

**act:onaid**



# Global Food Crisis and Response Strategies in The Gambia



July 2008

# Global Food Crisis and Response Strategies in The Gambia

ActionAid – NADA – NARI - VSO

July 2008

## **TABLE OF CONTENTS**

Acknowledgement.....	i
Acronyms.....	ii
Introduction.....	1-3
Contextual Analysis.....	3-10
Proposed Strategic Intervention.....	10-13
Partnership.....	14

## **Acknowledgement**

On behalf of ActionAid The Gambia (AATG) I would like to extend my gratitude and sincere appreciation to all those who have contributed to the preparation of this important document. I would specifically like to thank all the farmers and private individuals who provided us with their perspectives to the crisis and provided suggestions for the way forward.

I would particularly like to thank the Director of Voluntary Service Overseas (VSO), the Director General National Agricultural Development Agency (NADA) and the Director General National Agricultural Research Institute (NARI) for sparing time off their important tasks to share their expertise and experiences and for releasing their important technical staff to spend long working hours on this document for the last three months.

This acknowledgement will not be complete if I do not mention by name the following people: Fafanding Fatajo (Director DOP); Cherno Mballo (Director Agri Business), Kebba Daffeh (Director Livestock Services); Faye Manneh (Research Officer Pest Management Programme, NARI); Elina Cole (Programme Manager, VSO); Omar Badji (Head of Programmes AATG); Lamin Nyangado (Head of Policy AATG); Jainaba Nyang-Njie (Head of Communications and Documentation, AATG); Buba Khan (Food Rights Manager AATG); Modou Lamin Touray (Coordinator Communications and Documentation AATG); and Musa Jallow (Manager of IT AATG). These staff demonstrated both dedication and high level of professionalism throughout the exercise. I am particularly grateful to them.

Finally, I would like to extend our sincere gratitude and appreciation to the Offices of the President and Vice President for their support and guidance.



Dr Kujejatou Manneh-Jallow  
Country Director  
ActionAid The Gambia

## ACRONYMS

AATG	ActionAid The Gambia
CRRN	Central River Region North
CRRS	Central River Region South
DOP	Department of Planning
EU	European Union
FAO	Food and Agricultural Organization
GBOS	Gambia Bureau of Statistic
HDI	Human Development Index
HDR	Human Development Report
IMF	International Monetary Fund
LGA	Local Government Authority
LRR	Lower River Region
Mt	Metric Tonnes
NADA	National Agricultural Development Agency
NARI	Nation Agricultural Research Institute
NASS	National Agricultural Sample Survey
NBR	North Bank Region
NCD	New Castle Disease
US	United States
VSO	Voluntary Service Overseas
WARDA	West African Rice Development Agency
WB	World Bank
WR	Western Region

## 1. INTRODUCTION

The increase in global food prices reached critical proportions in the first quarter of 2008 with varying impacts on lives and livelihoods. According to FAO, 37 Countries are facing a crisis and requiring external assistance: 21 from Africa, 10 from Asia, 5 from Latin America and one from Europe (Crops Prospects and Food Situation No. 2, April 2008). Several factors have contributed to the current food crisis among which are:

**Increased demand** - Economic growth in China, India and elsewhere has led to change in life style and dietary patterns consequently resulting to increased demand for all cereals to feed both humans and livestock.

**Bio-fuels demand and expansion** - Decisions by the US and the EU to promote the use of bio-fuels by providing various tax exemptions and subsidy programs has also increased the overall demand for some crops, and reduced the amount of land available for food crops for human consumption.

**Oil and other input prices** - The doubling of oil prices from USD 60 in April 2007 to over 110 in early 2008 has led to high cost of production and transportation which are both important factors for determining food prices. High price of oil has been one of the incentives for the bio-fuels expansion.

**Climate change and crop failures** - The impact of climate change on agriculture is evident in recent years. Droughts and floods are recurrent in many areas.

**Lack of aid for rural development and investment in agriculture** - Many developing countries have reduced their investment in agriculture and rural development such as extension services, agricultural research and infrastructure investment mainly due to IMF and WB conditionalities.

**Commodity markets:** Although price rises are caused by real factors such as increased demand in China and other countries, and the expansion of bio-fuels, the effects are magnified by the operation of international commodity markets.

