuimi and North Bank West

¹⁴ The percentage estimates, when added, exceed 100 percent because households could give multiple responses.

¹⁵ Dependency ratio is usually a measure of the portion of household members who are too young or too old to work – i.e. children below 15 years of age and those above 65 years. In the 2011 CFSVA, a broader definition was used to count in anyone in the household who do not bring any income for any reason (e.g. student, sick, disabled).

strata, the proportion of households with high dependency was highest (approximately 40 percent). Approximately 40 percent of food insecure household were found to have high dependency rate as opposed to 30 percent of food secure households.

7.7 Water and sanitation

The majority of Gambian households use an improved source of drinking water, most of them using piped tap (67 percent) or borehole with pump (13 percent). However, 10 percent of households rely on unimproved sources of drinking water including open stream, river, and unprotected well or spring. The proportion of such households is markedly high in Kombos, Fonis, and Niamina strata where at least one in five households uses an unprotected source of drinking water. Food insecure households are more likely to rely on unimproved sources than food secure households: approximately 15 percent of food insecure households use an unimproved source of water compared to 10 percent of food secure households.

Nevertheless, access to water itself does not seem to be an issue: 45 percent of households reported having the water source at their premise while the average distance to the drinking water sources for the rest of the households was estimated 6 minutes walking distance or approximately 190 metres. However, it should be noted that collecting water is a task only performed by women and girls that can take 30 minutes to 3 hours every day.

Fifty five percent of households pay for water and not surprisingly Banjul and Kanifing strata with the most extensive provision of public tap service have the highest proportion of households paying for water (98 percent and 83 percent respectively). However, the payment for water is not a significant economic burden to households; the share of total monthly household expenditure on water is one percent. Rural communities surveyed reported that households usually contribute 5-10 Dalasi a month for maintenance of protected hand pumps and boreholes which are the most common source of drinking water.

Similarly, access to adequate sanitation facilities is not a problem for 94 percent of households most of whom use traditional pit latrine (71 percent) or even flush toilet (13 percent). This leaves 6 percent of households at the national level using unimproved sanitation facilities, although the proportion of households is significantly higher in Kombos, Fonis, Central River North and Niamina strata (up to 21 percent). Fonis and Niamina strata also have an above average prevalence of food insecurity and vulnerability, suggesting households without access to adequate sanitation facilities are more likely to be food insecure. In fact, the 2011 CFSVA found the proportion of households who rely on unimproved sanitation facilities is markedly higher for the food insecure (8 percent) and vulnerable (16 percent) compared to the food secure (5 percent).

7.8 Health and care practices¹⁶

The statistics on health and nutrition in The Gambia provide a mixed picture. Under-five mortality rate is 103 per 1,000 live births compared to the world average 60 and The Gambia's ranking was 31 out of 194 countries (UNICEF, 2009). The most commonly reported diseases in

¹⁶ Unless otherwise indicated in the main text, the statistics mentioned under this section were taken from MICS 2005/2006.

The Gambia are malaria, diarrhoea and acute respiratory infections which together account approximately 60 percent of infant deaths (GoTG, 2007).

At national level, 6 percent of under-five children are wasted (too thin for their height; an indication of acute malnutrition) and 22 percent of them are stunted (too short for their age; an indication of chronic malnutrition). Additionally, 19.9 percent of infants have low birth weights and 20.3 percent of under-five children are underweight. This situation is attributable to inappropriate child feeding practices, particularly an early end to breastfeeding and inadequate complementary feeding during and after weaning.

According to government statistics, 85 percent of the population have physical access to basic health services and over 97 percent of the population are within 3-7.5 km distance to community level primary health care posts. The consultation fee is supposed to be D1 for children and D2 for adults including treatment for malaria, diarrhoea, minor injuries, worm infestation etc. According to the communities surveyed however, consultation is up to D2 for children and D5 for aged 15 and above. Urban communities surveyed were generally satisfied with the service provided by health centres whereas rural communities reported having difficulties in terms of access due to distance to travel. Some of the common challenges identified at health centres include staff attrition, unhygienic conditions, lack of bed nets, drugs and electricity.

At the household level, Mother's health status as well as care and hygiene practices have direct consequences for the health and nutritional status of children and the whole family. On average, 63 percent of women wash their hands with soap after using the toilet; however at least one in three women use only water. The proportion of women who do not wash their hands at all was significantly above the national average (1 percent) in Central River North (6 percent) and Niamina (4 percent) strata. Sixty three percent of women responded positively when asked whether they slept under a mosquito net the night before although the proportion was significantly lower in Banjul (39 percent) and Kanifing (40 percent) compared to the other strata.

Most Gambian women benefit from reproductive health service: 94 percent of women attended antenatal consultation during the last pregnancy, 92 percent used iron tablets and 75 percent received vitamin A supplements in the first two months after their delivery. This is comparable to the findings by MICS III which reported that coverage of antenatal care by skilled personnel is relatively high with 98 percent receiving antenatal care at least once during their last pregnancy.

There are few studies that have examined the linkage between household food security and undernutrition in The Gambia to date. The National Nutrition Agency (NaNA) recently conducted the second vulnerability and nutrition assessment in selected urban communities in Banjul and Kanifing. This was an update to the first assessment carried out in 2009 which examined household dietary diversity and child malnutrition but failed to establish a valid relationship with the two indices. The results of the second assessment, however, were not available at the time of report writing. Another study done by WFP through NaNA which examined the nutritional status of Senegalese refugees from Casamance and their hosts located

in the Foni districts in 2009, suggested that under-five malnutrition is primarily due to inadequate care practices rather than household food insecurity (WFP, 2009).

8. Risk and Vulnerability Analysis

8.1 Hazards and shocks

There are two prominent factors that have negatively impacted Gambian households' food access and put them at risk of becoming food insecure in recent years: rising food prices and natural disasters.

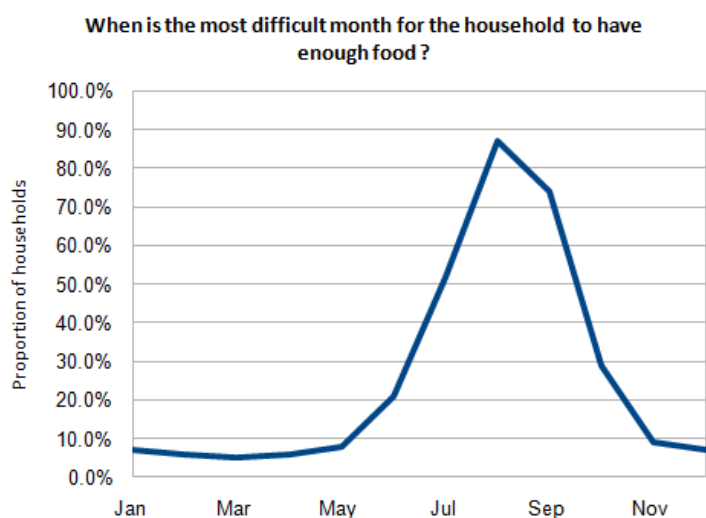
Approximately 76 percent of Gambian households acquire their food through purchases and are therefore highly susceptible to changes in food prices which affect their purchasing power. Despite the positive growth rates in GNP in recent years, there are continuing concerns about food and fuel price volatility as the world is bracing for yet another possible food price crisis. At the time of report writing, the food price index rose for eight consecutive months, averaging 236 points in February 2011, up 2.2 percent from January and the highest (both in real and nominal terms) since the inception of the index in January 1990 (FAO, 2011). The steep increase in food prices is compounded by rising global fuel prices which peaked at US\$100 per barrel in January 2011.

At the time of report writing the effect of high global prices have not translated into an immediate increase in local food prices in The Gambia, and cereal prices have remained relatively even; although communities surveyed reported a perceived increase in prices for basic commodities such as rice, sugar, cooking oil and fish. It is not clear to what extent this price increase is seasonal or due to the high global prices. Nevertheless, the current situation is clearly not sustainable given that any additional pressure on global demand due to population growth, mixed harvest outlook and speculations over commodities can easily affect countries highly dependent on food import to feed their own people such as The Gambia.

In fact, a recent WFP analysis included concluded that The Gambia as is one of countries to watch in terms of potential short term impacts of rising global food prices on food consumption. This is mainly due to the high consumption levels of sugar and vegetable oil, two of the main commodities that experienced a spike in prices. It further predicted that urban areas that developed a taste for imported foods such as wheat/bread, sugar and vegetable oil will likely to be affected as well the top three most vulnerable countries in West Africa in the event of another food crisis (WFP, 2011).

At the same time, food insecure and vulnerable Gambian households are also exposed to cyclical shocks due to occasional droughts and heavy rains and floods that occur almost on a yearly basis. Last year's floods damage was the worst of its kind in recent years according to the National Disaster Management Agency (NDMA) who even launched an international appeal for emergency relief. Approximately 35,000 individuals were affected either by being displaced and/or losing their food stocks and assets. The period of heavy rains and floods usually coincides with the pre-harvest lean season from June to September when households are least food secure during the course of the year. Graph 7-1 demonstrates the seasonality of household food insecurity that is common among Gambian households: August and September are reportedly the most difficult months.

Graph 8-1: Seasonality of household food insecurity



Source: 2011 CFSVA The Gambia

The community interviews resulted in mixed expectations for food security in the immediate and intermediate future. On one hand, rural communities forecasted a good harvest with some of them having benefited from newly introduced NERICA projects. These factors will contribute to food security of at least producer households. On the other hand, low selling rates (especially for groundnut), increasing prices of imported products and high level of soil degradation are likely to have a negative influence on food security.

8.2 Coping

In order to better understand how households cope in response to food access constraints, households were asked what type of food-related coping strategies among the following they used in the past seven days:

1. Rely on less preferred/expensive foods;
2. Borrow food or rely on help from friends/relatives;
3. Limit portion size at meal times;
4. Restrict consumption by adults in order for small children to eat; and
5. Reduce the number of meals eaten in a day.

At the national level, approximately 35 percent of the households did not employ any food-related coping strategies. However, at least one in two households reported to rely on less preferred and less expensive food and approximately 27 percent of the households reported to limit portion size at mealtime. Niamina stratum had notably the highest proportion of households reporting to employ food-related coping strategies; in particular, the proportion of households that reported to restrict adult consumption in order for small children to eat (48 percent) was more than double the national average (see Table 8-1). By contrast, Banjul (50 percent) and Kanifing strata (49 percent) had the highest proportion of households that did not employ any food-related coping strategies. It should be noted that the CFSVA was carried out at a time when household food access is the best during the year, which means the proportion of households employing food-related coping strategies is likely to increase during the lean season.

