FIANL REPORT

Food Security Profile

The Gambia

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List of acronyms

AAITG	Action Aid International The Gambia
ADWAC	Advancement for Women and Children
AFET	Association of Farmers, Traders and Educators
APMU	Agricultural Pest Management Unit
CBG	Central Bank of The Gambia
CBO	Community Based Organization
CFNPP	Cornel University Nutrition Policy Programme
CILSS	Permanent Interstate Committee for Drought Control in the Sahel
CRR	Central River Region
CSD	Central Statistics Department (now Gambia Bureau of Statistics)
CU	Concern Universal
DOP	Department of Planning
DOSA	Department Of State for Agriculture
DOSTIE	Department of State for Trade, Industry and Employment
DOSFEA	Department of State for Finance and Economic Affairs
ERP	Economic Recovery Program
FAO	Food and agricultural Organisation
GAFNA	Gambia Food and Nutrition Association
GBA	Greater Banjul Area
GCU	Gambia Cooperative Union
GDP	Gross Domestic Product
GMO	Genetically Modified Organism
GPMB	Gambia Produce Marketing Board
HDI	Human Development Index
IDA	International Development Association
IDD	Iodine Deficiency Disorder
KMC	Kanifing Municipal Council
LRR	Lower River Region
MCH	Maternal Health Care
MICS	Multiple Indicator Cluster Survey
MISTOWA	Market Information System for Trader Organizations in West Africa
MMAP	Methodist Mission Agricultural Programme
MWG	Multidisciplinary Working Group
NanA	National Nutrition Agency
NARI	National Agricultural Research Institute
NASS	National Agricultural Sample Survey
NBR	North Bank Region
NEA	National Environment Agency
NGO	Non-Governmental Organisation
NHPS	National Household Poverty Survey
OPL	Overall Poverty Line
PRSP	Poverty Reduction Strategy Paper
PSD	Program for Sustained Development
UNDP	United Nations Development Program
URR	Upper River Region
USAID	United States Agency for International Development
VAM	Vulnerability Assessment and Mapping
WR	Western Region
WEC	West African Evangelical Church
WFP	World Food Programme
WT/HT	Weight for Height

CONTEXT OF THE STUDY

In despite of important progress made in preventing and managing food crisis, the West African countries have faced food crisis in the last decades. Some of them result from temporary shocks. Others are mainly linked to structural causes of food insecurity. The recent food crisis that hit the sub-region in 2004-2005, particularly in Niger, drew attention to some of the structural causes that affect food availability and utilization. This situation showed that assessing short-term responses to transitory food insecurity is only a part of the solution. There is a significant convergence on the need for a greater commitment to address long term structural solutions to food insecurity.

Within the framework of the Food Crisis Prevention and Management Network in the Sahel and West Africa, the SWAC in association with the CILSS and other regional actors implicated in food security (Network of Peasant Organizations and Producers in West Africa – ROPPA and ECOWAS) propose to develop this initiative aiming to provide "Country Profiles on Food Security" for the Sahel and West Africa. This initiative will provide a set of analytical indicators allowing a better understanding of the causes of food crisis. It will also be used to inform and support decision makers to take them into account when defining policies and investment strategies for a sustainable food security.

The specific objectives of this initiative are:

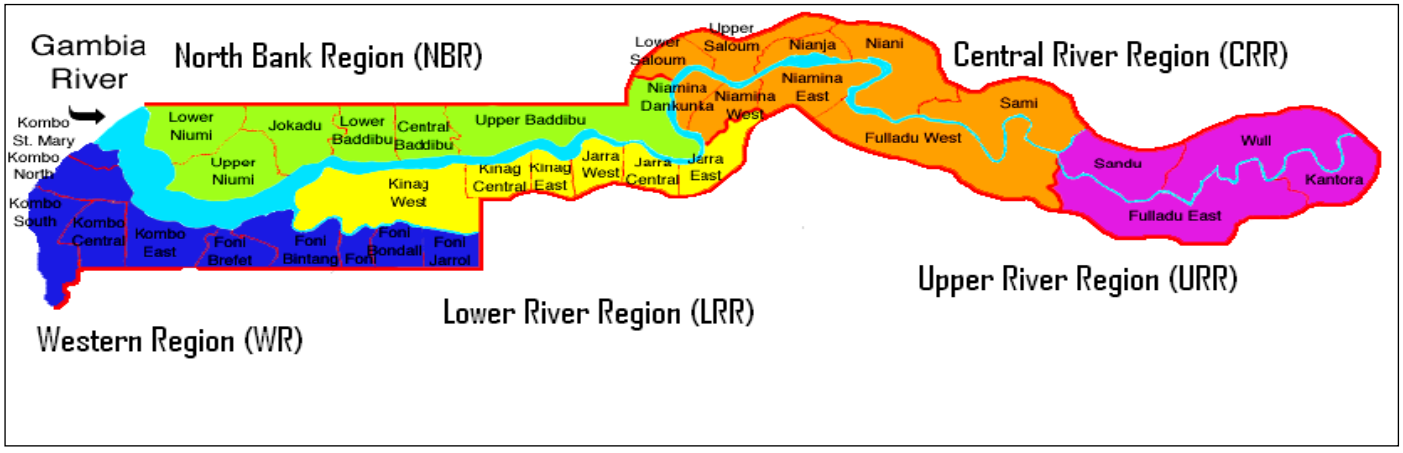
- Provide an analytical picture of key indicators relating to food security to engender greater understanding of food security and nutrition crisis and their persistence;
- Contribute to a better assessment of the investment effort made by countries in the area of food security; and,
- Facilitate decision-making by various stakeholders comprising governments, civil society, technical and financial partners.

I. OVERVIEW OF FACTORS RELATING TO FOOD AVAILABILITY

The Gambia is situated on the West Coast of Africa. It consists of a narrow strip of land within the valleys of the Gambia River stretching some 400 kilometres East to West and varies in width from 50 km near the mouth of the river to about 24 km further inland. It is almost an enclave in the Republic of Senegal except for a short seaboard on the Atlantic Coastline. It has a total surface area of 11,000 km^2. The topography is flat particularly near the sea and nowhere does it rise more than 90 m above sea level.

The Gambia is divided into 7 administrative areas comprising 2 municipalities (Banjul City Council and Kanifing Municipal Council) and 5 regions (formerly Divisions).

Figure 1: Administrative Regions of The Gambia



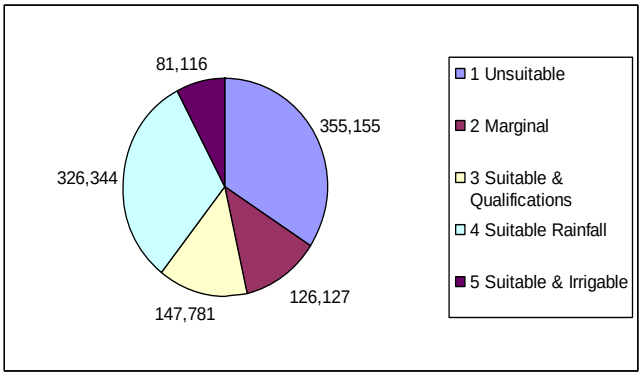
1.1. Productive resources and agricultural and pastoral vulnerability

1.1.1. Arable land and pasture resources

Agricultural potential

Total agricultural land for The Gambia is put at 1,036,523 ha classified according to suitability as presented in **Figure n°1**. According to the figure some 555,000 ha are considered suitable for agricultural production (suitable with qualifications, suitable rainfall and suitable and irrigable)[1].

Figure n°1: Land suitability classification



Source: Land resource study

There are great geographical variations for availability per capita and for cultivated area with Lower River Region having most unsuitable categories (0.83) while Central River Region-South (0.81) has most suitable area per capita (see **table n°1**). It is important to note that the water in the lower valley is perennially saline because of permanent tidal influence.

Table n°1: Land suitability and availability per region

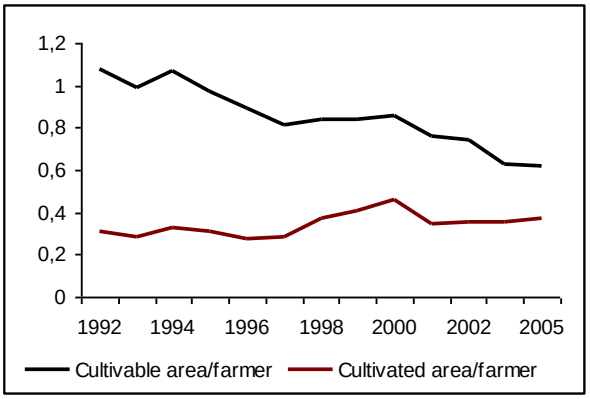
Region	Land Area (ha)		Land Area per capita	
	Unsuitable/ marginal	Suitable	Unsuitable/ marginal	Suitable
WR	57,328	117,457	0.22	0.46
LRR	98,02	55, 778	0.83	0.47
NBR	96,606	123,777	0.61	0.78
CRR North	83,123	64,482	0.78	0.60
CRR South	55, 701	86,435	0.52	0.81
URR	91, 524	105,187	0.63	0.72
Total	**482,297**	**553,116**	**0.54**	**0.62**

Source: Land resource study and own calculations, 2003

Land use

The share of cultivated area in the total cultivable area for the period 1992 to 2005 shows an increasing proportion of the land being utilized for crop cultivation from 28% in 1992 increasing to 60% in 2005. Cultivable area per farmer has been on the decline from 1.08 ha per farmer in 1992 to 0.62 in 2005. Cultivated area farmer has remained with the range of 0.27 ha/farmer in 1996 to the highest of 0.46 ha/farmer in 2000 (see **figure n°2**). This situation reflects the fact that the cultivable area has remained unchanged since 1992 while the farming population has almost doubled.

Figure n°2: Cultivable and cultivated areas per agricultural worker (1992-2005)



Source: National Agricultural Sample Survey, 2005

[1] Suitable with qualification: shallow soils on top of the plateau or of top depressions and shallow areas with drainage problems. Suitable rainfall: colluvial soils and soils on the edges of the flood plains of the river. Suitable and irrigable: alluvial soils with good potential for irrigated rice.