**Liberalization and de-regulation of agricultural trade and markets** - Policy changes in many countries over the last 20 years have increased the impact of international markets for both producers and consumers. Trade liberalization, the abolition of marketing boards, and the ending of subsidy programs have all made national markets more vulnerable to changes on international markets, and increased import dependency.

The Gambia being a net importer of food commodities is directly affected by the global food crisis. As a least developed, low income and a food deficit country that has one of the highest population densities (128 persons per square kilometer) in the sub-region Gambia is highly vulnerable. A recent consultation by AATG and partners across the country confirms the level of vulnerability among the population. According to the Household Poverty Survey Report of June 2006; 57.9 percent of the population lives in poverty with 39 percent in extreme poverty. In addition about 46 percent of rural households fall below the food poverty line, compared with 15 percent in urban areas and 4 percent in the Greater Banjul Area. Approximately, 91 percent of the extremely poor and 72 percent of the poor are dependent on agriculture for their survival.

The price of rice (the staple food) increased by about 42 percent between April and July 2008, thereby limiting intake of both quantity and quality food. Poor families are particularly affected as they no longer are able to provide enough food for their families. According to FAO (2008) the current food price increase is expected to be with us for at least the next ten years. This can be attributed to the complex nature of the causes. In view of the fore-going, it is therefore imperative to re-prioritize and redirect our intervention strategies towards the attainment of food self sufficiency.

In light of the above AATG and its partners; NADA, VSO, and NARI constituted a taskforce to review the food crisis situation in The Gambia specifically looking at the following:

- ✚ Consumption requirements for key food crops – rice, maize, millet, sorghum and groundnuts

- ✚ Current production levels and potentials for the different crops and livestock husbandry
- ✚ The import level for the different crops
- ✚ Land available for production and the area under cultivation for different ecologies
- ✚ Determine the food gaps and propose national response strategy for the short, medium and long term

## 2. CONTEXTUAL ANALYSIS

### 2.1 Poverty and Food Price Increase in The Gambia

The current global food crisis has significant negative impact on the Gambia especially among the poor. The manifestations are glaring and apparent as the cost of a bag of rice has increased from D600 in April to D850 (42% increase) in July with some forecast of it reaching D1250 by October 2008 (108% increase). This has serious implications on families. The official minimum daily wage is D27.50 (monthly average income of D605.00) which is often more than what the typical low income earner earns. This is less than the cost of one bag of rice (D870). Table 1 below shows the monthly increases from March to August 2008. It is important to note that most families in The Gambia consume more than 2 bags of rice in a month.

**Table 1: Average Monthly Retail Prices of Rice (in Dalasi Per Kilogram) (March to August 2008)**

Month	Price in dalasi/50kg of rice
March	580
April	600
May	725
June	800
July	850
August	870

With the crop failures experienced in the last cropping season, the hungry season which usually manifests itself in August has set in since May this year. This is usually the time when most household stocks deplete and there is virtually no cash and the farmers revert to mortgaging their properties especially farm implements, at a time when they are most needed. The expected price increase of D1250 will be totally out of the reach of most Gambians.



## 2.2 Food Production Levels and Consumption Requirements

The Gambia is among the poorest countries in the world and ranked in terms of its Human Development Index (HDI) 155<sup>th</sup> out of 177 countries (HDR, 2007). The Gambia was already a food deficit country before the global grain problem. This is because of the country's high dependence on rainfed agriculture which is both unpredictable and erratic and the over-dependence on subsistence agriculture. The country has few industries due mainly to lack of investment and poor infrastructure thus the high need for imported food with the attendant impacts on health, foreign exchange depletion, and suppression of economic growth. Food imports for the country account for almost 50 percent of national food requirement (National Strategy for Food Security in The Gambia 2003).

The Gambia is among the most vulnerable countries to the current global food crisis. The annual consumption requirement of the country's staple food rice is 160, 000 Mt (clean rice) of which only 11,395 Mt (paddy) which is approximately 7,406.75Mt clean rice is locally produced (NASS, 2007). This necessarily means that as a country we are only able to produce 4.63 percent of our annual requirement. The Gambia has the highest per capita rice consumption (117.33kg) among Sahelian countries and the third highest in West Africa (WARDA 1993). Although we have very serious shortage in meeting our rice requirements, we are however meeting our requirements for other cereals (maize, millet & sorghum), as can be seen in table 2 below.