Table 8-1: Proportion of households who employed food-related coping in the past seven days

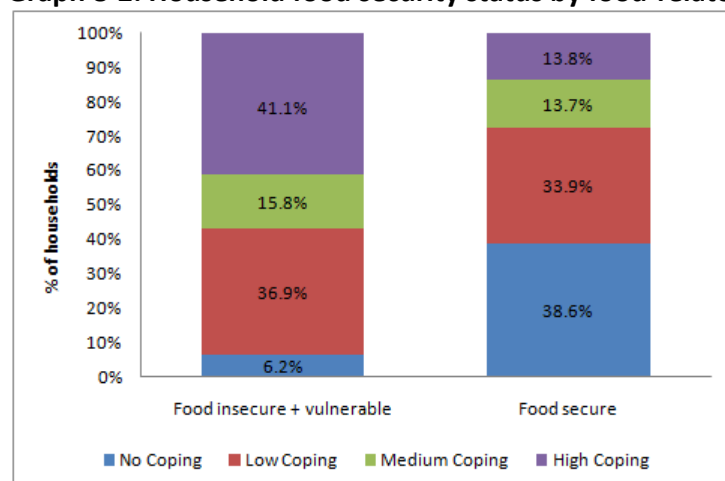
	rely on less preferred and less expensive foods	borrow food	limit proportion size	restrict consumption of adults for small children	reduce numbers of meals eaten in a day
Banjul	43.9%	7.2%	10.6%	11.6%	5.0%
Kanifing	44.4%	11.3%	16.7%	12.6%	9.3%
Kombos	53.6%	15.7%	33.7%	15.2%	17.4%
Fonis	61.3%	21.7%	40.1%	23.3%	16.4%
Kiang	82.3%	19.2%	25.1%	22.2%	16.9%
Jarra West	73.7%	15.7%	12.5%	9.4%	6.2%
Jarra Central and East	72.2%	42.2%	42.7%	38.2%	30.7%
Lower Nuimi	57.7%	17.5%	23.1%	9.3%	12.5%
North Bank West	54.6%	15.3%	15.2%	10.4%	10.7%
North Bank East	28.2%	5.0%	10.9%	9.5%	7.3%
Lower Saloum	49.1%	6.6%	31.3%	16.3%	12.0%
Central River North	77.4%	10.1%	29.6%	21.1%	18.3%
Niamina	68.6%	52.3%	55.5%	48.3%	38.2%
Janjanbureh	68.2%	18.7%	39.1%	19.9%	23.3%
Fulladu East	61.7%	13.5%	38.5%	21.6%	17.8%
Upper River North	66.5%	15.5%	33.3%	20.0%	17.1%
The Gambia	58.9%	17.1%	26.9%	18.2%	15.2%

Source: 2011 CFSVA The Gambia

The information on coping was further used to develop another commonly used proxy indicator of household food security as per the standard methodology developed jointly by CARE and WFP: the reduced Coping Strategy Index (CSI). The reduced CSI was computed taking into account both the frequency and severity of the strategy employed. Coping categories were created using the reduced CSI and households were classified into four different groups (*no coping, low coping, medium coping and high coping*) according to the extent of their coping (for more details on the reduced CSI, refer to Annex-D).

The share of food-insecure households in each coping category is notably higher than that of food-secure households, emphasizing their level of vulnerability (see Graph 7-2). There are also differences among the livelihood groups with non agricultural wage (20 percent) and cash crop (19 percent) groups having an above average proportion of households with high coping; these groups also happen to be the groups with the highest incidence of food insecurity and vulnerability.

Graph 8-2: Household food security status by food-related coping strategies



Source: 2011 CFSVA The Gambia

9. Recommended Action

The 2011 CFSVA was conducted during the period of the year when food is generally more available and there are less access constraints at household level. It was undertaken at the end of the harvest and income generating opportunities were abundant as it was also at the peak of the tourist season. As a consequence, the proportion of households who are currently food insecure is relatively small. However, at least one in ten households is vulnerable to food insecurity and the number will increase as the lean season approaches.

Medium to long-term interventions are required to protect and strengthen livelihoods of the food insecure and vulnerable and increase their resilience. A multi-sectoral approach is needed and any planned intervention should be harmonized with the national development strategies including the PRSP and PAGE (or the Program of Accelerated Growth and Employment).

Following are some broad strategic interventions for WFP and partners to consider:

1. **Set up a food security monitoring system (FSMS) to track changes in household's food security and vulnerability status over time:**

Districts in strata with above average food insecurity and vulnerability levels should be the primary surveillance sites for regular monitoring either on a quarterly or, at least, a semi-annual basis (i.e. dry/rainy season). These include Foni, Kiang, Jarra Central and East, Lower Saloum, Niamina and Janjanbureh strata.

The FSMS can be designed as a simple system that strengthens and builds on existing information products that are currently in place such as the Early Warning Bulletin issued by the Department of Water Resources on a decadal basis during the rainy period between June and October. It should also include selected key indicators of household level food security tracking changes on coping mechanisms, food and fuel prices at key local markets and household purchasing power.

A technical working group comprising of food security stakeholders and chaired by the government should lead the process in setting up and sustaining the FSMS. Priority should be given to developing a strong market monitoring component and efforts to link the FSMS with NaNA's nutrition surveillance system should be made as well.

2. **Focus on household income and livelihoods in food security policies and interventions:**

Despite the fact that agriculture is the primary livelihood source for the majority of Gambians, most households are net buyers of food. There is also a growing urban population whose livelihoods are much more varied and relies on the purchase of imported commodities for food consumption.

Thus promoting agricultural development to achieve food self sufficiency alone will not ensure food security at the household level. A wider range of food security policies and interventions should be pursued that aim at supporting different livelihoods and removing some of the structural bottlenecks that negatively impact household income

such as the limited storage and milling capacities at community and household level in rural areas; the high unemployment and low wages in urban areas; and the limited availability of micro-credit institutions (especially in urban areas).

3. **Invest in addressing chronic malnutrition and improving nutrition and care practices:**

The 2011 CFSVA found that there were no alarming levels of acute adult malnutrition that required attention from a public health perspective in The Gambia. Meanwhile, previous nutrition surveys have shown that chronic malnutrition is a more critical public health concern as suggested by the high prevalence of stunting and underweight in under five children. However, chronic malnutrition has not been addressed properly to date and there has been limited focus on the nature of micro nutrient deficiency and household nutrition and care practices.

It is therefore recommended to increase public sector investments in understanding and tackling chronic malnutrition which would include data collection at a more disaggregated level (i.e. strata or districts), policy formulation and nationwide awareness raising and sensitization events on nutrition and good care practices.

4. **Reinforce disaster preparedness and response measures with focus on household coping and resilience:**

Understanding households' ability to cope is key to disaster preparedness and response because the impact of a disaster on households will vary depending on how vulnerable or resilient they are to shocks. The 2011 CFSVA presented some conclusive findings on the varying levels of coping and vulnerability across different livelihood groups and strata.

There are ongoing efforts to establish systematic disaster preparedness and response measures to reduce the impact of future shocks such as floods or droughts as part of the overall activities of the National Disaster Management Agency. The results of the 2011 CFSVA can further complement these efforts by assisting the authorities to make informed decisions on better targeted disaster response and risk reduction.

5. **Develop social safety net schemes as part of the national food security strategy:**

Given the significant proportion of households who are at risk of becoming food insecure, there is a need to set up a social safety net that can serve as a buffer for these vulnerable households in times of crisis. This is particularly critical in the case of prolonged shocks with widespread negative impact on household income such as the high food prices.

The findings of the 2011 CFSVA on food insecurity and vulnerability levels can be a useful proxy for identifying the needs for social safety net schemes and inform initial geographic targeting as well as more detailed group targeting based on livelihoods.

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11. Annex

A. Food Security and Nutrition Conceptual Framework

Food security exists when ‘all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996)’.

There is no single measure to analyse the level of food security of a population, a community or an individual. Food security is highly complex in that it is determined by a range of interrelated agro-environmental, socio-economic and biological factors, all of which must be addressed to ascertain whether or not food security exists. The complexity of food security can be simplified by focusing on three distinct, but also highly interrelated dimensions of food security:

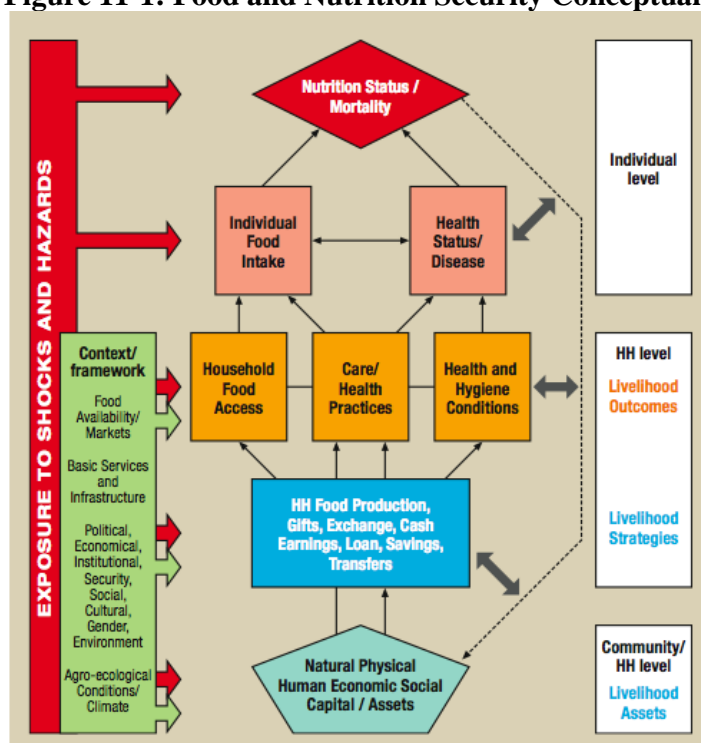
Food availability, concerns the food that is physically present in the area of study, through all forms of domestic production, commercial imports and food aid. This may be aggregated at the regional, national, district or community level.

Food access, concerns a household’s ability to regularly acquire adequate amounts of food, through a combination of its own home production and stocks, purchases, barter, gifts, borrowing or food aid.

Food utilization, refers to a household’s use of the food to which it has access, and an individual’s ability to absorb and metabolize the nutrients, i.e. the conversion efficiency of the body.

The Food and Nutrition Security Conceptual Framework (see Figure 11-1) is a way of visualizing the relationships among the various factors that affect food and nutrition security.

Figure 11-1: Food and Nutrition Security Conceptual Framework



The framework also recognizes that a household’s food security situation is subject to change and fluctuates. This can be either in response to specific shocks or as a result of natural seasonality

during the course of the year, often reflecting the agricultural cycle of the lean season and, in the case of The Gambia, the peak tourist season. In order to account for the dynamic nature of food security, the CFSVS analyses households' vulnerability to future shocks and problems and determines their capacities to withstand them. Capacities to withstand shocks such as floods and high food prices depend on many factors, including a solid asset base, the ease with which households are able to alternate between and rely on the incomes from different livelihoods, the health and physical strength of individual household members etc. By assessing future risks and their potential detrimental impact on household food security, the level of vulnerability of households and individuals is determined.

B. Determining level of household food security using Food Consumption Score (FCS) and food access indicators

In determining the level of household food security, the CFSVA relied on two proxy indicators: the Food Consumption Score (FCS) and the food access index specifically developed for the Gambian context.

Food consumption, according to WFP’s standard methodology, is defined by the diversity of the diet and the frequency with which staple and non-staple foods are consumed. It is used as a proxy indicator of the current food security situation. The most commonly used food consumption indicator in WFP food security surveys is the FCS, which is based on dietary diversity (the number of food groups consumed by a household over a reference period of seven days), food frequency (the number of days each food group is consumed) and the relative nutritional importance of different food groups.