Soil resources

The soils are predominantly ferruginous and feralitic highly weakened tropical soils characterized by low Cation Exchange Capacity (CEC), low inherent fertility, strong consistencies and poorly developed structures and medium to high base saturation. Soils in The Gambia are subjected to various types of degradation attributed to soil erosion (wind and water), clearing by burning and limited incorporation of green manure and salinization (drought has culminated in deeper penetration of saline water upstream) from the main river and its estuaries.

Range Resources

Range resources are categorized into upland and lowland. Upland range comprises closed woodland (20,900 ha), open woodlands and, trees and shrub savannah with and without previous cultivation (405,133 ha). The upland range provides only limited fodder during the dry season and has been gradually deteriorating in quality and now largely comprises less valuable fodder species. Lowland rangelands comprise the uncultivated swamplands and cover 70,393 ha contributing 19% of all dry season feed. Conflicts between crop farmers and livestock farmers are more prevalent as more swampland is being claimed for irrigated rice production.

Systematic monitoring and inventorying of the carrying capacity of the rangeland was conducted in 1986 but only covered URR and CRR. These areas also have the highest concentration of cattle with stocking of 70,430 in CRR and 55,027 in URR. In view of the differences livestock from URR migrate to CRR from January to June in search of feed. The uncontrolled grazing, recurrent bushfires, lack of adequate watering facilities and encroachment of farmlands on cattle tracks are major constraints in range utilization resulting in shortage of feed and culminating in low livestock production and productivity.

1.1.2. Water resources and their management

Water resources comprise of ground and surface water. The ground water exists in 2 aquifers systems: (1) a shallow sand aquifer and (2) a deep sand stone aquifer. The current exploitation of both aquifers is minimal with only few boreholes used for irrigated agriculture. Surface water on the other hand, is principally utilized in Central River Region (CRR) where the river is perennially fresh and used for rice irrigation.

Irrigation potential is estimated to be 80,000 ha. Accurate up-to-date figures on irrigated areas are not available. In 1991, the area equipped for full or partial control irrigation was estimated to be 1,670 ha; this figure has increased to 2,150 ha by the year 1999 (see **table n°2**), referring to several irrigation development projects under way in the country. At present, irrigated area has stagnated around 2,500 ha partly because of limitation of steep river banks (requiring pump uplift) and salinization (70 Km at end of rainy season and 250 Km at Kuntaur at end of the dry season) on the westward front and partly because of lack of sustainable irrigation systems.

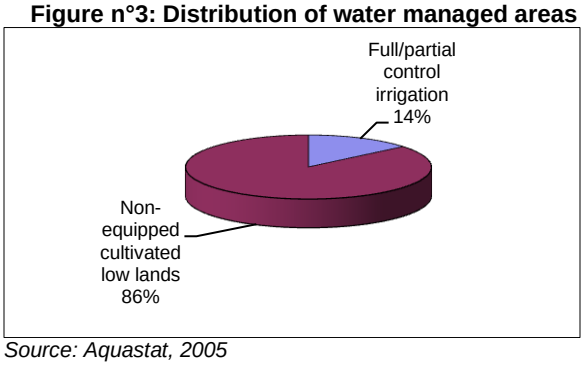
Table n°2: Evolution of irrigation development (in 1,000 ha)

Irrigation	1988-92	2003-07
Irrigation potential	80.0	80.0
Area equipped for irrigation: full control surface irrigation (1,000 ha)	1.67	2.5
Agricultural water managed area	14.8	15.3

Source: Aquastat, 2005

The total water-managed area is estimated at 15.319 ha or 7% of the cultivated area as presented in **figure n°3**. All the area equipped for full or partial control irrigation is surface-irrigated, either with pumped schemes (818 ha or about 38% of the area in 1999) or by employing tidal irrigation (1,331 ha or about 62% of the area)[2].

Figure n°3: Distribution of water managed areas



Source: Aquastat, 2005

In the Gambia, the resources that are made available for irrigation, especially labour, are influenced by a particularly complex network of rights and obligations in rural society. Women in rural communities play an important role in the allocation of family labour to food production tasks. The introduction of irrigation, or the technical formalization of existing water-use systems, involves in most communities a change in the traditional farming system. Women are major participants in irrigation at field level; however, there is only scant evidence that they participate significantly in water

[2] FAO's water and food security country profiles, 2005

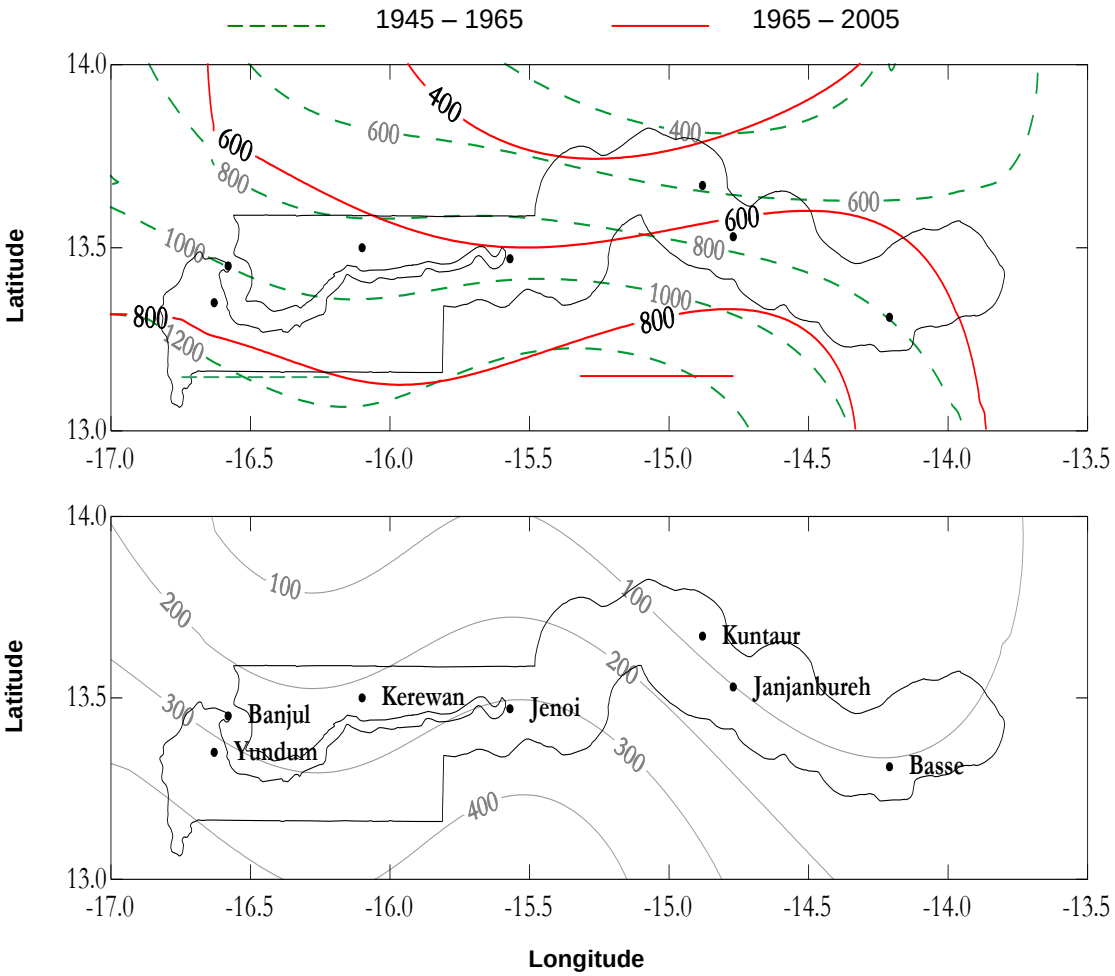
management or policy decisions at the system, regional or national levels (FAO, 2005).

1.1.3. Climate change

The climate is typically "Sudano Sahelian" characterized by a short monomodal rainy season (June to October) followed by a long-dry season (November to May) characterized by the harmattan wind.

Average annual rainfall is about 1,000mm but ranges from 850mm-1,597mm depending on the agro-ecological zone. **Figure n°4** shows spatial patterns and temporal changes in rainfall in the last sixty years. The top panel shows a south to south-westerly drift of cumulative July-August-September (JAS) rainfall contours. It could be observed that the area with average rainfall less than 800mm has increased from 36% to 93% since 1965. The bottom panel shows geographical variation of absolute decrease in rainfall. Yundum, Banjul, Kerewan, and Jenoi located westward of longitude 15º30'W (here indicated in world geographic coordinates as –15.5º) have experienced a fall in rainfall exceeding 200mm. Climatological stations to the East of 15º30'W (Kuntaur, Janjangbureh, and Basse) have experienced somewhat smaller changes since 1965. As crop and livestock production is sensitive to moisture, production and productivity have been varying with low rainfall. Its poor distribution in the past decades results in drought conditions which have adversely affected the food production potential.

Figure n°4: Isohyte Movements for The Gambia 1945-65 and 1965 -2005



Source: Njie, M., Gambia National Adaptation Plan of Action (NAPA) on Climate Change, 2007

1.2. Agricultural and pastoral productivity

1.2.1. Trends in production

Agricultural sector

Gambian primary sector has been characterized by subsistence production of food crops comprising cereals (early millet, late millet, maize, sorghum and rice); semi-intensive cash crop production (groundnuts, cotton, sesame and horticulture) and traditional livestock rising. Farmers generally practice mixed farming, although crops account for a greater portion of the production. On average, some 200,000 ha are annually cultivated of which less only 2% of them are irrigated. Among the crops, groundnuts are the most important occupying 40-50% of the cultivated area followed by early millet (25%), rice (8%), sorghum and maize (7% each) with the least of the area allocated to sesame and the root and tubers (cassava and sweet potatoes).

The majority of farmers are smallholders (less than 3 ha per farm family) and are generally resource poor. There is heavy reliance on household labour and traditional farming techniques. However, there is large-scale use of animal traction which has enhanced mechanization on most of the small holdings across the country[3].

Whilst groundnut cultivated area and production dominated the early periods of the review by 1985/86 the coarse grains became more dominant on both counts, as illustrated in **figures n°5 and n°6**. Production of coarse grains registered the biggest increase from around 40,000 Mt or 15% of total crop production in 1974/75 to over 90,000 or 50% by 1985/86. The upsurge in production levels of coarse grains could be attributed to the importance farmers attached to these crops for increased household food security particularly after the droughts in the 70's and early 1980s and the decrease of groundnuts yields resulting in revenue erosion of the farmers. However the full potential of these crops is yet to be exploited due to shortage of improved seeds, fertilizers and other inputs coupled with difficulties associated with processing.