**Table 2 Annual Rice and Other Cereals Consumption Requirement by LGA**

LGA	Population	Annual Rice Requirement (Mt)	Annual Requirement of Other Cereals (Mt)
Banjul	35,061	4102.137	2033.54
Kanifing	322,735	37759.995	18718.63
Brikama	389,594	45582.498	22596.45
Mansakonko	72,167	8443.539	4185.69
Kerewan	172,835	20221.695	10024.43
Kantaur	78,491	9183.447	4552.48
Janjanbureh	107,212	12543.804	6218.3
Basse	182,586	21362.562	10590
<b>The Gambia</b>	<b>1,360,680</b>	<b>159,199.56</b>	<b>78,919.52</b>

Source: DOP and GBOS

Production data for 2006 and 2007 (Table 3) shows a general downward trend for all the crops for 2007 due mainly to the drought in 2007.

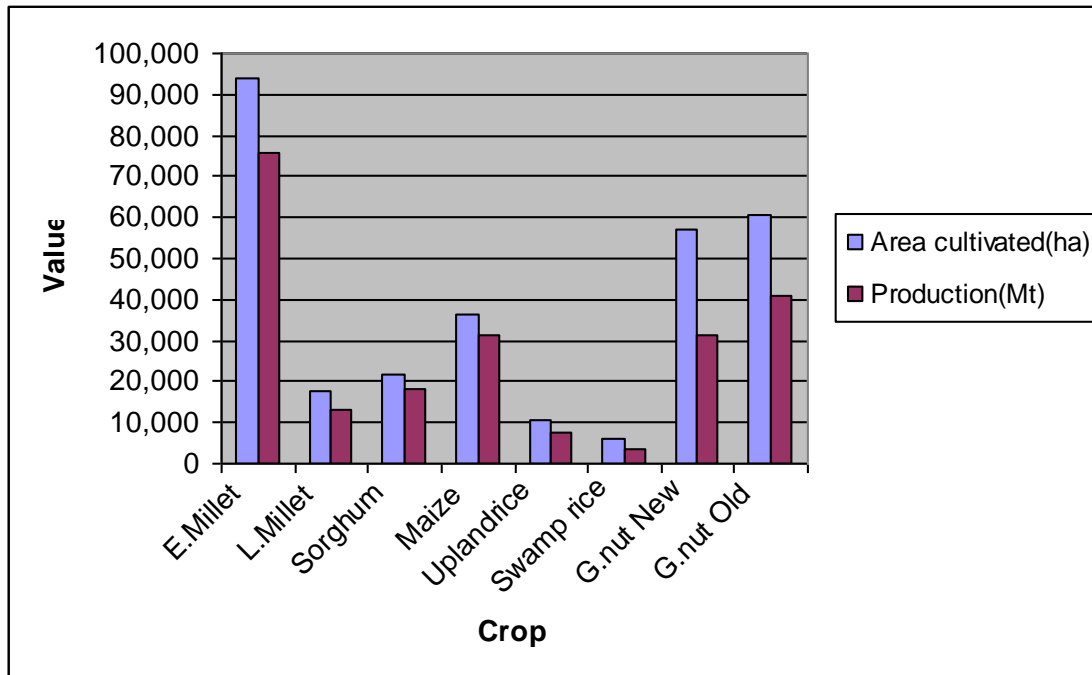
**Table 3 Summary of Crop Productions (2006- 2007)**