During the survey, households were asked on how many of the seven days prior to the data collection they had eaten 15 different food items. The FCS was computed by grouping together the food items into eight standard food groups – such as cereals; tubers and roots; legumes and nuts; meat, fish, poultry and eggs; vegetables (including green leaves); fruits; oils and fats; milk and dairy products; and sugar and sweets. Each food group with the pre-assigned weight according to its nutritional value was then multiplied by the number of days it was consumed and the FCS was calculated by summing up the scores of all food groups into one composite score. The maximum value of the FCS is 112, which implies the household consumed each food group everyday for the last seven days (the quantity of food is not considered).

Table 11-1: Example of Food Consumption Score table

Food item	Food group	Weight (A)	Days eaten in past 7 days (B)	Score A x B
Maize, rice, sorghum, millet, bread and other cereals	Cereals tubers, and root crops	2	7	14
Cassava, potatoes, and sweet potatoes				
Beans, peas, groundnuts, and cashew nuts	Pulses	3	1	3
Vegetables, relish, and leaves	Vegetables	1	2	2
Fruits	Fruit	1	0	0
Beef, goat, poultry, pork, eggs, and fish	Meat and fish	4	0	0
Milk, yoghurt, and other dairy	Milk	4	1	4
Sugar and sugar products	Sugar	0.5	4	2
Oils, fats, and butter	Oil	0.5	2	1
Composite score				26

The household score is compared with pre-established thresholds that indicate the status of the household’s food consumption. WFP uses two sets of thresholds, the standard thresholds and the higher score thresholds, whereby the latter is used only if there is a clear justification. Taking into account the high sugar and oil intake in the Gambian diet, the higher score thresholds were used to classify the household according to the following three Food Consumption Score groups:

1. Poor food consumption: 0 to 28
2. Borderline food consumption: 28 to 42
3. Acceptable food consumption: > 42

However, the Food Consumption Score group classification alone cannot adequately reflect the level of household food security as it provides a snapshot of the current food consumption (and therefore current access to food) without sufficiently considering elements related to seasonality

or sustainability as well as vulnerability. To overcome this limitation, food access was introduced as a second dimension to consider for the food security classification, taking into account households' ability to access food and potential vulnerability in case of a shock.

Food access was classified using share of food expenditure, coping strategies and access to credit. These indicators were selected as proxies as it is possible through them to have an idea of the food access situation of the household. Furthermore it is possible to assume that if a household spends the majority of its income on food in case of a crisis, it will be more difficult for that household to shift resources from other expenses to purchase food, then it will have to reduce food intake in terms of quality and/or quantity. Additionally, lack of access to credit will reduce the ability for a household to cope in the event of a shock

The poorest households in the world spend more than 75 percent of their income on food. Households in the richest countries (e.g. United States and Canada) spend less than 15 percent of their expenditures on food (COCA 2006; U.S. Department of Labor 2006). The classification used for the 2011 CFSVA followed the IFPRI standards¹⁷:

1. 75%: Very high (i.e. very vulnerable to food insecurity)
2. 65%–75%: High
3. 50% –65%: Medium
4. < 50%: Low

Starting from this classification of vulnerability of access, the information was cross-tabulated with the coping strategies adopted by households. Coping strategies were classified based on the reduced Coping Strategy Index (CSI) which takes into account the severity of food-related coping strategies employed by households (for more details refer to Annex-D).

The cross-tabulation of share of food expenditure and coping strategies resulted in the following categories:

1. Low or average share of food expenditure and no coping strategies adopted.
2. High share of food expenditure and low to medium coping strategies.
3. High share of food expenditure and High coping strategies.
4. Very high share of food expenditure and high coping strategies score.

<i>Rank of Food expenditure</i>	<i>Coping Strategies</i>			
	No coping strategies adopted	Low Coping (reduced CSI 1 to 5)	Medium Coping (reduced CSI 6 to 10)	High Coping (reduced CSI > 10)
0 to 50 percent	1	1	2	3
50 to 65 percent	1	2	2	3
65 to 75 percent	2	3	3	4
over 75 percent	3	4	4	4

Successively an additional layer was added to this classification considering if households have access to credit or not; Access to credit was considered as an improving condition as it can be a major resource of coping in the event of a shock, as previously discussed. As a result of this stratification, four FOOD ACCESS group were created as follows:

¹⁷ *Measuring food insecurity with Household expenditure survey* Lisa Smith_Ali Subandoro 2007

<i>Food access classification</i>	<i>% of households</i>
Deficit Food access	9.1
Vulnerable Food access	20.5
Average Food access	25.4
Proper Food access	45.1
Total	100.0

These Food Access groups were then cross-tabulated with the Food Consumption Score Groups as follows:

<i>Food Access Groups</i>	<i>Food Consumption Score Groups</i>		
	poor	borderline	acceptable
Deficit Food access	1	1	2
Vulnerable Food access	1	2	3
Average Food access	1	2	3
Proper Food access	2	3	3

Households with poor consumption are considered as being food insecure, except in the case with proper food access which is classified as vulnerable to food insecurity. . Households with borderline consumption and a deficit food access are also considered as food insecure. Households with borderline consumption and vulnerable food access are considered as vulnerable to food insecurity meaning that an external shock or a difficulty (income reduction or price increase for example) can put them into a food insecurity situation. Households with acceptable food consumption and proper or average food access are considered as food secure. As a result of this classification, the population can be classified into the following food security groups:

<i>Food security group</i>	<i>% of households</i>
Food insecure	0.6
Vulnerable to food insecurity	10.1
Food secure	89.3
Total	100.0

C. Total annual household income as a proxy indicator for wealth

Households were asked how much their total annual income was in the past year, whereby answers were recorded as predetermined income ranges instead of absolute values in order to minimize errors and ensure data quality. The ranges were determined by taking the mean annual household income values according to wealth quintiles as estimated by the National Planning Commission's 2009 Poverty and Social Impact Analysis: 1 = D0 – D20,000; 2 = D20,001 – D40,000; 3 = D40,001 – D50,001; 4 = D50,001 – D80,000; 5 = D80,001 – D170,000; and 6 = > D170,000.

Statistical tests (i.e. correlation and comparing means) were conducted to explore the relationship between the total annual income variable and other variables that reflect a household's wealth status such as (non-productive) asset ownership, access to improved source of water and toilet facilities, improved housing material (window and wall), and food expenditure (also share of total), and finally verify if the total annual income variable can be used as a proxy indicator for household wealth.

Tests results confirmed a statistically significant correlation between the total annual income variable and other wealth related variables:

Pearson Correlation														
	how much was the total	does hh own vehicle	does hh own bike	does hh own generator	does hh own radio	does hh own tv	does hh own watch	does hh own table	does hh own sofa	does hh own mattress	does hh own cabinet	does hh own vcr	does hh own fan	does hh own telephone
how much was the total annual income?	1	.318**	.101**	.210**	.204**	.425**	.235**	.266**	.418**	.217**	.384**	.398**	.411**	.201**
does hh own vehicle	.318**	1	.096**	.211**	.126**	.329**	.190**	.186**	.291**	.135**	.319**	.328**	.346**	.146**
does hh own bike	.101**	.096**	1	.119**	.139**	.095**	.168**	.087**	.062**	.062**	.089**	.115**	0.037	.129**
does hh own generator	.210**	.211**	.119**	1	.127**	.326**	.160**	.151**	.139**	.096**	.177**	.261**	.150**	.119**
does hh own radio	.204**	.126**	.139**	.127**	1	.205**	.321**	.212**	.150**	.165**	.184**	.249**	.153**	.205**
does hh own tv	.425**	.329**	.095**	.326**	.205**	1	.289**	.384**	.469**	.247**	.503**	.639**	.612**	.252**
does hh own watch	.235**	.190**	.168**	.160**	.321**	.289**	1	.312**	.211**	.205**	.280**	.275**	.222**	.252**
does hh own table	.266**	.186**	.087**	.151**	.212**	.384**	.312**	1	.340**	.320**	.348**	.342**	.305**	.278**
does hh own sofa	.418**	.291**	.062**	.139**	.150**	.469**	.211**	.340**	1	.232**	.495**	.418**	.463**	.202**
does hh own mattress	.217**	.135**	.062**	.096**	.165**	.247**	.205**	.320**	.232**	1	.280**	.244**	.220**	.227**
does hh own cabinet	.384**	.319**	.089**	.177**	.184**	.503**	.280**	.348**	.495**	.280**	1	.443**	.486**	.234**
does hh own vcr	.398**	.328**	.115**	.261**	.249**	.639**	.275**	.342**	.418**	.244**	.443**	1	.574**	.242**
does hh own fan	.411**	.346**	0.037	.150**	.153**	.612**	.222**	.305**	.463**	.220**	.486**	.574**	1	.194**
does hh own telephone	.201**	.146**	.129**	.119**	.205**	.252**	.252**	.278**	.202**	.227**	.234**	.242**	.194**	1

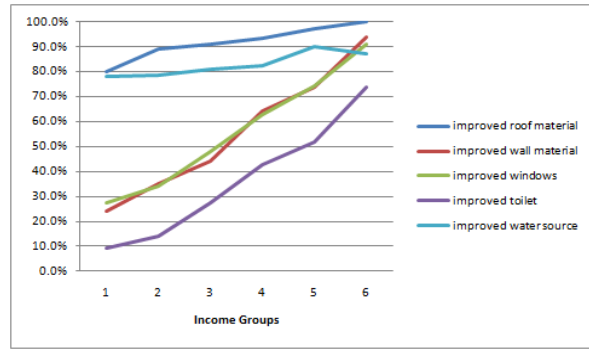
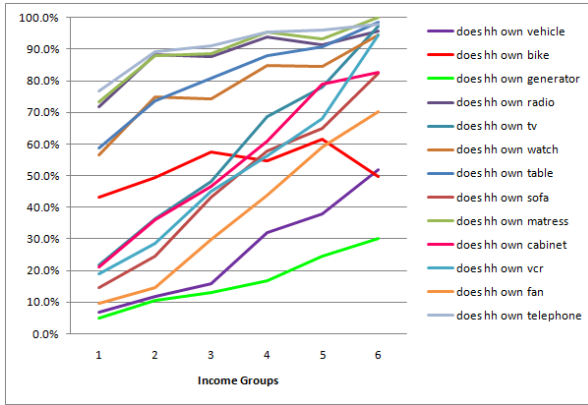
** Correlation is significant at the 0.01 level (2-tailed).

Pearson Correlation						
	how much was the total annual	improved roof material	improved wall material	improved windows	improved toilet	improved source of water
how much was the total annual income?	1	.176**	.375**	.345**	.400**	.075**
improved roof material	.176**	1	.317**	.278**	.202**	.167**
improved wall material	.375**	.317**	1	.596**	.493**	.189**
improved windows	.345**	.278**	.596**	1	.456**	.167**
improved toilet	.400**	.202**	.493**	.456**	1	.156**
improved source of water	.075**	.167**	.189**	.167**	.156**	1

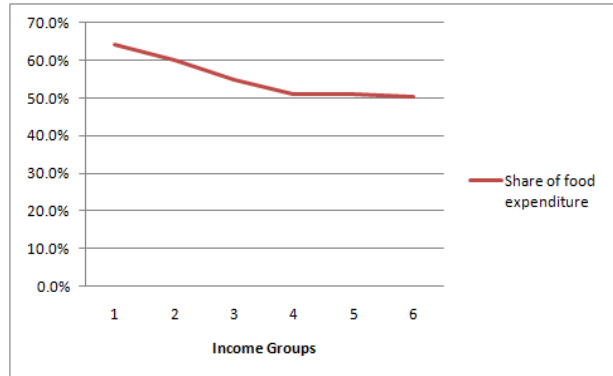
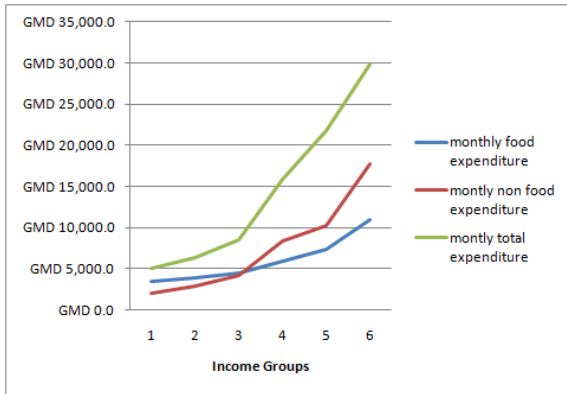
** Correlation is significant at the 0.01 level (2-tailed).