Amongst the coarse grains, early millet registered the highest increase in terms of both cultivated area and production; with cultivated area increasing from a low of 4,600 ha in 1977/78 to the highest of 109,900 ha in 2006/07 and production from 3,000 Mt to 166,000 Mt in the same period.

Significant increases in total production and cultivated area in the last ten years are reflective of agricultural mechanization programmes put in place by the Government since 1994. Under the operations "Back to the Land" and "Feed the Nation", the Government provided over 100 tractors from 1999 to 2005 for hire during land preparation activities and has contributed to increased cultivated area. Although a mixed trend, the latter years record more implements and working animals which may also explain the increase in cultivated area.

The relative share of cereals in the total major cropped area increased marginally from 36.7% in 1975 to 59.8% in 1985/86 and then to about 62% in 2004/05. The relative share of coarse grains in the total cropped area also increased marginally but at a stronger rate than the share of cereals.

Figure n°5: Production of major crops (in 1,000 MT) 1974/75-2005/06

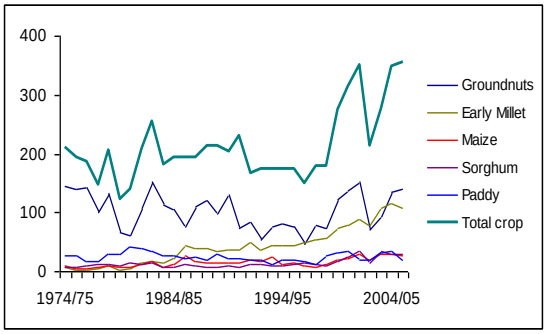
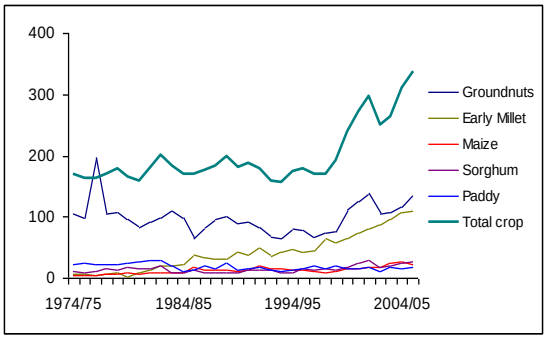


Figure n°6: Area of Major Crops (in 1,000 ha)



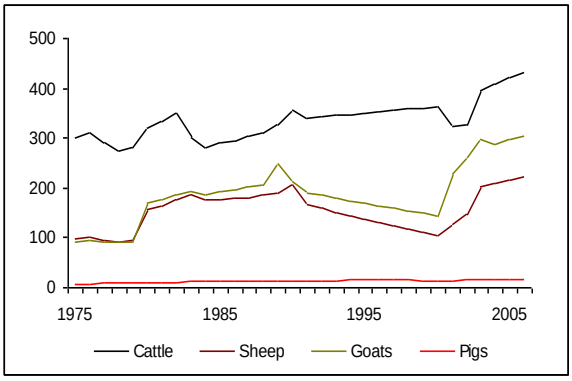
Source: National Agricultural Sample Survey/Department of Planning, 2006

[3] Department of Agricultural Services, 2001

Livestock production

Livestock constitutes important sources of food, income, manure and farm power in The Gambia. **Figure n°7** presents data on the trends in the livestock population from 1975 to 2006. The pattern shows a generally increasing population for cattle and for small ruminants. According to the data, the cattle population averages around 430,000 heads; 220,000 sheep and 300,000 goats; 16,000 pigs; and, 400,000 chickens. Despite the large number of cattle, off-take remains low due to holding of stocks as reserves of wealth by owners.

Figure n°7: Livestock population from 1975-2006 (1,000 heads)



Source: National Agricultural Sample Survey, 2006

At an estimated per capital meat consumption of 8 kg of milk and other diary products (estimated at between 10 and 24 kg per caput per annum), large volumes of meat, eggs and milk are annually imported to meet consumption requirements. **Table n°3** shows the increasing import dependency for livestock products since 1990, in particular for milk and eggs. Demand has increased in recent years due to increasing income and a rapidly expanding urban population. Nevertheless, livestock yields have remained unchanged since the last fifteen years (174 kg/year for milk and 3,2 kg/year for eggs).

Table n°3: Import dependency for livestock products

Product	Imports as percentage of consumption		
	1990	2000	2002
Meat	14,84	23,92	8,36
Beef	24,24	4,46	1,41
Poultry		65,89	35,32
Milk, equivalent	70,73	84,52	104,67
Eggs	24,01	33,05	41,08

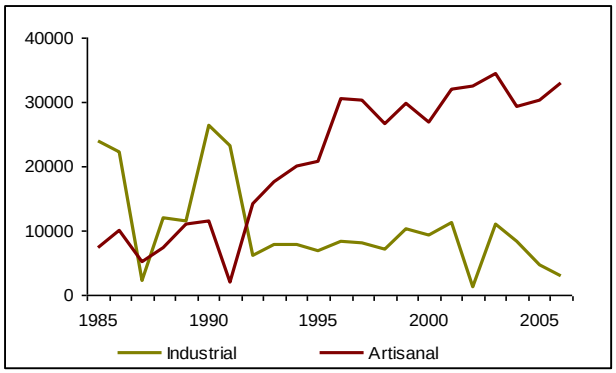
Source: FAO, 2005

This large import of livestock products, which are often cheaper than the domestically produced items, has served as a disincentive for local producers. Due to the low input management systems and poor husbandry practices, productivity and output have been generally low in the traditional free-range extensive systems. In the emerging modern sector semi-intensive management systems are predominant with increasing utilization of composite animal feed and concentrates.

Fisheries

The Gambia is endowed with abundant marine and riverine fish. Estimates from surveys highlight that demersal stocks are heavily fished with sustainable limits being approached; the pelagic resources are however under-exploited. Fisheries constitute an important natural resource and provider of cheap source of protein for a significant proportion of the population. Per capita fish consumption is higher in the coastal areas with 36 kg/per caput/annum for Banjul compared with 18 kg/per caput per annum for URR lowest in eastern Gambia. It is estimated that the maximum sustainable yield from the Gambia's continental shelf and estuarine area is 80,000 MT per year, whilst current catches are put at 30,000-40,000 Mt. The observation also indicates that high valued demersal species are under threat from exploitation. Data on fish catches from 1981 to 2004 by artisanal and industrial fisheries sub-sectors are presented in **figure n°8**. The picture is one of dwindling catches from the industrial sector whilst those of the artisanal sector show an increasing trend. High post-harvest losses, lack of credit, low skill levels and lack of infrastructure for landing constitute key constraints encountered in the sector.

Figure n°8: Marine fish production (in MT)

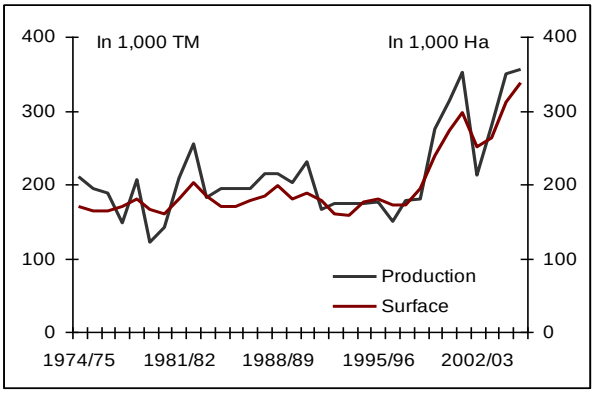


Source: Fisheries Department, 2006

1.2.2. Trends in crop yields

Figure n°9 is a graphical illustration of the trends on total cultivated area and total production. The total cultivated area increased – especially since the year 2000 - from 180,000 ha in 1974 to about 340,000 ha in 2005. Production projected on the same graph follows a similar trend increasing from 200,000 Mt to 350,000 Mt for the same period.

Figure n°9: Trends in total crop cultivated area and production

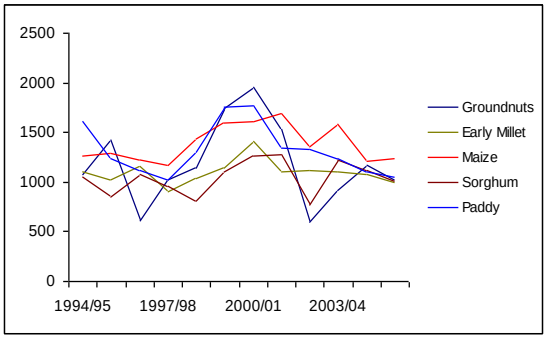


Source: NASS, Department of Planning/DOSA, 2006

This analysis shows that production growth has largely been due to area expansion with productivity stagnant due amongst others to dependence on rainfall, low investment in production inputs and related industries and the small size of holdings.

Performance on the yield of major crops is presented in **Figure n°10** for the period 1974/75 to 2006/07. After increasing until 2000, yields of main food crops decreased sharply and then stagnated over the last years. Besides unfavourable weather conditions (mainly rainfall), low yields are due to an important rise in the cost of production (particularly for fertilizers). Groundnut productivity has been particularly affected by poor seednuts, inadequate quantities and unaffordability of chemical fertilizers.

Figure n° 10: Yield of major crops (Mt/ha)



Source: NASS/Department of Planning, 2006

1.3. Food supply and food requirements

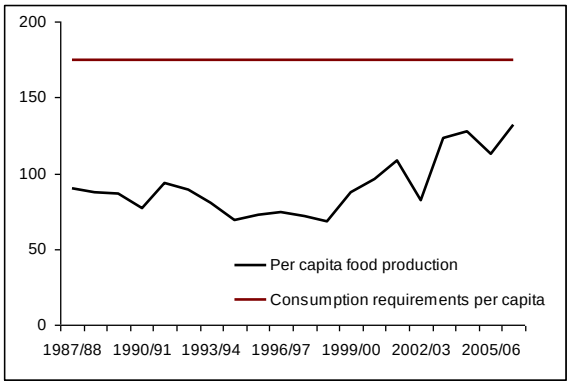
1.3.1. Population and demography

The population of The Gambia has registered significant increases over the period reaching about 1.4 million in 2003 (2003 population census) with a growth rate of 2.8%. This is lower than the previous census period. The share of urban population has strongly increased from 38% in 1993 to 51% in 2003.