<b>Crops</b>	<b>2006</b>	<b>2007</b>	<b>% Change</b>
<b>Early Millet</b>			
Area Planted (Ha)	101,397	94,151	-7.1
Average Yield (Kg/Ha)	1,021	805	-21.2
<b>Total Production (MT)</b>	<b>103,539</b>	<b>75,825</b>	<b>-26.8</b>
<b>Late Millet</b>			
Area Planted (Ha)	14,821	17,567	18.5
Average Yield (Kg/Ha)	987	761	-22.9
<b>Total Production (MT)</b>	<b>14,621</b>	<b>13,361</b>	<b>-8.6</b>
<b>Sorghum</b>			
Area Planted (Ha)	18,960	21,720	14.6
Average Yield (Kg/Ha)	1,069	826	-22.7
Total Production (MT)	20,266	17,951	-11.4
<b>Maize</b>			
Area Planted (Ha)	32,261	36,156	12.1
Average Yield (Kg/Ha)	903	869	-3.8
<b>Total Production (MT)</b>	<b>29,147</b>	<b>31,408</b>	<b>7.8</b>
<b>Total Coarse Grains</b>			
Area Planted (Ha)	167,439	169,594	1.29
Total Production (MT)	167,573	138,545	-17.3
<b>Upland Rice</b>			
Area Planted (Ha)	10,192	10,722	5.2
Average Yield (Kg/Ha)	927	713	-23.1
Total Production (MT)	9,447	7,646	-19.1
<b>Swamp Rice</b>			
Area Planted (Ha)	5,007	5,866	17.2
Average Yield (Kg/Ha)	1,275	639	-49.9
Total Production (MT)	6,385	3,749	-41.3
<b>Total Paddy</b>			
Area Planted (Ha)	15,199	16,588	9.14
Total Production (MT)	15,832	11,395	-28.0
<b>Total Cereals</b>			
<b>Area Planted (Ha)</b>	<b>182,638</b>	<b>186,182</b>	<b>1.94</b>
<b>Total Production (MT)</b>	<b>183,405</b>	<b>149,940</b>	<b>-18.2</b>
<b>Groundnuts New Variety (73/33)</b>			
Area Planted (Ha)	55,267	57,145	3.4
Average Yield (Kg/Ha)	695	550	-20.9
Total Production (MT)	38,399	31,437	-18.1
<b>Groundnuts Old Variety (28/206)</b>			
Area Planted (Ha)	55,116	60,446	9.7
Average Yield (Kg/Ha)	787	680	-13.6
Total Production (MT)	43,376	41,120	-5.2
<b>Total Groundnuts</b>			
Area Planted (Ha)	110,383	117,591	6.53
<b>Total Production (MT)</b>	<b>81,775</b>	<b>72,557</b>	<b>-11.3</b>

Source: DOP

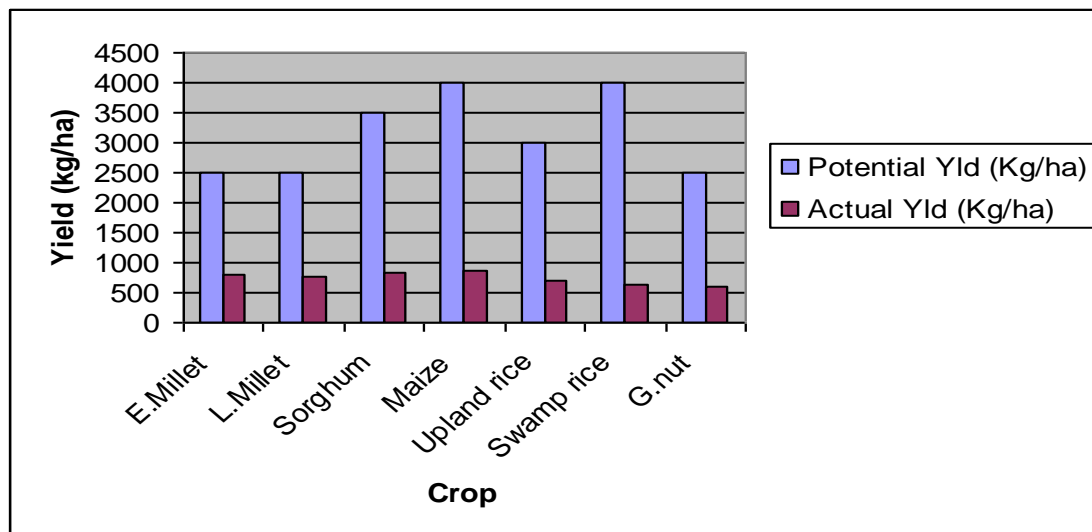
The production of rice for both years (2006 and 2007) is affected by the area put under cultivation as compared to other crops and the low productivity. Figure 1 below shows that in 2007 only 10,722ha and 5,866ha were put under cultivation for upland and swamp rice respectively as compared to early millet 94,151ha and maize 36,156ha. The productivity of both swamp and upland rice is less than 1Mt/ha as compared to the potential of 4Mt and 3Mt per hectare respectively. Low productivity is generally true for all other crops See figure 2 below.