Also, the distribution of households across income groups confirm that households that own assets¹⁸, have housing with improved material and access to improved water sources and toilet facilities are more likely to belong to higher income groups.

¹⁸ Note that the trend for bicycle ownership is reverse, which is unsurprising, given the fact that the wealthier a household the more likely it will rely on motorized vehicle.



In a similar vein, the expenditure patterns across different income groups demonstrate that households belonging to the higher income group are more likely to spend more in total and less on food. Share of food expenditure is indeed inversely proportional to income.



Given all of the above, the total annual household income variable was taken as a proxy indicator for household's wealth status and five wealth groups were developed by merging households belonging to income groups 5 and 6 into the highest wealth group (representing 7.6 percent of the total number of valid cases) while taking the rest of the income groups as lowest (group 1), low (group 2), medium (group 3) and medium-high (group 4) according to the order of hierarchy.

D. Reduced Coping Strategy Index (CSI)

The reduced Coping Strategies Index (CSI) was used as a proxy indicator of household food security in order to better understand how Gambian households cope in response to food access constraints. Households were asked how often they used a list of five coping strategies in the seven days prior to the survey:

1. Rely on less preferred and less expensive food;
2. Borrow food, or rely on help from friends/relatives;
3. Limit portion size at meal times;
4. Restrict consumption by adults in order for small children to eat; and
5. Reduce number of meals eaten in a day.

Similar to the calculation of the FCS, the reduced CSI is computed by adding the scores for each strategy: the weight (reflecting their severity) multiplied by the frequency (i.e. number of days employed).

Table 11-2: Example of reduced Coping Strategy Index table

<i>In the past seven days, how many days did your household have to</i>	Number of days (A)	Severity weight (B)	Score (A*B)
1. Rely on less preferred/expensive foods	5	1	5
2. Borrow food or rely on help from friends/relatives	2	2	4
3. Limit portion size at meal times	7	1	7
4. Restrict consumption by adults in order for small children to eat	2	3	6
5. Reduce the number of meals eaten in a day	5	1	5
Total household score (reduced CSI)			27

After exploring the distribution of the reduced CSI variable, the following CSI categories were developed:

1. No coping: Households that did not employ any food-related coping strategies with reduced CSI score = 0 (representing 35.1 percent of total sample);
2. Low coping: Households with reduced CSI score between 1 and 5 including those that rely on less preferred/expensive foods up to three days and limit portion size up to two days during the week (representing 34.2 percent of total sample);
3. Medium coping: Households with reduced CSI score between 6 and 10 including those that borrow food and restrict consumption by adults at least once during the week in addition to relying on less preferred/expensive foods (representing 13.9 percent of total sample); and
4. High coping: Households with reduced CSI score > 10 including those that employ several food-related coping strategies more frequently (representing 16.7 percent of total sample).

E. Livelihood groups clustering

The clustering process regroups the households based on their primary productive activity or income. For each group there is a clear main source of income accounting for 60-85 percent of the total income while the rest of the income may come from multiple sources without any consistent pattern.

In the questionnaire, households were asked to choose up to three main income sources from the following list of activities:

- 1 = Sale of food crops production (including garden produce)
- 2 = Sale of cash crops (e.g. groundnuts)
- 3 = Sale of animals / livestock, animal produce
- 4 = Fishing
- 5 = Agricultural wage labour (paid in-kind)
- 6 = Non agriculture wage labour (e.g. construction workers)
- 7 = Self employed services (e.g. taxi, carpenter, crafts)
- 8 = Self employed shopkeepers, traders
- 9 = Self employed street vendors
- 10 = Salaried employee – NGO / private
- 11 = Salaried employee – Public
- 12 = Business / entrepreneur
- 13 = Pensions / allowances
- 14 = Remittances
- 15 = Credit / loan
- 16 = Other (e.g. aid, gift, rent)

ADDATI was used to perform the clustering which first resulted in eight categories:

CATEGORIES	WEIGHT	COMPOSITION
<i>Cash Crop</i>	36.9%	78% from cash crops
<i>Self Employment</i>	19.5%	84,5% from Self Employment
<i>Salaries</i>	13%	80,3% from salaries
<i>Livestock and Fishing</i>	3.5%	69,3% from livestock & fishing and 17,8% from cash crop
<i>Remittances</i>	8.9%	74,2% from remittances
<i>Non Ag Wages</i>	7.2%	73,4% from non agricultural labour
<i>Food Crop</i>	10.7%	65,8% from food crops
<i>Other</i>	0.4%	79,5% from others and 12% from Self Employment

The categories “livestock and fishing” and “other” however had a very small population weight and were ruled out from being considered as distinct livelihood groups. The second biggest income source was explored for both categories and finally, “Livestock and Fishing” was merged with “Cash Crop” and “Other” with “Self Employment” respectively.

The final cluster results for the livelihood groups are as follows:

1. **Cash crop** – including households whose secondary income sources are livestock rearing and/or fishing;
2. **Self employment** – including households whose secondary income sources are aid, gift, rent amongst others;
3. **Salaries** – including households who primarily rely on salaried employment in private or public sectors;
4. **Remittances** – including households who primarily rely on remittances;
5. **Non agricultural wages** – including households whose secondary income sources are sale of firewood and informal sales (i.e. street vendors);
6. **Food crop** – including households who primarily rely on sale of food crops.

F. Sampling design

A two-stage cluster sampling approach was adopted for the CFSVA. The first stage was the selection of Enumeration Areas (EAs) from the stratified sampling frame (i.e. 39 districts regrouped into 16 strata, see Table 11-3) based on probability proportional to (population) size.

Table 11-3: Stratified sampling frame – 2011 CFSVA The Gambia

Region	Region Name	Municipality/LGA	Districts	Strata
Region 1	Greater Banjul Area	Banjul	Banjul South	Banjul
			Banjul Central	
			Banjul North	
Region 1	Kanifing Municipality	Kanifing	KUDC	KUDC
Region 2	Western Coast Region	Brikama	Kombo North	Kombos
			Kombo South	
			Kombo Central	
			Kombo East	Fonis
			Foni Berefect	
			Foni Bintang	
			Foni Kansala	
			Foni Bondali	
Foni Jarrol				
Region 4	Lower River Region	Mansakonko	Kiang West	Kiang
			Kiang Central	
			Kiang East	
			Jarra West	Jarra West
			Jarra Central	Jarra
			Jarra East	
Region 3	North Bank Region	Kerewan	Lower Nuimi	Lower Nuimi
			Upper Nuimi	North Bank West
			Jokadu	
			Lower Baddibu	Baddibu
			Central Baddibu	
Upper Baddibu				
Region 5	Central River Region - North	Kuntaur	Lower Saloum	Lower Saloum
			Upper Saloum	Central River North
			Nianija	
			Niani	
			Sami	
Region 5	Central River Region - South	Janjanbureh	Niamina Dankunku	Niamina
			Niamina West	
			Niamina East	
			Fulladu West	Janjanbureh
			Janjanbureh	
Region 6	Upper River Region	Basse	Fulladu East	Fulladu East
Region 6	Upper River Region	Basse	Kantora	Upper River North
			Wulli	
			Sandu	

N.B. Districts highlighted in yellow are predominantly urban according to GBOS.

The second stage was the random selection of households within each EA. The EAs were selected from the sample frame provided by GBOS developed for the 2003 Population and Housing Census. Within each EA, 8 households were randomly selected following the “spin the

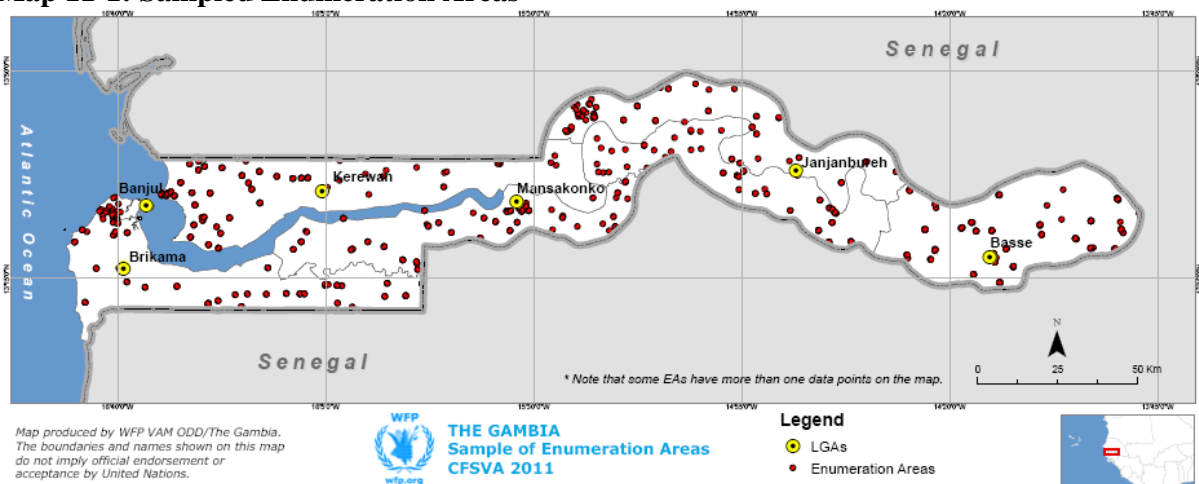
pencil method”, which is sometimes used in the Expanded Programme on Immunization (EPI) surveys and in UNICEF anthropometric surveys.

Once the data collection team arrives in the cluster, the approximate middle of the cluster is identified. A pencil or bottle is spun to select a random walking direction (also called a transect line). The data collection team then counts the number of households encountered along the transect line between the centre and the perimeter of the cluster. This number is then divided to determine the interval at which households along the transect line will be selected.

When the transect line contains fewer than the number of households required, all households in the line are included in the sample and the data collection team returns to the centre of the cluster to pick a second random walking direction, and the process is repeated. If a household without an appropriate respondent is encountered, skip it and proceed to the next selected household. This may require returning to the centre and repeating the process for transects with fewer than the number of required households. It should be noted that this method usually results in a bias, because households from the centre of the village can be overrepresented.

For each stratum, a total of 21 EAs were selected in at least eight questionnaires were administered in each EA with a few exceptions where households were under-sampled or oversampled for various reasons (e.g. lack of households to interview, double-selection of EA or compensation for EAs that were unaccounted for). All in all, data for 2,694 households have been collected and analyzed.