Similarly, the population density has grown from 47 persons per square kilometre in 1973 to 128 persons in 2003. This makes the Gambia one of the highest densely populated countries in Africa. For agricultural land, the population density is estimated at over 300 inhabitants per square kilometre and the resulting intensive land use due to shorter fallow periods poses potential serious threat of degradation to agricultural land.

Per capita food production has been rising, especially since the end of the 90s. It passed from 80 Kg/per person in 1998/99 to 160kg/per person in 2006/07 Nevertheless, local production is not sufficient to meet food consumption requirements, as illustrated in **figure n°11**.

Figure n°11: Per capita food production and consumption requirements (kg/ha)

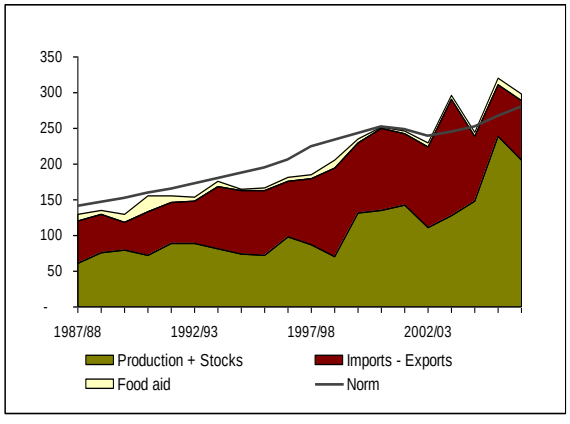


Source: CILSS, 2007

1.3.2. Commercial imports and food aid

As indicated by **figure n°12**, local production cannot meet consumption requirements, most food stuff are usually imported either as commercial imports or food aid. These imports, particularly rice and wheat flour, serve to bridge the gap between production and consumption. Improvements have been observed over the last years (local production provided about two thirds of food requirements).

Figure n°12: Evolution of food balance (in millions of tonnes)

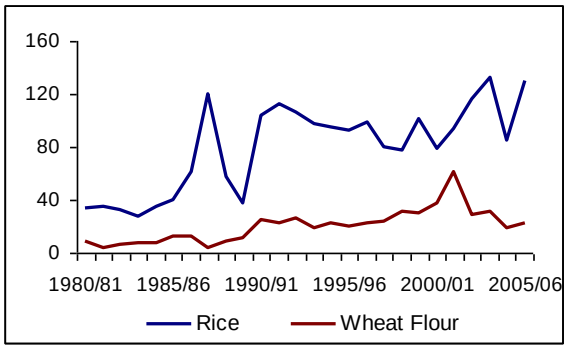


Source: CILSS, 2007

Food imports

The most important food imports items comprise cereals (rice and wheat flour). However, vegetable oil, sugar, tomato paste, onions, coffee and tea also constitute food imports in The Gambia. **Figure n°13** presents the imports of rice and flour from 1981 to 2005 and indicates rising imports from 1986 when economic reform measures liberalized food imports. Accordingly, rice imports before 1985/86 were less than 40,000 Mt but rapidly increased to over 120,000 Mt in 1987/88. Wheat flour imports however remain fairly level at around 23,000 Mt. The increase in rice imports in 2001-04 is attributed to the low harvests experienced due to the prolonged drought. Cereal imports have been dominated by Gambian Lebanese who have long-term relationships with suppliers and overseas financial markets.

Figure n°13: Trends in commercial imports of rice and wheat flour



Source NASS, DOP/DOSA, 2006

Other food imports of significance include vegetable oil, sugar, tomato paste, onions, coffee and tea. The imports of sugar increased from about 36,000 Mt in 1986 to an average of 80,000 Mt annually from 2000 to 2003. Imports of tomato paste experienced similar trends from 2,600 Mt in 1986 to 5,000 Mt annually from 2000-2003. Whilst the increases may be explained by increases in local consumption, re-exports to the sub-region has also been an important factor according to the incentives that the protection measures implemented in Senegal for these products represents for the smugglers.

Food aid

Imported food aid has played an important role in filling food deficit gaps during periods of natural calamities and among vulnerable groups.

Whilst an important component of food supply in the 1970's and 1980's, the volume of food aid has declined in later decades.

The annual volume of cereal food aid has ranged from 2,000 metric tons to 15,000 tons over the last decade.

In The Gambia, most of the food aid received is mainly rice and flour but other items such as oil, sugar, biscuits and beans are also provided. Details on food aid indicate a general declining trend with rice being the commodity provided in largest quantity followed by vegetable oil and meat and fish in descending order.

Most of the food aid has been for project operations. Major sources of food aid have been World Food Programme (WFP), USAID (PL 480), NGOs (Catholic Relief Services, Action Aid The Gambia (AATG), WEC Mission and various Islamic organisations.

Conclusion: Increasing production resulting from area expansion rather than yield increase

The Gambia is the smallest country in West Africa. Some 555,000 ha are considered suitable for agricultural production (about 48% of total land). Over the last fifteen years, data reports an increasing proportion of the land being utilized for crop cultivation (from 28% in 1992 to 60% in 2005). Only 2% of the cultivated area is irrigated. The irrigated area has stagnated around 2,500 ha because of limitation of steep river banks, salinization and partly because of lack of sustainable irrigation systems.

Cultivated area and production have considerably increased. This has largely attributed to area expansion with yields stagnant or even declining (due to the dependence on rainfall, low investment in production inputs and related industries and the small size of holdings). Significant rise in production observed since the last decade is also reflective of agricultural mechanization programmes put in place by Government since 1994.

In spite of increasing domestic food production, commercial and food aid imports are essential to meet increasing consumption requirements fuelled by high population growth and urbanization. Food aid supplies less than 3% of total requirements. Imports particularly rice and wheat flour, serve to bridge the gap between production and consumption.

II. ACCESS TO FOOD RESOURCES

With increasing urbanization and with most rural households being net food purchasers, access has become an important element in food security in The Gambia. It is classified amongst the poorest countries in the world. The UNDP's Human Development Index (HDI) rated The Gambia as 155 out of 177 countries in 2004 and 2005 (slipping from 151 in 2003).

1.1. Socio-demographic factors and situation in vulnerable areas

Poverty

The assessment of the evolution of poverty in The Gambia was not adequately tackled in the past. However, the 2003/04 Integrated Household Survey has addressed the problem by standardizing the 1992 and 1998 datasets in terms of methodological differences[4].

Evidence from successive household poverty surveys from 1992 to 2003 indicates the pervasiveness of poverty and its increasing trend both in urban as rural areas, as presented in **table n°4**. The gap between urban and rural areas has been rising over the same period.

Table n°4: Evolution of poverty in The Gambia (1992-2003)

Year	Food poverty line			Overall poverty line		
	Banjul	Urban	Rural	Banjul	Urban	Rural
1992	5	9	23	17	40	41
1998*	7	22	45	21	48	61
2003		n.a	n.a		57	

Source: Reports on the 1993-94, 1998 and 2003/04 household surveys

According to the 1998 household economic survey, extreme poverty is more prevalent in rural areas with around 45% of rural households falling below the food poverty line, compared to 22% in urban areas and just 7% in Banjul. In rural areas, 61% of the population

[4] Poverty measurements generally collected information on expenditure, which serves as a proxy for income levels. Income information is derived from expenditure and consumption data. Poverty measurement uses the physiological deprivation model to assess lack of access to economic resources (income) to satisfy basic material needs. The value of this basket is the poverty line. The overall poverty line includes the cost of food plus some additional essential items such as clothing, accommodation and travel.

was living below the overall poverty line (food and non food poverty lines).

Within rural areas, poverty prevalence rates vary considerably between the administrative regions, with the highest levels of extreme poverty, around 50%, being found in Lower and Upper River Regions (LRR and URR). North Bank Region (NBR) and Central River Region (CRR) have slightly lower rates of around 45%, while the prevalence in Western Region (WR) is considerably less at 20% as indicated in **table n° 5**.

Table n°5: Incidence of poverty by region

Regions	Extremely Poor	Poor	Non-poor
Banjul	1.7	17.5	80.8
KMC	6.8	11.8	81.5
Lower River	**50.5**	13.4	36.1
Central River	43.3	11.7	45.0
North Bank	45.9	20.9	33.2
Upper River	**49.2**	16.1	34.8
Western	20.2	24.5	55.2
The Gambia	**29.7**	**17.2**	**53.1**

Source: 1998 NHPS data

1.2. Sources of income and household coping strategies in vulnerable areas

Sources of income

Employment data from the NHPS in 1998 revealed that over 91% of the members of extremely poor households worked in agriculture[5]. This is corroborated by recent analysis on economic activity of the Gambian population in relation to the poverty head count also revealed that peasant agricultural workers and unskilled workers are the poorest. Similar trends were observed in poverty gap and severity in the various occupations.

In a participatory poverty assessment that was conducted in 1999-2002, the majority of rural inhabitants who were identified as poor, cited several factors affecting their incomes: low productivity, inadequate access to essential inputs for production and poor marketing opportunities. It was evident from the findings of the survey that low household incomes due to low agricultural productivity from which most rural income is derived coupled with the other factors are the root cause of rural poverty.

This outcome not only reflects the failure of past policies to address the needs of the agricultural sector appropriately. The problems encountered with groundnut marketing, the principal cash crop, in the recent past are an illustration of this situation. Groundnut export prices declined by almost 15% from 1991 to 1999 and the value of exports declined from 4.5% to 2.3% of GDP. Direct government intervention to provide credit to farmers was not successful and the burden of unpaid debt contributed to the termination of the Gambia Co-operative Union's (GCU) lending program during the 1992/93 crop season. The privatisation of The Gambia Produce Marketing Board (GPMB), without establishing alternative arrangements to assist farmers, left the groundnut sector with virtually no organised purchasing and export facilities. Groundnut production declined considerably over the last three decades. Although for the past two years production has rebounded, the price for groundnuts in international markets remains depressed.

Vulnerable groups and zones

Vulnerable groups and zones exist in both urban and rural Gambia. The lean period (July to September) is particularly difficult for rural producer households as stocks are lowest and prices higher. Consequently, households are prone to food insecurity with income or production losses particularly due to natural calamities such as drought or floods as presented in **Table n°6**. It shows geographical variations occur from year to year. Consequently, vulnerable groups (numbers and location) differ according to year. However, as the table shows the North Bank Region (NBR), Central River Region North (CRRN) and Upper River Region (URR) are particularly prone due to dry spells and late rains.