**Figure 1: Area (ha) under cultivation and total production (Mt) for key food crops in 2007**



Source: NASS 2007

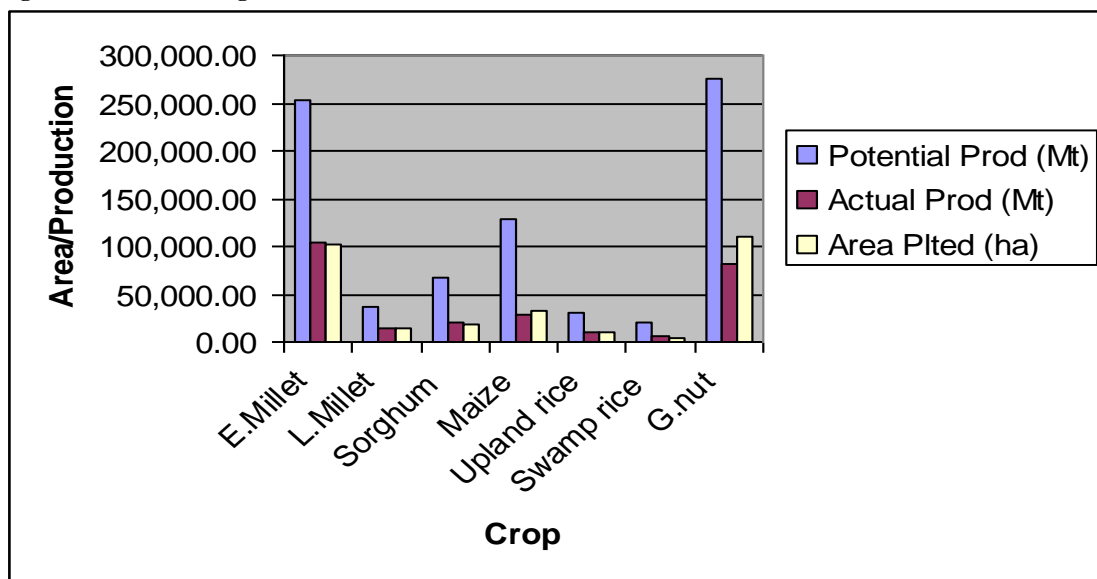
**Figure 2. Actual yield against potential yield per hectare**



Source DOP 2007

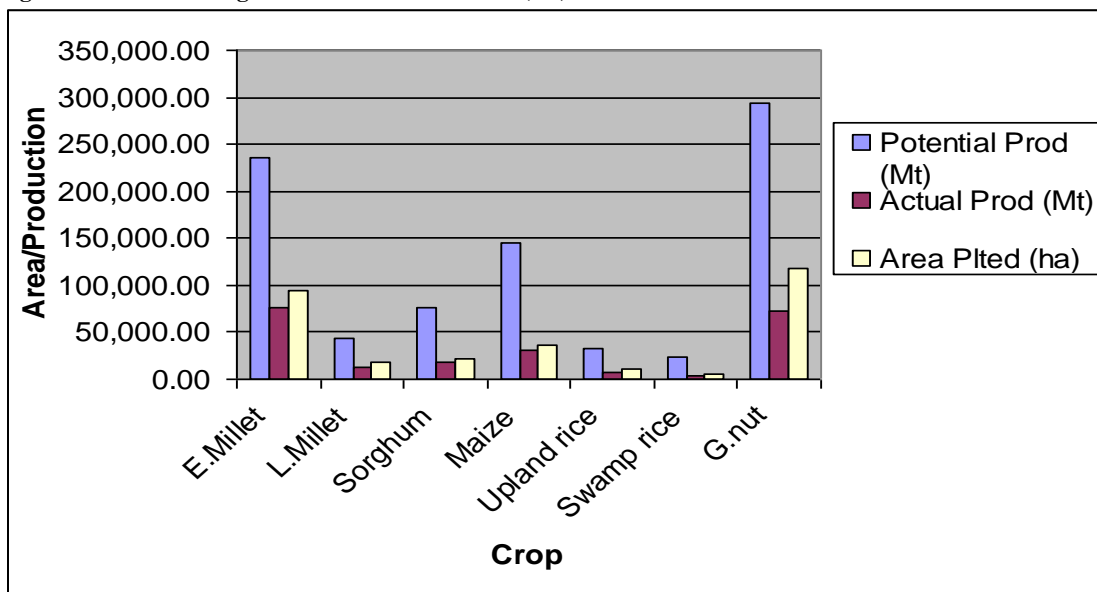
The total production of all key food crops (upland rice, swamp rice, early millet, late millet, maize, sorghum and groundnuts) are below their potentials by 76.2%, 84%, 67.8%, 69.6%, 76.4% 78.3% and 75.3% respectively (figure 3 below). The Gambia can achieve 50 percent of its requirements for rice by increasing productivity for the area under production for swamp and upland and if the current area is increased by two folds, the national requirements for rice would be met. This is in addition to the potentials in the irrigated perimeters (tidal & pump). There is also enough land under all ecologies to meet the above requirements (Figure 5) if distributional issues are adequately addressed.