Map 11-1: Sampled Enumeration Areas



The sample size calculation was based on the following parameters:

Prevalence	50%
Precision	10%
Level of confidence	95%
Design effect	1.6
Expected response rate	95%
Number of households per stratum	162
Number of strata	16
Total number of households	2,592

G. Weighting system

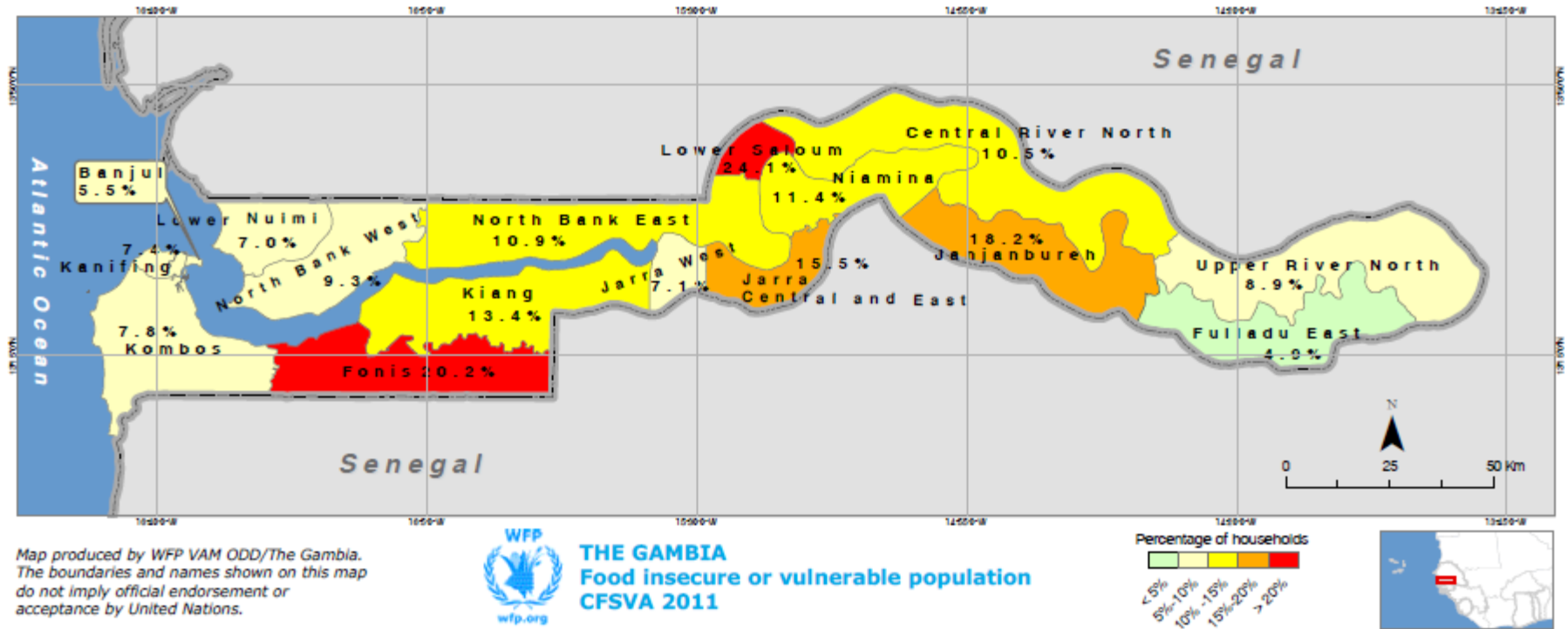
Weights were applied during the analysis of data relating to households. The weighting variable was constructed using the estimated number of households in each EA according to the sample frame of the 2003 Population and Housing Census. First, the proportion of households in each EA with reference to the total number of households was determined (i.e. number of households in EA / total number of households in The Gambia). This proportion was then multiplied by the total number of households sampled to determine the standardization factor (i.e. proportion*2,694). The standardization factor was then divided by the number of households sampled per EA to derive the weight.

Table 11-4: Example of weight calculation

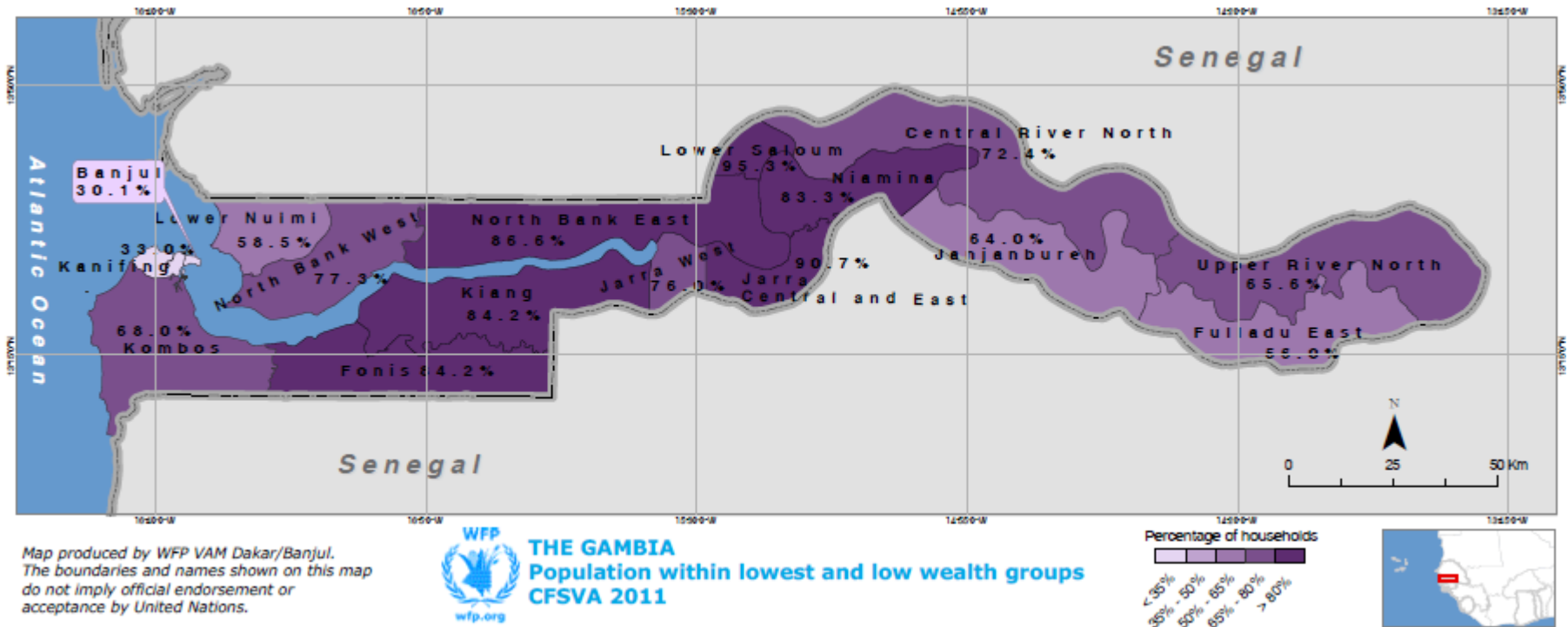
Stratum	Clustered District Group	EA Number	Estimated hh number	Sampled hhs	Proportion	Standard. Factor	Weight
1	Banjul	10001	80	8	0.22%	11.8	1.47
		10005	92	8	0.25%	13.5	1.69
		10009	74	8	0.20%	10.9	1.36
		10014	80	8	0.22%	11.8	1.47
		10019	56	8	0.15%	8.2	1.03
		11004	67	8	0.18%	9.9	1.23
		11009	67	8	0.18%	9.9	1.23
		11013	87	8	0.24%	12.8	1.60
		11017	77	8	0.21%	11.3	1.42
		12003	86	8	0.23%	12.7	1.58
		12007	77	8	0.21%	11.3	1.42
		12012	50	8	0.14%	7.4	0.92
		12016	71	8	0.19%	10.5	1.31
		12021	70	8	0.19%	10.3	1.29
		12025	98	8	0.27%	14.4	1.80
		12029	50	8	0.14%	7.4	0.92
		12032	73	8	0.20%	10.7	1.34
		12036	74	8	0.20%	10.9	1.36
		12040	71	8	0.19%	10.5	1.31
		12046	63	8	0.17%	9.3	1.16
12050	74	8	0.20%	10.9	1.36		
(...)	(...)	(...)	(...)	(...)	(...)	(...)	(...)
TOTAL			18,298	2,694	100.00%	2,694.0	1.00

H. Maps

Map 11-2: Proportion of food insecure or vulnerable population



Map 11-3 Proportion of poor population



I. Output tables

Proportion of food insecure + vulnerable by Region and Strata

		Food security Classes 2nd attempt		
		Food insecure	Vulnerable to food insecurity	Food secure
		Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	.5%	5.0%	94.5%
	Kanifing Municipal Council	.0%	7.4%	92.6%
	Western Coast Region	1.0%	11.9%	87.1%
	Lower River Region	.2%	11.1%	88.7%
	North Bank Region	.2%	9.0%	90.9%
	Central River Region North	1.0%	16.0%	83.0%
	Central River Region South	.0%	15.0%	85.0%
	Upper River Region	.5%	6.0%	93.5%
	Total	.4%	10.3%	89.3%
	Strata name (clustered districts)	Banjul	.5%	5.0%
Kanifing		.0%	7.4%	92.6%
Kombos		.6%	7.1%	92.2%
Fonis		1.4%	18.8%	79.8%
Kiang		.0%	13.4%	86.6%
Jarra West		.0%	7.1%	92.9%
Jarra Central and East		.7%	14.8%	84.5%
Lower Nuimi		.0%	7.0%	93.0%
North Bank West		.6%	8.8%	90.7%
North Bank East		.0%	10.9%	89.1%
Lower Saloum		2.1%	22.0%	75.9%
Central River North		.0%	10.5%	89.5%
Niamina		.0%	11.4%	88.6%
Janjanbureh		.0%	18.2%	81.8%
Fulladu East		.0%	4.9%	95.1%
Upper River North		1.2%	7.7%	91.1%
Total		.4%	10.3%	89.3%

Household food security status by vulnerability criteria

		Food security Classes 2nd attempt		
		Food insecure	Vulnerable to food insecurity	Food secure
		Row N %	Row N %	Row N %
gender of household head	Male	.4%	9.8%	89.8%
	Female	.3%	13.0%	86.7%
	Total	.4%	10.3%	89.3%
can hh head read and write?	No	.4%	12.7%	86.9%
	Yes	.4%	8.6%	91.1%
	Total	.4%	10.3%	89.3%
improved source of water (new)	unimproved	.9%	12.7%	86.4%
	improved	.3%	10.0%	89.7%
	Total	.4%	10.3%	89.3%
improved toilet (new)	unimproved	.5%	25.6%	73.9%
	improved	.4%	9.2%	90.4%
	Total	.4%	10.3%	89.3%