Table n°7 presents data ranking regions according to various food security indicators comprising availability, access, utilization and nutrition. The data indicates Upper River Region as most food insecure and therefore most vulnerable according to various food security indicators. It is important to note that production covers 80% of food needs. Nevertheless, this region is affected by significant poverty levels, high stunting and female illiteracy rates. This situation reflects the fact the vulnerability is not only the consequence of a lack of food availability but is above all a result of multi-causal phenomenon.

[5] Care should be taken in interpreting these figures as the household survey only allows for the reporting of a single work activity. It does not allow for the possibility of multiple sources of income, which is often a characteristic of livelihood strategies in poor households.

Table n°6: Natural calamities and affected populations

Year	Division	Natural Calamity	# of Villages	Population	Coping Strategy
1998	WR LRR NBR	Dry Spell Dry Spell Dry Spell		40,258 22,554 70,424	Planting Early maturing Crops
1999	URR	Flood			
2002	LRR NBR CRR URR	Dry Spell Dry Spell Dry Spell Dry Spell		18,700 53,000 34,604 14,689	Replanting early maturing crops
2005	CRRN	Dry Spell		61,793	Replanting of early maturing crops
2006	NBR CRRN CRRS WR	Floods Dry Spell Dry Spell Dry Spell	145 160 235 80	50,540 41,465 69,320 43,175	Income generation/gardening Asset disposal/income generation Labour hire/Remittances Labour hire/Remittances

Source: NASS, 2006

Table n° 7: Ranking according to various food security indicators

REGION	AVAILABILITY		ACCESS		UTILIZATION		NUTRITION	
	% of needs covered by production[1]		% of population below extreme poverty line[2]		Female literacy rates[3]		Stunting (height for age)[4]	
	Ranking	Statistics	Ranking	Statistics	Ranking	Statistics	Ranking	Statistics
Western	1	29.4	4	50	5	16.8	4	20
North Bank	5	94.7	2	71	4	14.3	3	29
Lower River	2	54.2	2	71	3	12.9	3	29
Central River	4	92	3	62	2	11	2	33
Upper River	3	88	1	**73**	1	**5.7**	1	**38**

Source: *CRS Senegal and Gambia offices. FY 2002-2006 Development Area Program*

Note: A ranking of 1 indicates the most food insecure and a ranking of 5 indicates the least food regions

[1] Surplus/Deficit production calculated by dividing regional-level total cereal production with consumption requirements for cereals- defined by CILSS as 190 kg/per capita for Sahelian countries. FAO/GEOWEB (% of need covered by production)

[2] Government of The Gambia, 1998 National Household Poverty Survey Report. Banjul, The Gambia 1998 (% of population below poverty line)

[3] GOTG, Central Statistics Census 1993 (Female Literacy)

[4] GOTG, 1998 National Household Poverty Survey Report (Stunting)

1.3. Food market functioning

1.3.1. Market infrastructures

Road network

Trade within the country is conducted through 2 major trunk roads (North and South Bank). The 400 km or so of paved road on the South Bank (including those connecting The Gambia to the Senegal border) constructed in the 1970's but now under reconstruction; while over 228 km of paved roads have recently (2005/06) been constructed in the North Bank of the River (Barra to Lamin Koto). **Table n°8** presents the state of the road stock for the period 1975 to 2005. It shows that feeder roads are still a major constraint to the evacuation of produce farm and to markets, even though improvements have been made since 1990. In 2005, 450 Km of feeder roads (50% of total) remained unimproved (against 58 Km for primary roads and 82 Km for secondary roads).

Table n°8: Changes in Road Stock in The Gambia (in Km) 1975-2005[6]

	1975	1990	2000	2005
Primary Roads				
Paved	224	421	854	1,020
Gravel	434	277	477	311
Unimproved	173	133	58	58
Secondary Roads				
Paved	35	46	142	162
Gravel	70	65	266	246
Unimproved	206	205	82	82
Feeder Roads				
Paved	2	2	30	30
Gravel	23	128	432	432
Unimproved	1,147	1,042	450	**450**
Total Roads				
Paved	261	469	1,026	1,212
Gravel	522	470	1,135	989
Unimproved	1,626	1,380	590	590

Source: World Food Summit, Gambia Roads Authority and own calculations, 2005

Food reserve stocks

Prior to 1985, the Gambia Produce Marketing Board (GPMB), a public monopoly was responsible for the export and import of agricultural/food commodities and held stocks of rice. However with economic reforms in the Mid 1980's, the public sector no longer holds stocks of food and relies on the private sector. Stock levels are closely monitored by the Department of State for Trade, Industry and Employment (DOSTIE). Fiscal reserves to the tune of 1.2 Million were held in the treasury in a special account up to the late 1990's in case of emergency needs for food purchase. Whilst the public sector no longer holds stocks, capacity for storage exists at strategic locations throughout the country which were utilized in the early 80's to store food aid and emergency relief supplies. These facilities, their locations and capacities are presented in **table n°9**. It indicates a range in storage capacity from 300 Mt to 8,000 Mt with a cumulative storage capacity of 19,900 Mt. With the passing of time most of these are in a state of disrepair, however a few have recently been repaired and used to by NGOs store food for communities.

Table n°9: Location and Capacity of Local Government Warehouses

Location	Capacity (in MT)
KMC	
Kanifing	8,000
Western Region	
Brikama	300
North Bank Region	
Kerewan	2,000
Farafenni	2,300
Lower River Region	
Kwinella	3,500
Jattaba	300
Central River Region	
Karantaba	1,000
Dankunku	1,000
Kaur	300
Upper River Region	
Basse	900
Kanube	300
TOTAL	**19,900**

Source: Department of State for Local Government and Lands

At the community level, NGOs and Community-Based Organizations (CBOs) operate Village Cereal banks (Cereal Banks consists of well constructed stores and serve as a social mechanism which allows farmers to store, sell cereals to the store when they need cash, and to buy back those cereals at a reasonable price when they need grain). There exist between 10-15 operational cereal banks mostly supported by NGO's such as Action Aid, FFHC, GARDA, ADWAC and AFET. Cereal banks were very common in The Gambia in the 1970's but their importance has declined.

In addition to the village cereal banks, some 600-800 seeds stores exist in the country built by government and NGOs. They vary in their sizes and state of functionality. In the past, seed, particularly groundnut seed was kept from January to April with the government providing pesticides, labels, advice and record clerks to beneficiaries. With the removal of subsidies and liberalization of services, there has been limited public sector support for the intervention.

[6] Primary roads = Connects main centres of activity and from the major connection, and are all weather. Secondary roads = Connects particular regions or locality to the primary network. Feeder roads = Routes used for access between villages and for transportation to buying stations and river depots.

1.3.2. Food supply chains and stakeholders

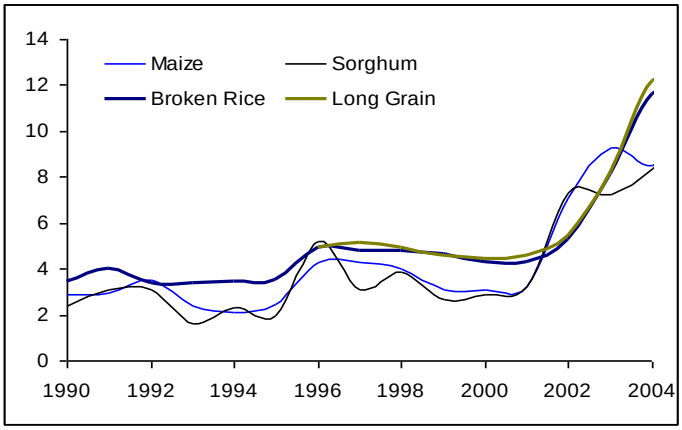
The formal channel for agricultural/food marketing is largely employed for groundnut, cotton, and sesame (cash crops); whilst the informal one is employed for traditional cereals, livestock, horticulture and fisheries products. The informal channel constitutes the major channel for transaction at the farm, household, daily (regular market) and weekly markets ("loumo").

The informal channels, particularly the loumos are useful in linking surplus food production regions with food deficit regions and ensuring regular supply of food commodities to consumers and allow farmers to dispose off farm produce to traders. Loumos are strategically located on the main trunk road or near major trade routes near the border with Senegal. In view of their proximity to the borders, they serve as channels for international trade. The Gambia conducts large import and export trade due to its low protection policies and availability of communication infrastructure/facilities. The exchange rate factor is important this regard and given the use of the CFA Franc in commercial transaction, it plays an important role in trade dynamics.

In view of the increasing urbanization, a large part of the market segment is in the Banjul and the Greater Banjul Area with flow of imported food commodities towards the interior and the flow of local agricultural commodities in the opposite direction. Data shows an increasing trend in prices of imported rice and other imported food commodities as distance from Banjul increases. Recent prices offered to consumers in daily retail markets, show general increases with long grain imported rice recording the highest price, as illustrated in **figure n°14**. The low cereal production of the preceding cropping seasons and the resulting demand from both, The Gambia and Senegal, as well as the CFA exchange rates are the principal causes of the price increases in 2003 and 2005.

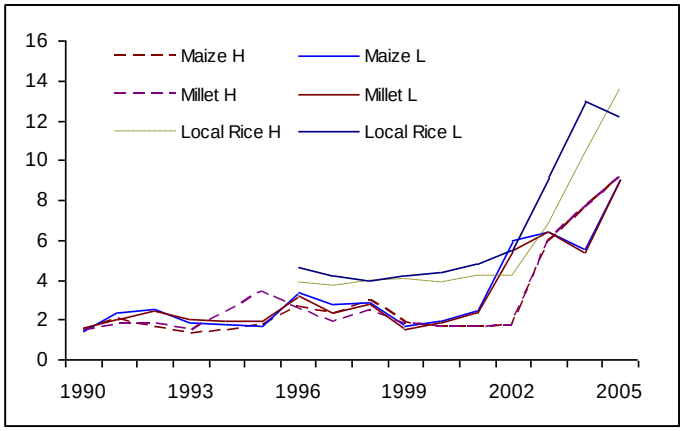
Loumo prices – countrywide – are generally lower than retail prices as local producers bring their commodities to these markets. **Figure n°15** presents respectively the variations in cereal prices among the lean (July-September when farmers stocks are lowest) and harvest periods (October to December when farmers stock are highest) for loumo markets. Whilst prices are generally lower at harvest, it could be observed that for some years, the reverse was the case (or similar prices observed in the harvest and lean periods).