Figure 3. 2006 Actual against Potential Production (Mt) and area cultivated.



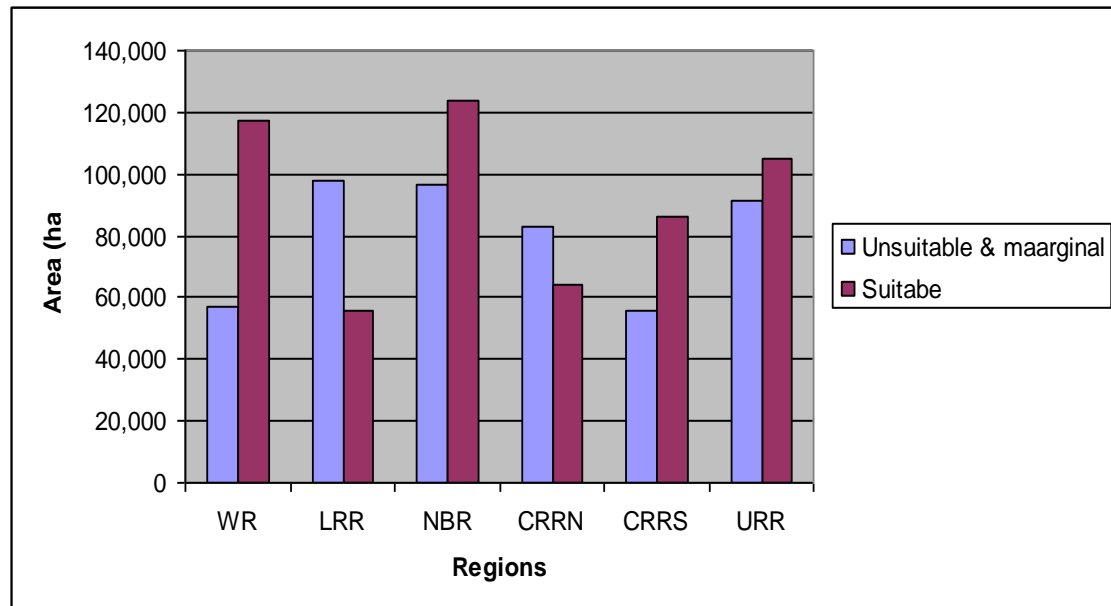
Source DOP

Figure 4. 2007 Actual against Potential Production (Mt) and area cultivated



Source DOP 2007

**Figure 5: Land suitability and Availability (ha) in the different regions**



Source: Land Resource Study 22

## **2.2 Factors Affecting Production and Productivity of Key Food Crops**

Several factors are responsible for the low production and productivity of the food crops mentioned above. It is worth mentioning that the special case of the low production and productivity of upland and swamp rice are highly attributable to the fact that 99 percent of the area under cultivation for both ecologies is by women who depend totally on rudimentary technologies. Another important factor is the frequent droughts causing high levels of salt intrusion in the swamps. Other factors affecting production and productivity for all crops include:

- inadequate access to and ownership of appropriate and cost effective farming technologies and farming inputs
- lack of capital due to lack of agricultural financing institutions
- inappropriate land tenure systems
- inadequate institutional support (Research and Extension)
- declining soil fertility
- high dependence on short rainy seasons (3 months on the average)
- erratic rainfall patterns aggravated by climate change
- pests and diseases
- inadequate markets and marketing facilities (poorly developed local markets)
- poor infrastructures (roads, storage facilities etc.)