Livelihood groups by Region and Strata

		Final Livelihood groups					
		Cash Crop	Self Employment	Salaries	Remittances	Non Ag Wages	Food Crop
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	5.6%	35.4%	31.3%	14.9%	11.3%	1.5%
	Kanifing Municipal Council	29.1%	26.4%	17.3%	8.5%	7.4%	11.3%
	Western Coast Region	26.3%	24.3%	19.2%	8.0%	11.4%	10.7%
	Lower River Region	31.3%	26.4%	12.8%	12.9%	7.8%	8.7%
	North Bank Region	46.8%	15.8%	13.5%	6.0%	7.6%	10.2%
	Central River Region North	53.3%	18.3%	9.6%	3.8%	6.9%	8.0%
	Central River Region South	47.7%	17.2%	9.7%	4.7%	6.6%	14.2%
	Upper River Region	37.2%	19.1%	7.6%	18.9%	6.9%	10.3%
	Total	36.0%	22.2%	14.4%	9.6%	8.1%	9.6%
	Strata name (clustered districts)	Banjul	5.6%	35.4%	31.3%	14.9%	11.3%
Kanifing		29.1%	26.4%	17.3%	8.5%	7.4%	11.3%
Kombos		16.1%	30.7%	22.9%	6.2%	15.8%	8.3%
Fonis		41.1%	15.1%	13.9%	10.7%	5.0%	14.1%
Kiang		43.9%	14.8%	15.5%	10.3%	4.2%	11.2%
Jarra West		19.1%	36.5%	12.7%	19.0%	11.8%	1.0%
Jarra Central and East		36.9%	23.1%	10.2%	6.3%	5.4%	18.2%
Lower Nuimi		34.3%	20.4%	17.7%	7.8%	11.8%	8.1%
North Bank West		53.3%	13.5%	13.2%	3.8%	5.4%	10.8%
North Bank East		53.1%	13.6%	10.2%	6.0%	5.4%	11.7%
Lower Saloum		41.1%	22.6%	15.7%	1.7%	9.8%	9.1%
Central River North		64.5%	14.4%	4.0%	5.7%	4.3%	7.1%
Niamina		56.1%	10.7%	7.7%	2.0%	5.0%	18.5%
Janjanbureh		40.3%	22.9%	11.4%	7.0%	8.1%	10.3%
Fulladu East		31.0%	23.2%	12.4%	16.4%	8.4%	8.7%
Upper River North		46.5%	12.8%	.5%	22.7%	4.7%	12.7%
Total		36.0%	22.2%	14.4%	9.6%	8.1%	9.6%

Proportion of food insecure + vulnerable by livelihood groups

		Food security Classes 2nd attempt		
		Food insecure	Vulnerable to food insecurity	Food secure
		Row N %	Row N %	Row N %
Final Livelihood groups	Cash Crop	.3%	13.0%	86.6%
	Self Employment	.5%	10.0%	89.5%
	Salaries	.6%	4.7%	94.7%
	Remittances	.0%	6.5%	93.5%
	Non Ag Wages	.6%	14.6%	84.7%
	Food Crop	.0%	9.2%	90.8%
	Total	.4%	10.3%	89.3%

Proportion of poor households by Region and Strata

		wealth groups				
		Lowest	Low	Medium	Medium-high	Highest
		Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	14.1%	16.0%	22.1%	14.9%	32.9%
	Kanifing Municipal Council	18.7%	14.3%	19.3%	24.6%	23.1%
	Western Coast Region	41.0%	33.7%	12.5%	7.9%	4.9%
	Lower River Region	58.5%	24.1%	7.2%	4.4%	5.8%
	North Bank Region	49.5%	25.0%	10.5%	8.5%	6.6%
	Central River Region North	57.0%	25.8%	7.9%	7.7%	1.6%
	Central River Region South	46.1%	28.0%	12.5%	10.1%	3.3%
	Upper River Region	40.4%	19.7%	12.7%	12.7%	14.5%
	Total	45.2%	24.5%	11.6%	9.7%	9.0%
	Strata name (clustered districts)	Banjul	14.1%	16.0%	22.1%	14.9%
Kanifing		18.7%	14.3%	19.3%	24.6%	23.1%
Kombos		30.6%	37.4%	14.9%	10.0%	7.1%
Fonis		55.8%	28.4%	9.1%	4.9%	1.8%
Kiang		64.6%	19.6%	6.2%	2.2%	7.3%
Jarra West		45.3%	30.7%	10.1%	5.6%	8.3%
Jarra Central and East		71.7%	19.0%	3.9%	5.0%	.4%
Lower Nuimi		30.5%	28.0%	15.6%	12.7%	13.2%
North Bank West		50.1%	27.2%	10.9%	7.3%	4.5%
North Bank East		66.1%	20.5%	5.5%	5.6%	2.3%
Lower Saloum		66.6%	28.7%	2.3%	2.3%	.0%
Central River North		49.1%	23.3%	12.5%	12.2%	2.9%
Niamina		53.5%	29.8%	9.9%	4.2%	2.6%
Janjanbureh		37.9%	26.1%	15.4%	16.6%	4.0%
Fulladu East		34.0%	22.0%	14.2%	14.7%	15.2%
Upper River North		48.6%	16.9%	10.8%	10.1%	13.6%
Total		45.2%	24.5%	11.6%	9.7%	9.0%

Proportion of poor households by livelihood groups

		wealth groups				
		Lowest	Low	Medium	Medium-high	Highest
		Row N %	Row N %	Row N %	Row N %	Row N %
Final Livelihood groups	Cash Crop	53.3%	21.4%	10.3%	8.8%	6.2%
	Self Employment	43.7%	29.0%	10.7%	9.0%	7.7%
	Salaries	27.6%	26.6%	17.9%	14.4%	13.5%
	Remittances	28.0%	17.3%	14.8%	18.0%	22.0%
	Non Ag Wages	49.5%	32.2%	10.2%	2.6%	5.5%
	Food Crop	54.5%	24.1%	8.6%	6.0%	6.8%
	Total	45.2%	24.5%	11.6%	9.7%	9.0%

Housing quality (roof and wall material) by Region and Strata

		improved roof material		improved wall material	
		unimproved	improved	unimproved	improved
		Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	.0%	100.0%	11.8%	88.2%
	Kanifing Municipal Council	.0%	100.0%	12.7%	87.3%
	Western Coast Region	.9%	99.1%	66.5%	33.5%
	Lower River Region	8.8%	91.2%	73.1%	26.9%
	North Bank Region	8.1%	91.9%	66.5%	33.5%
	Central River Region North	37.6%	62.4%	77.4%	22.6%
	Central River Region South	32.0%	68.0%	74.7%	25.3%
	Upper River Region	24.5%	75.5%	47.0%	53.0%
	Total	13.3%	86.7%	58.4%	41.6%
	Strata name (clustered districts)	Banjul	.0%	100.0%	11.8%
Kanifing		.0%	100.0%	12.7%	87.3%
Kombos		.6%	99.4%	49.7%	50.3%
Fonis		1.3%	98.7%	90.8%	9.2%
Kiang		10.2%	89.8%	84.9%	15.1%
Jarra West		5.2%	94.8%	61.1%	38.9%
Jarra Central and East		13.1%	86.9%	79.5%	20.5%
Lower Nuimi		3.7%	96.3%	59.7%	40.3%
North Bank West		12.4%	87.6%	78.5%	21.5%
North Bank East		8.7%	91.3%	63.7%	36.3%
Lower Saloum		22.7%	77.3%	72.3%	27.7%
Central River North		51.0%	49.0%	82.0%	18.0%
Niamina		42.3%	57.7%	84.3%	15.7%
Janjanbureh		22.8%	77.2%	66.2%	33.8%
Fulladu East		18.9%	81.1%	43.0%	57.0%
Upper River North		33.0%	67.0%	53.0%	47.0%
Total		13.3%	86.7%	58.4%	41.6%

Housing quality (type of window) by Region and Strata

		type of window						
		Windows with Glass	Windows with bars	Windows with shutters	Windows with screens	Windows with curtains	Windows with corrugated iron	No Window
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	52.7%	3.4%	32.9%	2.4%	1.4%	2.3%	5.0%
	Kanifing Municipal Council	52.6%	7.3%	30.2%	2.3%	.0%	7.0%	.6%
	Western Coast Region	17.1%	4.7%	14.4%	2.9%	1.7%	58.5%	.7%
	Lower River Region	7.8%	1.4%	24.6%	1.9%	1.0%	55.7%	7.5%
	North Bank Region	6.7%	5.4%	15.7%	.8%	.5%	59.8%	11.2%
	Central River Region North	2.5%	5.3%	5.9%	.0%	1.3%	46.2%	38.8%
	Central River Region South	4.6%	2.9%	18.3%	.4%	1.7%	48.4%	23.6%
	Upper River Region	12.7%	5.0%	35.1%	1.1%	1.6%	28.6%	15.8%
	Total	16.0%	4.2%	21.5%	1.4%	1.1%	43.5%	12.3%
	Strata name (clustered districts)	Banjul	52.7%	3.4%	32.9%	2.4%	1.4%	2.3%
Kanifing		52.6%	7.3%	30.2%	2.3%	.0%	7.0%	.6%
Kombos		26.0%	4.8%	17.4%	3.9%	2.3%	45.5%	.0%
Fonis		4.2%	4.4%	10.0%	1.4%	.9%	77.3%	1.7%
Kiang		3.5%	1.9%	4.0%	1.9%	.7%	82.0%	5.9%
Jarra West		14.5%	1.2%	13.9%	2.4%	1.1%	59.2%	7.6%
Jarra Central and East		2.1%	1.0%	63.3%	1.1%	1.3%	22.2%	9.1%
Lower Nuimi		10.2%	3.4%	9.4%	1.2%	.8%	64.4%	10.6%
North Bank West		3.0%	3.7%	11.5%	1.0%	.8%	65.0%	15.1%
North Bank East		6.3%	8.4%	24.3%	.3%	.0%	51.8%	8.9%
Lower Saloum		1.9%	7.5%	11.4%	.0%	2.8%	50.6%	25.9%
Central River North		3.1%	3.4%	.8%	.0%	.0%	42.2%	50.5%
Niamina		.8%	.0%	28.8%	.0%	1.2%	38.4%	30.8%
Janjanbureh		8.1%	5.6%	8.9%	.8%	2.2%	57.3%	17.2%
Fulladu East		16.4%	3.7%	38.6%	1.8%	.0%	30.0%	9.5%
Upper River North		7.0%	7.1%	30.0%	.0%	4.1%	26.5%	25.3%
Total		16.0%	4.2%	21.5%	1.4%	1.1%	43.5%	12.3%