Figure n°14: Retail Prices at lean periods (Dalasi/kg)



Source: NASS, 2005

Figure n°15: Loumo Prices at lean periods (in Dalasi/kg)



Source: NASS, 2005

Access to market information which is a critical requirement for importers, producers and consumers is poor in all sectors of trade. Such information includes the need for compliance with sanitary and phytosanitary regulations of importing countries. The principal sources of market information include the NASS/DOP price information on cereal, horticulture and livestock prices and the MISTOWA market information posted on its website. Traders also utilize Radio Senegal for information especially on cereal prices.

Conclusion: High poverty levels coupled with rising food prices reduced access to food

Poverty in The Gambia has increased since 1992, both in urban and rural areas. Available data shows that extreme poverty is more prevalent in rural areas with 45% of households living below the food poverty line, compared to 22% in urban areas.

Within rural areas, poverty prevalence rates vary between regions, with the highest levels of extreme poverty in Lower and Upper River regions. This latter region is also considered as the most vulnerable according to various food security indicators. Although production covers an important part of food needs, this region is affected by significant poverty levels, high stunting and female illiteracy rates. The problems encountered with groundnut marketing, the principal cash crop, in the recent past have contributed to increasing poverty trend.

The small size of the Gambia enhances market access to most areas; however due to the deteriorating road network in certain parts of the country, physical access to food from the loumos (informal markets) can be problematic during the peak rainy season.

The fact that most farming households are net-purchasers of food makes the situation a cause of concern. It has been observed that there is an increasing trend in prices of cereals, in particular imported food commodities. The low cereal production of the preceding cropping seasons and the resulting demand from The Gambia (but also from Senegal), as well as the FCFA exchange rates are the principal causes of the price increases since 2003. This situation requires particular attention to be given to the development of cereal markets.

III. SOCIAL, CULTURAL AND SANITARY FACTORS AFFECTING UTILIZATION OF FOOD

1.1. Nutritional status of population

The Nutrition Surveillance Programme of the National Nutrition Agency (NaNA) from 1985 to 2005 conducts twice yearly surveys to monitor the nutrition status among children under the age of five. The data covers **weight for height** (wasting/thinness). Data for the last ten years is presented in **table n°10** collected from about 104 Primary Health Care (PHC) Villages. It covers about 50,000 children under five (data does not include urban and non-PHC). It shows seasonal variations in the occurrence of wasting among the children surveyed, at national level. In general, peak levels of malnutrition are recorded in the months of September, October and November (the rainy season) and the lowest levels in March and April (the dry season).The results also indicate a declining trend. Thus from 2000-2005 stunting declined from 19% to 17.8% and the underweight from 21% to 17% during the same period. This trend is to be related to the significant improvements in access to services.

The highest prevalence of malnutrition was reported for the Lower River, Central and Upper River regions. Children under 5 are particularly vulnerable to malnutrition due to a number of factors including poor feeding practices, inadequate health care and contamination with bacterial agents due to poor sanitation and hygienic practices.

Table n°10: Seasonal Nutrition Indicators 1995-2005

Year	80-90% WT/HT Yellow	< 80% HT/WT Red	Total
1995D	11	1	12
1995W	13	2	15
1996D	10	1	11
1996W	13	2	15
1997D	10.1	1.6	11.7
1997W	11	2	13
1998D	10.1	1.4	11,5
1998W	12.2	3.7	15.9
1999D	10.4	2.1	12.5
1999W	12.5	3.5	16
2000D	10.0	1.7	11.7
2000W	11.1	1.3	12.4
2001D	10.2	1.9	12.1
2001W	13	2	15.0
2002D	10.6	1.4	12
2002W	11.3	1.7	13
2003D	8.9	1.2	10.1
2003W	11.9	1.7	13.6
2004D	8.0	1.0	9.0
2004W	9.8	1.3	11.1
2005D	7.5	1.2	8.7
2005W	9.5	1.8	11.3

Source: NANA, 2005

Micronutrient deficiency is another manifestation of malnutrition and causes growth retardation, impaired intellectual development, reduced work performance, morbidity and mortality. Studies by the National Nutrition Agency in 1999 highlight that iron deficiency anaemia, Vitamin A deficiency and iodine deficiency disorder (IDD) merit public health attention. The data presented in **table n°11** indicates nationally that 73% and 15% of the children suffer from moderate and severe iron deficiency respectively; 64% of children suffer from sub-clinical Vitamin A Deficiency and 9% from severe deficiency; the Total Goitre Rate (TGR) was 16%. Regionally, it indicates that the URR, CRR and LRR are the most affected for all 3 deficiency disorders.

The same 1999 survey showed that anaemia due to iron deficiency is also common among pregnant and lactating mothers with 73% and 56% moderately anaemic while 5% and 2% were severely anaemic.

Table n°11: Micronutrient Status by Region of Children Under 5

Region	Anaemia		Vitamin A Deficiency		Iodine Deficiency Disorder	
	Moderate (%)	Severe (%)	Moderate (%)	Severe (%)	Goitre Rate (%)	Urinary Iodine Level
Banjul	65	6	60	0	0.6	7.37
KMC	60	3	54	7		
Western	81	9	47	0	0.6	3.59
North Bank	65	12	71	5	2.3	4.75
Lower River	92	17	68	18	12.4	2.76
Central River	81	20	77	10	17.4	6.88
Upper River	93	35	69	18	19.3	3.18
National	**73**	**15**	**64**	**9**	**16.3**	**4.18**

Source: National Nutrition Agency (NaNA), 1999

1.2. Food habits and consumption

National food consumption

No comprehensive national food consumption survey is available for The Gambia although a consumer survey was conducted in Banjul in 1969. Nationwide average calorie and grain (by weight) consumption are derivable from overall crude food balance sheets based on only the major cereal and groundnut crops.

Recent small household income and consumption surveys (under the Cornel University Food and Nutrition Policy Program CFNPP) undertaken in two urban areas and three rural villages in 1989/90 estimated rural and urban calorie intakes. **Table n°12** summarizes the comparative urban/rural calorie intake estimates of the CFNPP study. The CFNPP study estimated daily household calorie per adult equivalent to be 2,826.6 for urban and 2,497.6 for rural which are all in excess of 2,230 calories per capita daily norm.

This study estimated the share of rice in the daily calorie intake to be 44.1% for urban areas and 37.4% for rural areas. Thus, confirming the role of rice in The Gambia as the staple food.

Table n°12: Daily Household Calorie Consumption per Adult Equivalent

Food Equivalent Category	Urban Sample		Rural Sample	
	Calories	% share	Calories	% share
Dairy products	74.5	2.4	58.4	2.3
Fish	188.4	6.6	144.3	5.9
Fruit/vegetables/ roots	147.3	5.0	83.8	3.5
Grain products	210.2	7.1	64.8	2.6
Groundnut	90.0	3.1	207.8	8.7
Groundnut oil	289.3	10.3	124.6	5.3
Meat	33.4	1.1	32.5	1.3
Palm oil	168.0	5.8	61.5	2.5
Rice	1,205.2	44.1	943.9	37.4
Sugar	244.2	8.6	186.1	7.5
Other grains	155.1	5.1	577.1	22.5
Other	20.9	0.7	12.9	0.5
Total Calorie Consumption	2,826.6	100.0	2,497.6	100.0

Source: CFNPP Survey, 1989/90

Feeding practices

Exclusive breast feeding for 4 months has been practiced by 48.6% of mothers in 2005, as indicated in **table n°13.** Similarly 45.6% of mothers practice 6 months of exclusive breast feeding and 85% in Baby Friendly Community Initiative (BFCI) villages[7] which shows the positive impacts of this programme. The total period for breast feeding is 24 months with 48% of mothers initiating breast feeding within the first hour of birth and 90% within 24 hours of birth. Complementary feeds are introduced from 4 months of birth.

While the quantities in terms of intake are largely sufficient, the quality is poor with inadequacies in terms of nutrients and high bacterial contamination. In this regard, there are efforts in laboratory microbial analysis and the formulation of highly nutritious and concentrated complementary food using locally available and affordable ingredients to be subsequently promoted to mothers.

[7] The Baby Friendly Community Initiative (BFCI) involves the active participation of local communities and health authorities in concert to improve the health and nutritional status of children.

Table n°13: Indicators on breast feeding for Babies

Indicator	1989	2000	2005
Exclusive Breast Feeding (4 months)		36%	48.6%
Exclusive Breast Feeding (6 months) National BFCI			 45.6% 85%
Total Period of Breast Feeding	24	24	24
Age of introduction of complementary food for infants	4	4	4

Source: NaNA, 2005

1.3. Access to basic social services

Table n°14 presents data on selected health and other services indicators. It shows that literacy rates are very low in the Gambia. Overall (composite combining men and women) increased from 25% adult literacy in 1983 to 37% in 1993 to 48% in 2003 (58% men and 37 women). School enrolment and attendance also low in the past has increased with increased accessibility to schools for the rural population. Increasing literacy and improving the education system particularly for women has been reported to be critical in improving heath and nutrition particularly of children.

The health indicators show improvements in reduced mortality rates for both under 5 and infant mortality rates from 320 and 217 (per 1000 live births) in 1973 to 75 for both in 2003. Maternal mortality also improved from 1,050 (per 100,000 live births) to 730 in 2003. These have been possible due to increased access to health services in rural areas and improving existing facilities. In addition to main hospitals in Banjul and Bansang, 4 new hospitals in the public sector have been established (another 7 private clinics/hospitals exist). In the rural areas, some 14 health centres, 6 dispensaries and 95 base and outreach. Approximately 659 hospital beds are available, 97 of which are in rural health centres.

While only a negligible proportion of the rural population had access to safe water drinking water in 1973, 23% had access in 1983, 50% in 1993 and 80% in 2003. Access to sanitation by the population increased from 25% in 1993 to 53% in 2003.