- high post harvest losses
- unfair trade (access to international markets for developing country products is restricted by the application of non-tariff barriers to trade, western subsidies resulting in dumping of food products from developed countries, etc) and
- inadequate national policies

### **2.3 Groundnut Production, Processing and Marketing**

Groundnut is both a cash and food crop for the Gambia and as well an important source of livestock feed. However, its production has been constrained over the last decade by poor markets and marketing support. The 2007 production statistics shows that 117,591ha of groundnuts were cultivated with a total production of 72,318.5Mt. This is way below the potential output of 293, 977Mt (Table 2).

The oil from groundnut is among the best quality in the World, unfortunately the Gambia has not taken advantage of this and is importing the worst quality cooking oils despite the large quantities of groundnut that could not be adequately marketed.

### **2.4 Livestock: An important component of the Gambia food basket**

Livestock production is an important component of the farming systems in The Gambia and it is particularly an important part of the food basket. The predominant livestock production system in the Gambia is the traditional system, which is extensive, low input and subsistence in nature. Livestock managed under this system are more vulnerable to the negative effects of seasonal variations in rainfall as the natural vegetation constitutes the principal source of feed for them. As a result of the inadequate availability of feed and water, nutritional stress on cattle increased after the dry spell experienced in 2007/2008 rainy season which resulted in high incidences of diseases like Black quarter and Hemorrhagic septicemia in cattle and Pasteurellosis in small ruminants. Also indirectly influenced by the dry spell, are the high cost of groundnut hay and other livestock feed supplements and ingredients.

From 2006 to 2008, the cost of 50kg bag of poultry feed has increased by 31 percent, 50Kg bag of groundnut hay by 50 percent and a kilogram of beef by 25 percent. There is a growing gap between demand and supply of livestock products like beef,

mutton, dairy, eggs and poultry meat, thus making the affordability of these products increasingly difficult for the population particularly the poor.

The sectoral response to the food crisis calls for the enhancement of the productive capacity of small-scale to medium livestock producers through the promotion of appropriate technology and undertaking training in improved husbandry practices. This is to be complimented by improved farmer access to improve services, inputs and marketing.

### **3. PROPOSED STRATEGIC INTERVENTIONS**

As a result of the analysis of the food crisis situation in The Gambia the following strategies are proposed for achieving food sovereignty for the country including self-sufficiency in our staple food, rice. Key areas of intervention identified are:

#### **3.1 Increase production and productivity for all key crops for self sufficiency and commercialization**

The data above has revealed huge gap between actual and potential production and productivity for all key crops: rice, millet, maize, sorghum and groundnuts. The data also shows great potential for increased expansion in terms of land area.

The specific interventions essential for increased production and productivity in rice for self sufficiency and commercialization will require production levels above the 159,000 Mt national annual requirements. This as indicated above can be achieved through increase in the yield per hectare targeting the potential yield level of 4 and 3 Mt per hectare for upland and swamp respectively. It will also require expansion of the land area for upland and swamps from 16,588ha to 79,610ha by 2013. In addition to the upland and swamp, the intervention will also target intensive and extensive production using both pump and tidal irrigation systems. Production targets by ecology are presented in Tables 4 & 5 below.