Total household income (in Dalasi) by Region and Strata

		how much was the total annual income?					
		1-20,000	20,001-40,000	40,001-50,000	50,001-80,000	80,001-170,000	>170,000
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	14.1%	16.0%	22.1%	14.9%	23.9%	9.0%
	Kanifing Municipal Council	18.7%	14.3%	19.3%	24.6%	10.9%	12.2%
	Western Coast Region	41.0%	33.7%	12.5%	7.9%	2.0%	3.0%
	Lower River Region	58.5%	24.1%	7.2%	4.4%	4.6%	1.2%
	North Bank Region	49.5%	25.0%	10.5%	8.5%	4.7%	1.9%
	Central River Region North	57.0%	25.8%	7.9%	7.7%	1.6%	.0%
	Central River Region South	46.1%	28.0%	12.5%	10.1%	2.8%	.4%
	Upper River Region	40.4%	19.7%	12.7%	12.7%	8.6%	5.9%
	Total	45.2%	24.5%	11.6%	9.7%	5.8%	3.2%
	Strata name (clustered districts)	Banjul	14.1%	16.0%	22.1%	14.9%	23.9%
Kanifing		18.7%	14.3%	19.3%	24.6%	10.9%	12.2%
Kombos		30.6%	37.4%	14.9%	10.0%	2.1%	5.0%
Fonis		55.8%	28.4%	9.1%	4.9%	1.8%	.0%
Kiang		64.6%	19.6%	6.2%	2.2%	6.6%	.7%
Jarra West		45.3%	30.7%	10.1%	5.6%	6.4%	2.0%
Jarra Central and East		71.7%	19.0%	3.9%	5.0%	.0%	.4%
Lower Nuimi		30.5%	28.0%	15.6%	12.7%	9.5%	3.7%
North Bank West		50.1%	27.2%	10.9%	7.3%	3.4%	1.1%
North Bank East		66.1%	20.5%	5.5%	5.6%	1.4%	.9%
Lower Saloum		66.6%	28.7%	2.3%	2.3%	.0%	.0%
Central River North		49.1%	23.3%	12.5%	12.2%	2.9%	.0%
Niamina		53.5%	29.8%	9.9%	4.2%	1.8%	.8%
Janjanbureh		37.9%	26.1%	15.4%	16.6%	4.0%	.0%
Fulladu East		34.0%	22.0%	14.2%	14.7%	9.5%	5.7%
Upper River North		48.6%	16.9%	10.8%	10.1%	7.5%	6.1%
Total		45.2%	24.5%	11.6%	9.7%	5.8%	3.2%

Income sources by Region and Strata

		income sources multiple response																
		Sale food crops production	Sale cash crops production	Sale of animals /animal products	Fishing	Agricultural wage labour	Non agric wage labour	Self-employed-services	Self-employed-Shopkeepers, trader	Self-employed-street vendors	Salaried employee - NGO, Private sector	Salaried employee-public/civil servant, security	Business/entr epreneur	Pension or allowances	Remittances	Credit, loan	Other	No other income source
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	2.8%	6.9%	.5%	1.4%	.0%	6.4%	19.0%	9.2%	11.9%	13.7%	28.2%	28.5%	3.7%	30.7%	.0%	6.5%	39.9%
	Kanifing Municipal Council	24.2%	36.5%	4.8%	1.8%	2.4%	7.8%	22.9%	7.5%	6.9%	6.7%	18.0%	15.6%	2.3%	24.4%	.0%	12.5%	44.2%
	Western Coast Region	22.3%	31.5%	2.8%	6.2%	4.2%	11.2%	20.0%	7.0%	10.3%	4.4%	20.3%	9.3%	7%	16.4%	.0%	9.3%	46.1%
	Lower River Region	27.8%	44.3%	4.3%	2.6%	1.7%	9.2%	16.3%	9.5%	6.6%	4.4%	13.2%	11.6%	1.7%	33.0%	.5%	8.0%	19.1%
	North Bank Region	31.6%	56.3%	5.0%	5.2%	1.8%	10.8%	14.4%	8.3%	5.6%	3.9%	16.7%	8.5%	6%	23.1%	1.1%	9.6%	46.3%
	Central River Region North	25.2%	64.9%	9.9%	2.5%	1.1%	10.6%	11.7%	6.8%	8.2%	.8%	10.1%	6.0%	1.2%	19.7%	1.7%	7.6%	41.3%
	Central River Region South	25.8%	57.8%	7.8%	4.6%	4.7%	5.1%	13.3%	9.0%	6.2%	2.4%	10.7%	5.5%	2.1%	16.9%	.9%	4.0%	39.4%
	Upper River Region	26.7%	55.2%	4.3%	3.3%	1.5%	7.4%	19.0%	10.7%	9.0%	3.0%	7.6%	6.9%	.8%	34.2%	.3%	4.6%	48.1%
	Total	24.9%	45.9%	4.9%	3.7%	2.2%	8.9%	16.7%	8.6%	7.7%	4.6%	15.2%	10.7%	1.5%	25.1%	.6%	7.9%	39.2%
	Strata name (clustered districts)	Banjul	2.8%	6.9%	.5%	1.4%	.0%	6.4%	19.0%	9.2%	11.9%	13.7%	28.2%	28.5%	3.7%	30.7%	.0%	6.5%
Kanifing		24.2%	36.5%	4.8%	1.8%	2.4%	7.8%	22.9%	7.5%	6.9%	6.7%	18.0%	15.6%	2.3%	24.4%	.0%	12.5%	44.2%
Kombos		15.5%	18.7%	.6%	7.0%	3.1%	12.3%	25.3%	7.9%	14.1%	6.3%	23.3%	9.7%	.6%	9.8%	.0%	9.6%	47.4%
Fonis		32.1%	49.9%	6.0%	5.0%	5.7%	9.6%	12.4%	5.8%	4.8%	1.7%	16.0%	8.6%	.9%	25.8%	.0%	8.8%	44.2%
Kiang		35.1%	57.5%	8.8%	4.0%	3.3%	8.3%	14.4%	4.4%	2.7%	2.8%	16.7%	7.7%	.0%	30.3%	.6%	12.9%	28.6%
Jarra West		16.5%	32.5%	.0%	2.3%	.0%	9.0%	16.6%	14.9%	8.8%	4.9%	13.6%	13.4%	3.2%	37.7%	.0%	5.2%	5.1%
Jarra Central and East		37.6%	48.6%	6.0%	1.7%	2.8%	10.3%	17.8%	6.4%	7.4%	5.2%	8.7%	13.1%	1.3%	28.5%	1.4%	7.2%	30.7%
Lower Nuimi		30.5%	45.9%	5.7%	5.0%	.0%	11.6%	19.2%	8.5%	7.5%	3.4%	25.1%	9.0%	.7%	19.3%	.7%	11.8%	49.5%
North Bank West		32.2%	67.3%	6.9%	5.3%	.5%	12.3%	12.2%	7.5%	2.3%	5.7%	11.9%	9.0%	.5%	20.9%	.8%	5.9%	46.0%
North Bank East		32.1%	57.4%	3.0%	5.4%	4.4%	9.0%	11.8%	8.0%	6.4%	3.0%	12.7%	7.6%	.5%	28.1%	1.5%	10.4%	43.7%
Lower Saloum		23.8%	52.0%	2.7%	1.9%	.0%	11.1%	11.4%	7.9%	11.5%	1.0%	13.5%	8.0%	2.2%	22.6%	2.5%	12.4%	44.7%
Central River North		26.6%	76.5%	16.5%	3.1%	2.1%	10.1%	12.0%	5.9%	5.2%	.6%	7.0%	4.1%	.3%	17.2%	.9%	3.4%	38.2%
Niamina		27.2%	66.0%	5.9%	7.2%	4.3%	6.1%	8.9%	4.6%	.0%	.7%	7.6%	7.3%	.8%	12.8%	.7%	3.6%	25.2%
Janjanbureh		24.5%	50.5%	9.5%	2.3%	5.0%	4.3%	17.2%	12.9%	11.6%	3.9%	13.5%	3.9%	3.2%	20.6%	1.0%	4.5%	52.1%
Fulladu East		28.3%	41.4%	5.3%	4.4%	2.4%	4.9%	20.5%	11.3%	11.0%	4.9%	11.0%	8.8%	.7%	31.5%	.5%	4.4%	49.4%
Upper River North		24.3%	76.1%	2.9%	1.5%	.0%	11.1%	16.8%	9.8%	4.6%	.2%	2.5%	4.0%	.9%	38.2%	.0%	5.0%	46.2%
Total		24.9%	45.9%	4.9%	3.7%	2.2%	8.9%	16.7%	8.6%	7.7%	4.6%	15.2%	10.7%	1.5%	25.1%	.6%	7.9%	39.2%

Total household income (in Dalasi) by livelihood groups

		how much was the total annual income?					
		1-20,000	20,001-40,000	40,001-50,000	50,001-80,000	80,001-170,000	>170,000
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Final Livelihood groups	Cash Crop	53.3%	21.4%	10.3%	8.8%	4.0%	2.1%
	Self Employment	43.7%	29.0%	10.7%	9.0%	3.6%	4.0%
	Salaries	27.6%	26.6%	17.9%	14.4%	8.9%	4.6%
	Remittances	28.0%	17.3%	14.8%	18.0%	15.5%	6.5%
	Non Ag Wages	49.5%	32.2%	10.2%	2.6%	4.5%	1.0%
	Food Crop	54.5%	24.1%	8.6%	6.0%	5.1%	1.6%
	Total	45.2%	24.5%	11.6%	9.7%	5.8%	3.2%

Access to credit by Region and Strata

Proportion of households with migrant members by Region and Strata

		any hh member working away from home?	
		No	Yes
		Row N %	Row N %
Region (Local Government Area)	Banjul City Council	66.1%	33.9%
	Kanifing Municipal Council	78.6%	21.4%
Strata name (clustered districts)	Western Coast Region	71.3%	28.7%
	Lower River Region	53.0%	47.0%
	North Bank Region	57.8%	42.2%
	Central River Region North	72.4%	27.6%
	Central River Region South	65.7%	34.3%
	Upper River Region	53.9%	46.1%
	Total	62.8%	37.2%
	Banjul	66.1%	33.9%
	Kanifing	78.6%	21.4%
	Kombos	78.6%	21.4%
	Fonis	60.8%	39.2%
	Kiang	44.1%	55.9%
	Jarra West	59.2%	40.8%
	Jarra Central and East	52.8%	47.2%
	Lower Nuimi	67.5%	32.5%
	North Bank West	57.9%	42.1%
	North Bank East	49.1%	50.9%
	Lower Saloum	70.2%	29.8%
	Central River North	74.3%	25.7%
	Niamina	58.4%	41.6%
Janjanbureh	72.3%	27.7%	
Fulladu East	60.3%	39.7%	
Upper River North	44.1%	55.9%	
Total	62.8%	37.2%	

		does your hh have access to credit?	
		No	Yes
		Row N %	Row N %
Region (Local Government Area)	Banjul City Council	73.1%	26.9%
	Kanifing Municipal Council	80.7%	19.3%
	Western Coast Region	60.3%	39.7%
	Lower River Region	44.8%	55.2%
	North Bank Region	60.3%	39.7%
	Central River Region North	66.7%	33.3%
	Central River Region South	42.9%	57.1%
	Upper River Region	41.1%	58.9%
	Total	56.6%	43.4%
	Strata name (clustered districts)	Banjul	73.1%
Kanifing		80.7%	19.3%
Kombos		61.9%	38.1%
Fonis		57.9%	42.1%
Kiang		40.3%	59.7%
Jarra West		51.4%	48.6%
Jarra Central and East		39.2%	60.8%
Lower Nuimi		48.1%	51.9%
North Bank West		46.5%	53.5%
North Bank East		81.2%	18.8%
Lower Saloum	86.7%	13.3%	
Central River North	48.5%	51.5%	
Niamina	26.5%	73.5%	
Janjanbureh	57.5%	42.5%	
Fulladu East	45.2%	54.8%	
Upper River North	35.1%	64.9%	
Total	56.6%	43.4%	