Table n°14: Selected Indicators on Health and Access to Services

Indicator	1973	1983	1993	2003
Life expectancy at birth				
Overall	33	42	53	58
Male	32	40	52	58
Female	35	44	54	59
Fertility rate	6.1	6.4	6.1	5.1
Mortality rate under 5 (per 1,000)	320	260	137	75
Infant mortality rate (per 1,000)	217	167	137	75
Maternal mortality (per 100,000 live births)	-	-	1,050	730
Population access to safe drinking water (in %)		23	50	80
Access to improved sanitation (% overall)			25	53
Adult literacy rate in %				
Overall		25	37	48
Women		14.7	27	37

Sources: Various (Health PER, PRSP II), 2003

Conclusion: Slight declining trend in malnutrition related to improvements in access to services

Malnutrition, particularly among the under five, although on the decline is a common in The Gambia. During the period 2000-2005, stunting declined from 19% to 17.8% and the underweight from 21% to 17%. The highest prevalence of malnutrition was reported for the lower, central and upper river regions. Micronutrient deficiency with manifestations of iron deficiency anaemia, vitamin A deficiency and iodine deficiency are also prevalent in these three regions.

Children under 5 are particularly vulnerable due to a number of factors including poor feeding practices, poor quality of food in terms of nutrients, inadequate health care and poor sanitation and hygienic practices.

Some significant progress has been observed in access to services such as clean water, sanitation, health services and education. This has been reflected in the improvements in infant and maternal mortality rates, in life expectancy for both male and female and malnutrition rates. Changes in health indicators have been possible due to increased access to health services in rural areas and improving existing facilities. These encouraging results must be highlighted and taken into account by other governments in the region when defining policies to fight against malnutrition.

IV. POLICY AND INVESTMENT EFFORTS IN FOOD SECURITY

1.1. Food security policy and investment

1.1.1. Food Security Policy

Analysis of food security policy covered two periods: the Pre Economic Recovery Program (ERP) spanning 1975/76 to 1985/86 and the Post ERP covering the aftermath of 1985/86.

Pre-ERP Food Security Policy

During the pre-ERP no explicit or comprehensive food security specific policy was articulated, the major thrust of national food security policy was on food self-sufficiency. This was hinged on improving the nutritional standards of rural households, reducing food imports mainly cereals, increasing cash crop production and diversifying the production base. Some of the food security specific policy instruments employed in pursuit of this central policy strand of food self-sufficiency included institutionally organized market for tradition grains at controlled prices under the aegis of the defunct GPMB, an outright policy of promoting cereal banks, introduction of village milling machines in strategic locations in rural areas, construction of divisional warehouses, and introduction of subsistence credit.

The impact of this food policy orientation did not only prove hostile to the achievement of improved national food security but also contributed significantly to the overall economic malaise which precipitated the adoption of a comprehensive Economic Recovery Programme by mid-1985.

Post ERP Food Security Policy

This period was marked by the adoption of a comprehensive Economic Recovery Programme (ERP) by mid-1985, followed by a 10-year successor programme- the Programme for Sustained Development (PSD) in 1990. The implementation of the PSD was designed to consolidate the gains of the ERP. The overall national food policy orientation of this programme continued to emphasize food self-sufficiency with greater attention to efficiency concerns as follows:

i) to encourage the domestic production of crops for which the Gambia has high comparative advantage particularly coarse grains, groundnut and swamp rice;

ii) to expand the production of horticulture and livestock (diversification);

iii) to continue to pursue market determined producer prices in order to increase rural cash incomes; and,

iv) to ensure regular supply of agricultural inputs to ease supply bottlenecks and encourage increased private sector participation in input supply and distribution at competitive prices.

The translation of these overall agricultural policy objectives into positive food security effect has been constrained by the negative impacts of improper sequencing and ill-timing on the implementation of the macro-economic reforms especially privatization, credit and interest rates liberalization and, removal of subsidies.

Policy measures and strategies have generally effected some marginal improvements in coarse production resulting in some value-added and growth of the Agriculture and Natural Resources (ANR) sector's contribution to GDP. Nevertheless, they have failed to 1) guide resource allocation and develop sustainable production systems and 2) address the increasing income and productivity disparity between the agricultural sector and the rest of the economy, in particular the manufacturing sector. The overall sluggish growth of the economy and slow pace of structural changes during the post ERP period have paradoxically resulted in a beyond trend increase in the ANR's share with respect to the major macro sectoral parameters such as employment and value added but more importantly in deepening poverty and increased food insecurity.

In the area of nutrition, a number of intervention strategies have been implemented in The Gambia. These strategies include the Baby Friendly Community Initiative (BFCI) which involves the active participation of local communities and health authorities in concert to improve the health and nutritional status of children. The activities at the local level are coordinated by the Village BFCI Committees (entry point for primary health care, nutrition education, maternal health, HIV and vaccinations). Other nutrition programmes conducted by public health authorities include the promotion of Exclusive Breast Feeding, Vitamin A Supplementation Programme, The iron folic supplementation and the programme to promote the consumption of iodide salt at household level. These programmes have components covering sensitization and outreach program using various mass media to enhance understanding and adoption.

1.1.2. Investment efforts in food security

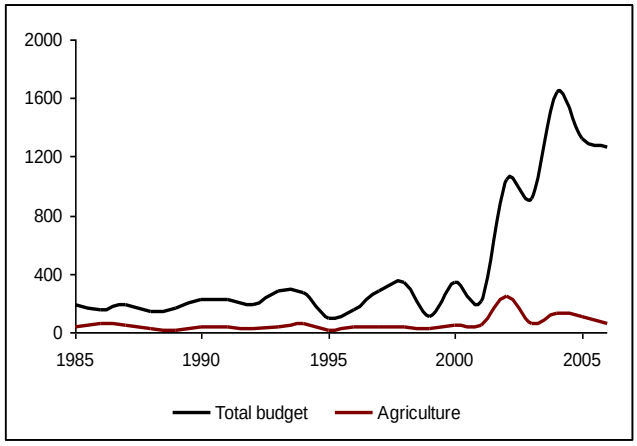
Albeit cautious, the government's immediate post-independence cereal policy was tacitly self-sufficiency (in rice). However, with persistent drought conditions during the early -70s, rapidly growing rural population, diminishing potentials of the traditional food production technologies, the government espoused an explicit policy of rice self-sufficiency through irrigated rice production by mid-1970. From the 1980's increasing attention has been paid to supporting tidal rice irrigation which is considered more sustainable. In fact, project interventions in the 1990's had the development of tidal structures as the most important component.

In order to evaluate investment efforts made in food security area, the analysis is focused on the expenses allocated to the development budget which covers all the projects and programmes implemented in The Gambia.[8] **Figure n°16** presents the evolution of the national development and ANR's budgets for the period 1985/86 to 2006. Total development budget increased by an annual rate of 32% from 1985/86 to 2006. Nevertheless, the share of agriculture and natural resources in absolute terms increased by a modest rate of 9%. The share of rice in agriculture and natural resources budget increased by an impressive 35% annually.

For the last five years, ANR's investments represented less than 10% of total development budget. They increased considerably in the mid 90's (almost a third of total budget) with the implementation of Government's mechanization programmes.

[8] 20% of the development budget is financed by The Gambia Local Fund (GLF).

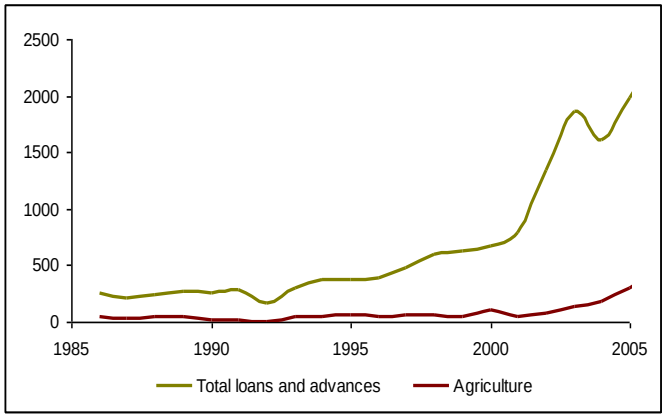
Figure n°16: Agriculture & Natural Resources expenditures and development budget (in millions of Dalasi)



Source: Development Estimates 1985/86 to 2006, DOSFEA

Regarding the private sector, the total share of agriculture in total commercial bank loans and advances grew by a declining rate of 1.2% from D48.29 million in 1986 to about D39.63 million in 2001 whereas the corresponding share of distributive trade increased at an annual rate of 31.0% from D61.84 million in 1986 to about D349.60 million (see **figure n°17**). Given that the bulk of commercial bank loans and advances to agriculture were in the form of groundnut crop financing, little commercial investment went to finance crop production especially domestic rice production. Thus rice imports serve as a strong competitor with domestic food production for commercial bank investment resources. This has strong negative impact on overall rural livelihood and poverty reduction. On an annual basis some 40 million US dollars are spent just on rice imports alone.

Figure n°17: Commercial bank loans and advances to sectors (in D million)



Source: Central Bank of The Gambia, 2006

1.2. Food aid policy and cooperation

Food aid policy

There is not an **articulated** and **specific public sector policy** exists for **food aid**. A number of agencies including WFP, Islamic organizations, bilateral sources (Japan, Italy and USA) and NGOs have provided food aid assistance. The WFP is one of the key agencies involved in coordinating food aid assistance. Its interventions comprise the Food-for-Work and School Feeding Programme (see project aid category in **figure n°18a**) which have been used by communities and public sector agencies in agriculture for soil and water conservation works and by education for nutrition supplementation of infants.

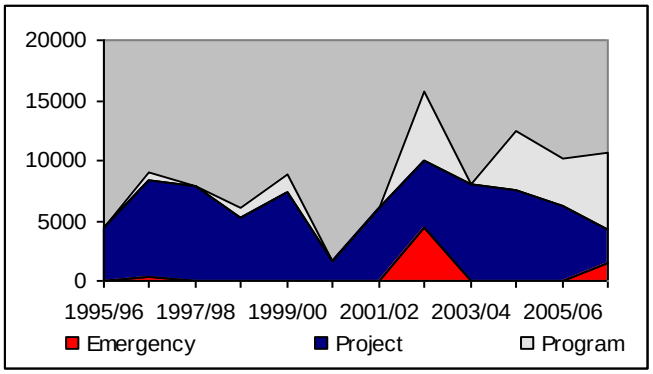
Monetization of food aid supported by the USA (PL 480) was common in the 1980's and utilized for balance of payment support. Main sources of this now include CRS, and bilateral sources (Italy and Japan). During the past five years, program food aid was about 5.000 Mt.