**Table 4: Rice production targets for self sufficiency and commercialization (2009-2013) by Ecologies**

Period	UPLAND				SWAMP				TIDAL				PUMP IRRIGATION			
	Target Area (ha)	Target paddy (Mt)	Clean rice (65% paddy)	% Clean Rice	Target Area (ha)	Target paddy (Mt)	Clean rice (65% paddy)	% Clean Rice	Target Area (ha)	Target paddy (Mt)	Clean rice (65% paddy)	% Clean Rice	Target Area (ha)	Target paddy (Mt)	Clean rice (65% paddy)	% Clean Rice
Year 1	15000	60000	39000	27.97	6000	18000	11700	23	2400	14400	9360	60	500	2500	1625	12.5
Year 2	27000	108000	70200	50.3	11000	33000	21450	42.30	2800	16800	10920	70	1375	6875	4468.75	34.37
Year 3	37000	148000	96200	69.01	16000	48000	31200	61.53	3200	19200	12480	80	2250	11250	7312.5	56.25
Year 4	47000	188000	122200	87.67	26000	78000	50700	100	3600	21600	14040	90	3125	15625	10156.25	78.13
Year 5	53610	214440	139386	100	26000	78000	50700	100	4000	24000	15600	100	4000	20000	13000	100
Overall Targets	53610	214440	139386	100	26000	78000	50700	100	4000	24000	15600	100	4000	20000	13000	100



**Table 5: Total targets for all ecologies (upland, swamp, tidal and pumped Irrigation**

Period (2009-2013)	Total area (ha)	Total paddy	Total clean	% target (clean rice)
Year 1	23,900	94,900	61,685	28.21
Year 2	42,175	164,675	107,039	48.95
Year 3	58,450	226,450	147,193	67.31
Year 4	79,925	134,025	197,097	90.12
Year 5	87,610	336,440	218,686	100

In order to realize the above targets, the small scale farmers will need to be supported with improved technologies to reduce time and drudgery (particularly for women), improve irrigation systems to allow for year round production and provided with quality seasonal inputs (fertilizer, seeds, pesticides, etc). Other essential components required for the achievements of the above targets are quality research and extension support and effective farmer cooperatives. Capacity building, advocacy and campaign are also important for the attainment of the objectives.

Rice production support will cover post harvest handling and marketing. This will include storage, primary processing, grading, packaging and marketing for both local and export markets. Rice marketing cooperatives will be set up and supported with processing facilities and revolving fund for crop financing.

### **3.2 Production support for other cereals**

The intervention in other cereals will focus on improvement on yield. It will also include diversification, value addition and the promotion of increased consumption of these cereals. Maize production will particularly be promoted to provide livestock feed. Women's associations will be supported with processing equipment to add value and reduce drudgery and time.

### **3.3 Groundnut**

Intervention will be focused on yield improvement, processing and marketing. Formation and strengthening of Farmer Cooperatives will be important focus of the strategy. The intervention will also emphasize quality control both at production and post harvest level to prevent aflatoxin contamination. The target for groundnut production as a result of intensification (yield improvement) is 293, 978Mt (yield target of 2.5Mt per Ha) over the next five years (2009 – 2013).

### **3.4 Improve livestock production**

Livestock is an important component of our food basket. This strategy will focus on providing an integrated management of both crops and livestock in order to provide complementary support for each other. Specific interventions will include:

- ✚ Increase grazing areas for cattle
- ✚ Rehabilitate degraded rangeland in the each of 5 regions
- ✚ Sensitize, train and equip livestock owners for fire control
- ✚ Rehabilitation of boreholes, slipways in the regions to provide water for cattle
- ✚ Register, sensitize & train livestock association members on improved husbandry practices for beef production
- ✚ Train and purchase cross-bred animal for beef production during the strategic period
- ✚ Establish Ward breeding and fattening schemes nationwide for small ruminants
- ✚ Establish and operationalize Divisional and district apexes
- ✚ establish and operationalize Breeding and marketing information system
- ✚ establish and operationalize the national platform of small ruminant breeders
- ✚ Enhance the capacity of the Department of Veterinary Services
- ✚ Develop information, education and communication strategies on breeding and genetic improvement
- ✚ Enhance Livestock owners' knowledge, attitude and skills on breeding and record keeping
- ✚ Establish hatcheries and feed mills for poultry
- ✚ Provide vaccination programme against NCD
- ✚ Establishment of hatcheries and feed mills
- ✚ Update of legislations
- ✚ Formulation of a comprehensive policy
- ✚ Institutional capacity building

#### **4. Partnership**

Food security and sovereignty cannot be achieved by any single organization or institution. It requires combined and concerted efforts by all stakeholders. Therefore the importance of partnership in achieving the desired outputs of the proposed interventions and strategies cannot be overemphasized. Different organizations have different expertise and functions all of which are necessary for the achievement of food sovereignty in the country.



ActionAid – NADA – NARI - VSO  
July 2008