Source of drinking water by Region and Strata

		main source of drinking water						
		Public tap/ piped water/private tap	Pond, lake, river or stream	Borehole with pump	Rain water	Protected dug well or spring	Unprotected well or spring	Vendor (bottled water)
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	100.0%	.0%	.0%	.0%	.0%	.0%	.0%
	Kanifing Municipal Council	94.1%	.6%	.0%	.0%	2.9%	2.4%	.0%
	Western Coast Region	48.3%	.7%	18.6%	.0%	6.5%	26.0%	.0%
	Lower River Region	69.1%	.0%	19.2%	.3%	4.4%	7.1%	.0%
	North Bank Region	66.0%	.8%	16.6%	.0%	8.3%	7.7%	.6%
	Central River Region North	47.1%	.8%	17.9%	.4%	24.8%	9.1%	.0%
	Central River Region South	53.4%	.8%	10.7%	.5%	16.0%	18.5%	.0%
	Upper River Region	74.3%	.2%	10.1%	.0%	11.3%	4.1%	.0%
	Total	67.4%	.5%	13.3%	.2%	8.9%	9.7%	.1%
	Strata name (clustered districts)	Banjul	100.0%	.0%	.0%	.0%	.0%	.0%
Kanifing		94.1%	.6%	.0%	.0%	2.9%	2.4%	.0%
Kombos		55.0%	.0%	10.0%	.0%	5.4%	29.5%	.0%
Fonis		38.5%	1.6%	30.9%	.0%	8.1%	20.8%	.0%
Kiang		59.0%	.0%	31.0%	.0%	4.5%	5.5%	.0%
Jarra West		81.3%	.0%	6.5%	.0%	3.5%	8.7%	.0%
Jarra Central and East		60.7%	.0%	26.3%	1.1%	5.7%	6.2%	.0%
Lower Nuimi		75.1%	1.8%	8.1%	.0%	6.5%	8.5%	.0%
North Bank West		54.0%	.7%	21.3%	.0%	10.7%	13.4%	.0%
North Bank East		66.8%	.0%	20.6%	.0%	8.2%	3.0%	1.4%
Lower Saloum		63.9%	.8%	20.9%	.8%	12.7%	.9%	.0%
Central River North		31.8%	.7%	15.2%	.0%	35.7%	16.5%	.0%
Niamina		47.7%	.0%	14.6%	.0%	9.2%	28.4%	.0%
Janjanbureh		58.5%	1.5%	7.3%	.9%	22.1%	9.7%	.0%
Fulladu East		80.2%	.0%	6.3%	.0%	10.2%	3.4%	.0%
Upper River North		65.5%	.4%	15.9%	.0%	13.1%	5.1%	.0%
Total		67.4%	.5%	13.3%	.2%	8.9%	9.7%	.1%

Type of sanitation facility used by Region and Strata

		type of toilet used				
		Flush toilet	Traditional pit latrine	Ventilated Improved Pit (VIP) Latrine	Open pit (no walls)	None / bush, stream etc
		Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	62.2%	17.8%	20.0%	.0%	.0%
	Kanifing Municipal Council	44.0%	44.0%	12.0%	.0%	.0%
	Western Coast Region	12.2%	65.0%	6.7%	11.3%	4.7%
	Lower River Region	3.4%	89.1%	2.9%	.7%	4.0%
	North Bank Region	6.2%	79.5%	11.5%	.3%	2.5%
	Central River Region North	3.0%	70.6%	11.7%	5.0%	9.7%
	Central River Region South	1.7%	77.5%	10.5%	2.9%	7.4%
	Upper River Region	5.1%	81.1%	9.4%	1.4%	2.9%
	Total	13.4%	70.5%	9.7%	2.5%	3.9%
	Strata name (clustered districts)	Banjul	62.2%	17.8%	20.0%	.0%
Kanifing		44.0%	44.0%	12.0%	.0%	.0%
Kombos		18.9%	55.5%	10.8%	7.8%	7.1%
Fonis		2.5%	78.8%	.9%	16.4%	1.3%
Kiang		.0%	93.4%	.7%	.0%	5.9%
Jarra West		7.4%	85.9%	4.4%	.6%	1.7%
Jarra Central and East		.5%	89.4%	2.7%	1.6%	5.7%
Lower Nuimi		7.0%	76.7%	12.9%	.0%	3.4%
North Bank West		3.2%	91.7%	1.2%	.0%	3.9%
North Bank East		7.6%	73.1%	17.9%	.7%	.7%
Lower Saloum		3.8%	69.4%	18.9%	.0%	7.9%
Central River North		2.2%	71.7%	5.2%	9.6%	11.3%
Niamina		.0%	82.2%	1.8%	1.0%	15.1%
Janjanbureh		3.3%	73.3%	18.2%	4.6%	.6%
Fulladu East		8.3%	82.8%	6.9%	.0%	2.0%
Upper River North		.4%	78.6%	13.2%	3.5%	4.3%
Total		13.4%	70.5%	9.7%	2.5%	3.9%

Women health by Region and Strata

		Did you attend antenatal consultation during last pregnancy?		Last night, did you/she sleep under a mosquito net?		After using the toilet, what do you/she use to wash hands?			
		No	Yes	No	Yes	Water only	Home made soap/lash & water	Washing soap & water	Nothing
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	2.2%	97.8%	60.0%	40.0%	25.0%	4.9%	69.9%	.2%
	Kanifing Municipal Council	.6%	99.4%	52.4%	47.6%	35.2%	14.5%	49.4%	.9%
	Western Coast Region	2.4%	97.6%	50.9%	49.1%	37.0%	2.2%	60.6%	.2%
	Lower River Region	5.0%	95.0%	28.8%	71.2%	30.5%	18.9%	50.1%	.5%
	North Bank Region	1.7%	98.3%	29.4%	70.6%	30.4%	17.0%	51.6%	1.0%
	Central River Region North	12.1%	87.9%	28.4%	71.6%	46.4%	10.4%	40.0%	3.2%
	Central River Region South	15.4%	84.6%	19.9%	80.1%	58.7%	11.1%	26.8%	3.5%
	Upper River Region	6.2%	93.8%	39.3%	60.7%	46.0%	12.7%	40.8%	.5%
	Total	4.9%	95.1%	37.9%	62.1%	36.2%	12.4%	50.4%	1.0%
	Strata name (clustered districts)	Banjul	2.2%	97.8%	60.0%	40.0%	25.0%	4.9%	69.9%
Kanifing		.6%	99.4%	52.4%	47.6%	35.2%	14.5%	49.4%	.9%
Kombos		1.4%	98.6%	59.8%	40.2%	30.4%	1.2%	68.4%	.0%
Fonis		3.7%	96.3%	39.1%	60.9%	45.7%	3.4%	50.5%	.5%
Kiang		9.8%	90.2%	22.9%	77.1%	25.9%	28.8%	45.3%	.0%
Jarra West		1.2%	98.8%	36.0%	64.0%	18.8%	17.2%	64.0%	.0%
Jarra Central and East		5.7%	94.3%	22.7%	77.3%	58.0%	9.9%	30.0%	2.1%
Lower Nuimi		3.3%	96.7%	38.4%	61.6%	26.2%	17.0%	56.2%	.6%
North Bank West		.8%	99.2%	26.9%	73.1%	32.8%	25.4%	39.7%	2.1%
North Bank East		.9%	99.1%	19.9%	80.1%	33.2%	5.7%	60.9%	.2%
Lower Saloum		3.4%	96.6%	19.5%	80.5%	36.8%	4.1%	59.1%	.0%
Central River North		17.3%	82.7%	37.1%	62.9%	55.8%	16.5%	21.3%	6.4%
Niamina		18.4%	81.6%	15.1%	84.9%	61.4%	7.8%	27.3%	3.5%
Janjanbureh		13.4%	86.6%	23.6%	76.4%	56.6%	13.7%	26.3%	3.4%
Fulladu East		5.9%	94.1%	40.5%	59.5%	47.8%	9.7%	42.5%	.0%
Upper River North		6.5%	93.5%	37.4%	62.6%	43.3%	17.1%	38.2%	1.4%
Total		4.9%	95.1%	37.9%	62.1%	36.2%	12.4%	50.4%	1.0%

Reason for borrowing in last 6 months by Region and Strata

		reason for borrowing								
		To buy food	To cover health expenses	To pay school education fees	To buy agric inputs (tools seeds fertilizers)	To buy or rent land	To buy clothes or shoes	To pay for ceremonies	Other	implement business
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
Region (Local Government Area)	Banjul City Council	40.8%	8.4%	15.3%	.0%	.0%	17.7%	.0%	17.8%	.0%
	Kanifing Municipal Council	63.6%	.0%	21.3%	.0%	.0%	.0%	15.1%	.0%	.0%
	Western Coast Region	54.5%	.0%	8.1%	.0%	2.0%	.0%	4.1%	8.5%	22.8%
	Lower River Region	75.8%	3.9%	3.6%	3.1%	2.0%	2.0%	3.0%	2.8%	3.8%
	North Bank Region	66.7%	5.0%	6.4%	9.4%	.0%	.0%	3.4%	5.5%	3.5%
	Central River Region North	72.9%	9.6%	.6%	6.2%	.0%	3.2%	6.4%	1.1%	.0%
	Central River Region South	69.5%	17.5%	3.4%	3.3%	.0%	.0%	2.0%	2.8%	1.3%
	Upper River Region	57.8%	11.5%	4.8%	7.4%	.0%	.5%	3.6%	.0%	14.4%
	Total	67.8%	8.0%	4.7%	4.6%	.8%	1.4%	3.4%	3.4%	6.0%
Strata name (clustered districts)	Banjul	40.8%	8.4%	15.3%	.0%	.0%	17.7%	.0%	17.8%	.0%
	Kanifing	63.6%	.0%	21.3%	.0%	.0%	.0%	15.1%	.0%	.0%
	Kombos	37.9%	.0%	9.2%	.0%	4.3%	.0%	3.9%	9.3%	35.5%
	Fonis	69.5%	.0%	7.2%	.0%	.0%	.0%	4.3%	7.7%	11.4%
	Kiang	75.1%	1.5%	5.8%	5.0%	2.8%	2.7%	1.2%	4.2%	1.5%
	Jarra West	68.5%	2.6%	3.5%	3.1%	3.0%	2.9%	4.3%	3.4%	8.6%
	Jarra Central and East	85.6%	8.0%	1.4%	1.2%	.0%	.0%	3.2%	6%	.0%
	Lower Nuimi	63.0%	7.2%	5.8%	4.3%	.0%	.0%	5.0%	9.9%	4.8%
	North Bank West	66.9%	5.2%	7.2%	16.5%	.0%	.0%	3.4%	8%	.0%
	North Bank East	74.4%	.0%	6.5%	9.1%	.0%	.0%	.0%	3.5%	6.5%
	Lower Saloum	81.9%	.0%	.0%	3.4%	.0%	.0%	14.6%	.0%	.0%
	Central River North	71.4%	11.2%	.8%	6.6%	.0%	3.7%	5.0%	1.3%	.0%
	Niamina	71.1%	23.4%	.4%	3.1%	.0%	.0%	.6%	1.4%	.0%
	Janjanbureh	66.4%	6.1%	9.4%	3.7%	.0%	.0%	4.9%	5.5%	3.9%
	Fulladu East	48.3%	6.9%	7.1%	12.7%	.0%	.0%	3.2%	.0%	21.8%
	Upper River North	68.0%	16.3%	2.4%	1.8%	.0%	1.1%	3.9%	.0%	6.5%
	Total	67.8%	8.0%	4.7%	4.6%	.8%	1.4%	3.4%	3.4%	6.0%



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