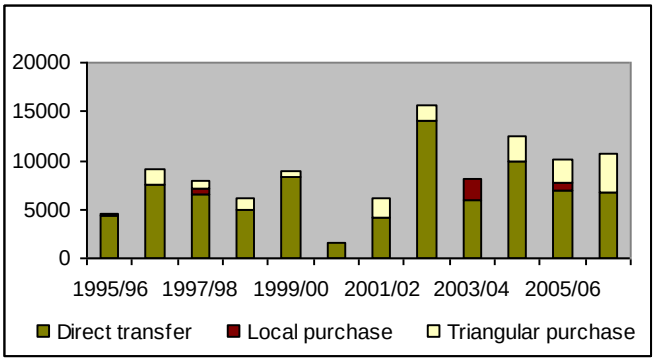
Emergency food aid was has been provided only twice in the last ten years: about 4,000 Mt in 2002/03 and 1,400 Mt last year.

During the period 1995-2006, direct transfers were the main supply mode of food aid. Triangular and local purchases were minor, as illustrated in **figure n°18b**.

In view of the quantities provided and the disposal mechanisms, food aid has not created much disincentive for production or market distortions. The issues of Genetically Modified Organisms (GMO) and buying local cereals for food aid have brought to the forefront the need for a clear-cut food aid policy.

Figures n°18a and 18b: Evolution of food aid by category and supply mode (in Mt)





Source: Interfais, 2007

Development cooperation in food security

A number of donor partners cooperate with government in the area of food security through a variety of interventions. Key donors comprise AfDB, IFAD, FAO, The European Union, IDB, KFAED, UNDP, IDA, WFP and bilateral cooperation with the Republic of China (Taiwan).

Although a multitude of donors and interventions, support has generally of a small-scale nature and of short duration. These have made sustainability of gains difficult and hence perpetuate the vicious cycle of poverty and food insecurity. Furthermore, coordination of interventions is uncommon culminating in duplication of efforts. The Government has recently established an Aid Coordination Office in the Department of State for Finance and Economic Affairs to resolve this.

1.3. National capacity in prevention and management of food crisis

While no specific or structured organization has been established for food crisis prevention and management, the following mechanisms exist:

- The Department of Trade, Industry and Employment (DOSTIE) continuously monitors the stock level of essential food items and encourages the private sector to stock up for commercial purposes;
- The Multidisciplinary Working Group (MWG) established in the early 1980's initiated by AGRYHYMET of CILSS and coordinated by the Department of Water Resources. Other members comprise the Department of Planning of Agriculture, The Agricultural Pest Management Unit (APMU), Department of Livestock Services, Department of Agricultural Services and the National Environment Agency (NEA). The MWG monitors the agricultural season from May to October through joint trekings and the publication of a decadal bulletin covering climatic, crop performance, and fodder and commodity prices.
- The Department of Planning, under the Department of State for Agriculture undertakes weekly cereal price collections at in both regular and weekly markets. This is currently disseminated in its annual publications (The National Agricultural Sample Survey). This provides a good means of monitoring price fluctuations in the market.
- The CILSS, FAO, WFP Annual Crop Assessment missions conducted in September-October of every year to review the crop and fodder situation. These are subsequently reviewed at the regional level to map out strategies for interventions.
- The Vulnerability Assessments and Mappings (VAM) conducted by the WFP (2002 and 2006) to identify and map vulnerable areas and populations. Identified areas and groups (or individuals) are then targeted for relief assistance.
- The Nutrition Surveillance Programme ongoing since 1985 and now under the NaNA covering the under 5 at the Primary Health Care Centres.

All the above provide information on the food situation which could thus contribute to an effective early warning mechanism. Most of the institutions mentioned above encounter budgetary constraints which culminate in inconsistency in data collection and render the data less timely or inaccurate.

Recently, a National Disaster Management Secretariat under the Office of the Vice President and supported by the UNDP has been established to enable rapid response to national and localized emergencies/disasters. At national level, the National Disaster Management Committee is chaired by the Vice president whilst the regional committees are chaired by Governors.

It could be observed a number of structures exist that monitor and report on the food situation in the Gambia; what is needed is to coordinate these efforts and ensure sharing timely information that could provide early warning for rapid response.

Conclusion: Comprehensive policies but limited investment

There has been a marked shift in policy from the period of the 1970's and early 1980's. It could be observed that food security strategies in both periods laid emphasis on diversifying the agricultural production base, increasing output of domestic food particularly cereals, creating employment opportunities and ensuring linkages with key sectors such as tourism. While the strategies have been comprehensive, they have not always been translated into the requisite investment for the sector by both public and private sector. Apart from some investment by the public sector in rice irrigation, little resources have been consistently injected in the food production sector: : less than 10% of total development budget is consecrated to agriculture & natural resources investments.

Furthermore, given that the bulk of commercial bank loans and advances to agriculture were in the form of groundnut crop financing, little investment went to finance crop production especially domestic rice production.

While no specific or structured organization has been established for food crisis prevention and management, a number of structures exist to monitor and report on the food security situation. These are however institutionally based. A better coordination is needed to ensure timely information and provide early warning for rapid response.

V. CIVIL SOCIETY ACTORS AND FOOD SECURITY

A number of NGOs and CBOs have been **active in the sphere of food security** by undertaking interventions at international, national and community level. These interventions cover the following areas:

- Food safety net programs (food aid to targeted beneficiaries)
- Establishment and operation of cereal banks
- Support to commodity improvements projects
- Seed security interventions
- Advocacy and food rights

It is estimated that about 80 local and international NGOs are active in the Gambia. Key NGOs involved in the area of food security include: Action Aid International The Gambia (AAITG), Catholic Relief Services (CRS), Concern Universal (CU), Methodist Mission Agriculture Programme (MMAP), Gambia Food and Nutrition Association (GAFNA), Freedom From Hunger Campaign (FFHC), National Women Farmers Association (NAWFA), Agency for Development of Women and Children (ADWAC). These and some 70 other smaller NGOs due to their proximity to the grass root have made gains promoting horticultural production and marketing among women, rural finance intermediation, group management, food safety net programmes for vulnerable groups, soil and land conservation, promoting skills, off-farm income generating activities and environmental management.

The registered NGOs have formed an association (TANGO) to better co-ordinate their activities and to liaise and coordinate with the Government programs. One special feature of the NGO-led programmes is that these are fully demand driven with a high level of community ownership. Recently 4 local NGOs (AFET, ADWAC, NAYAFS, NAWFA) and the Farmer's Platform have constituted a consortium on food security and address wide ranging issues including cereal banks, food rights (trade justice), land advocacy for women etc.

Lastly a number of civil society organizations have emerged with food security advocacy high on their agenda. These comprise the National Farmers Platform; the AAITG initiated Food Security Network; the NGO Food Security Consortium; and, Gambia National Consumer Protection Association and the Pro-PAG advocacy group. The later has conducted budgetary analysis showing that Government budgetary allocation to the agricultural sector needs to be increased and has also conducted sensitization

sessions with decision-makers (national assembly members).

The Government has in 2002 been organizing Participatory Budget Sessions which provides a forum for NGOs and an opportunity to lobby for increased budgetary allocation to food security interventions. With enhanced budgetary analysis capacity by the NGO community (PRO-PAG) and through a collective lobby effort, they have a good opportunity to influence government policy and decision-making. These two ingredients however have to be further strengthened.

Conclusion: Increased role of social society but still limited capacity to influence food security policies

NGOs and CBOs have been actively complimenting Government efforts through support to communities and vulnerable groups in the area of food security. Key intervention areas in this regard have been in food safety nets, establishment and management of cereal banks, production (cereals, horticulture and livestock), seed security and advocacy. While NGOs are closer to the grass-root, the efforts of many are of short durations, small-scale and thinly spread to make positive sustainable impact on the food security status of beneficiaries.

While NGOs in The Gambia collaborate with the public sector in efforts to improve food security, their capacity to influence government policy is rather limited particularly on individual basis. However as a collective body under TANGO and using PRO-PAG as an effective tool, there are increasing possibilities to influence government decisions food security policies.

CONCLUSION

The productive factors for agricultural productivity have experienced declines over the past decades making dependence on extensive traditional practices. In fact, increasing trends has largely attributed to area expansion with yields stagnant or even declining. This is the case particularly of cereals, requiring commercial imports and food aid to meet increasing consumption requirements fuelled by high population growth and urbanization.

Access to food for most households is limited due to poverty an increasing trend in prices of cereals, in particular imported food commodities. The fact that most farming households are net-purchasers of food makes the situation a cause of concern. Particular attention needs to be given to the development of cereal markets.

Malnutrition although on the decline is a common in The Gambia. It is principally attributed to poor quality complementary food, poor feeding practices, inadequate health care and contamination by bacterial agents. Access to services, especially to health services has improved. This has been reflected in the improvements in infant and maternal mortality rates and in life expectancy for both male and female. These encouraging results must be highlighted and taken into account by other governments in the region when defining policies to fight against malnutrition.

While the food security policies and strategies are comprehensive, they have not always been translated into investment in the sector. Although NGOs and CBOs have a limited capacity to influence government policy, there are increasing possibilities to influence government decisions, particularly those related to budgetary allocations to public sector interventions in food security.

METHODOLOGY

The study was conducted by a local expert in CILSS member countries, under the supervision of a coordination team proposed by the consortium Gret/Iram/ICI. This team was composed by experts with broad expertise in different fields related to food security.

The coordination was conducted by a committee composed by the following structures: CILSS, SWAC, Fews-Net, FAO, WFP, ROPPA, European Commission and French cooperation. The committee provided the guidelines of the study and approved the documents. A workshop was organized at the start of the study, with the participation of national experts and the coordination team, in order to discuss the methodology and define the indicators.

In each country, CILSS representatives organized an information meeting to present the work to key national stakeholders implicated in food security and to exchange and share their points of view and opinions.

Data and information were collected through interviews with key informants (authorities, information systems, NGO, producer organizations, donors and NU agencies…). Analysis was made by the local experts with the support of the coordination team. Main results were presented to key actors involved in food security for comments and approval.

The main findings of the studies are available on the website of the Food Crisis Prevention and Management Network in two different formats: a country profile report and a summary report.

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