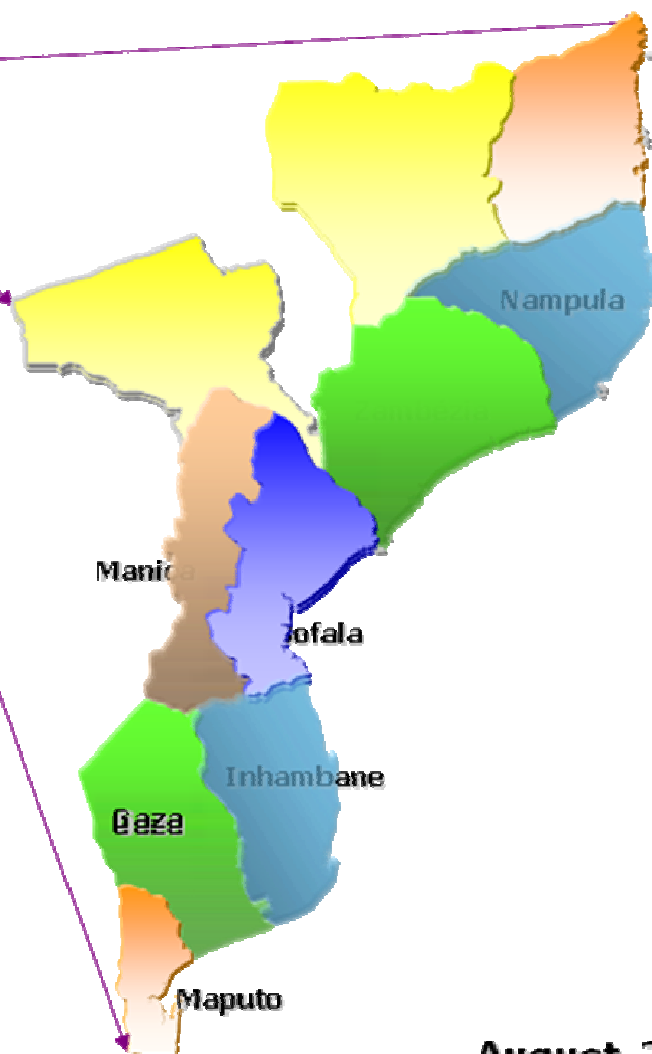




Republic of Mozambique

Technical Secretariat for Food Security and Nutrition

Report on Monitory of the Food Security and Nutrition Situation in Mozambique



SETSAN

August, 2009

Acknowledgements

Food and Nutritional Security is by its very nature a multidisciplinary, multisectoral and multiple theme. In the particular case at hand, the evaluation and analysis of vulnerability to food and nutritional insecurity (FNI), requires synergies and solid partnerships among the stakeholders, based on the comparative institutional advantages in favour of the common objective, which is: to identify who are vulnerable, why that is so, where they are, and to identify the future scenarios.

On this occasion, SETSAN, as a multisectoral coordinating board for the implementation of FNS policies and actions in Mozambique, would like to thank all member ministries and partner organizations which, through their contributions, made it possible to carry out the present evaluation of the vulnerability to acute FNI. The acknowledgements are extended to all technicians at national, provincial and district level, who played an exemplary role, in the collection, processing and analysis of the data for the elaboration of the present report.

A special word of thanks to the District Administrators, Heads of Administrative Posts and Localities and to the members of the Advisory Councils who, in their capacity as authorities, enhanced the spirit of decentralization and good governance, and managed to assist, guide and advise the various technicians during the data collection process, thereby contributing to ensuring that the exercise faithfully trends of current vulnerability status.

We also thank the donors and the various cooperation partners, among others the WFP, FAO, UNICEF, Save The Children, Usaid/FEWS NET, World Vision, and the various NGOs at provincial level, for their support in providing technical assistance and financial resources; something which ensured the full realization of this report in all phases of the process, including the arrival of a vulnerability specialist from the Regional Vulnerability Evaluation Committee (RVAC).

Finally, we thank all, including the interviewed communities, and we hoping that the results obtained here will be of public use to stakeholders in their planning, decision-making and the realization of priority interventions aimed at alleviating the vulnerability of the affected rural populations to FNI.

ACRONYMS

AFs	Family Households
ASAN	Evaluation of Food and Nutritional Security
AV	Vulnerability Analysis
CSB	Corn Soya Blend
CPT	Food for Work
DCAP	Crops and Early Warning Department
DNC	National Directorate of Commerce
DNSA	National Directorate of Agrarian Services
DPA	Provincial Directorate of Agriculture
FAO	Food and Agriculture Organization (UN)
FEWS NET	Famine Early Warning System Network
FIAs	Agricultural Input Fairs
GAV	Vulnerability Analysis Group
HIV/SIDA	HIV Virus/Human Immunodeficiency Syndrome
InSAN	Food and Nutritional Insecurity
IDPPE	Institute for the Development of Small-Scale Fishery
IDS	Demographic Health Inquiry
INE	National Institute of Statistics
INAS	National Institute of Social Affairs
INGC	National Institute for Disaster Management
MMAS	Ministry of Women and Social Affairs
MINAG	Ministry of Agriculture
MISAU	Ministry of Health
MIC	Ministry of Industry and Commerce
MOPH	Ministry of Public Works and Habitation
ONGs	Non Governmental Organizations
OMS	World Health Organization
PAs	Administrative Posts
PMA	World Food Programme
PDA.s.	Personal Data Assistance
SIMA	Agricultural Markets Information System
SPA	Provincial Agricultural Services
EP1	First Level Primary School
EP2	Second Level Primary School
EPC	Complete Primary School
RFE	Rain Fall Estimates
SAN (FNS)	Food and Nutritional Security
SC	Save the Children
SETSAN	Technical Secretariat for Food and Nutritional Security
SETSAN-P	Provincial SETSAN
TM	Metric Tons
UNICEF	United Nations Children's Fund
WV	World Vision
AFs (HH)	Family Households
ASAN	Evaluation of Food and Nutritional Security

GENERAL CONTENTS

EXECUTIVE SUMMARY	6
1. INTRODUCTION	8
2. OBJECTIVES	9
GENERAL:	9
SPECIFIC:	9
3. METHODOLOGY	9
3.1 DESIGN OF THE SAMPLE	9
3.2 ESTIMATE OF SAMPLE ERRORS	10
3.3 FIELD WORK	11
3.4 REVIEW OF SECONDARY DATA	11
3.5 ANALYTICAL METHODS	11
3.6 LIMITATIONS OF THE STUDY	12
4. MAIN FINDINGS	12
4.1. SOCIODEMOGRAPHICS OF THE FAMILY HOUSEHOLDS	12
4.1.1. COMPOSITION OF THE FAMILY HOUSEHOLD	13
4.1.2. HEADS OF FAMILY	13
4.1.3. TAXA DE DEPENDÊNCIA	14
4.2. PRODUCTION AND AVAILABILITY OF FOOD	15
4.3. ACCESS TO FOOD	18
4.4. USE AND UTILIZATION OF FOOD	23
4.5. STABILITY OF FOOD	34
4.6. SUITABILITY OF FOOD	38
5. ONGOING FSN INTERVENTIONS	39
5.1. FAVOURABLE ENVIRONMENT	39
5.2. INVESTMENT TRENDS PER FSN PILLAR	39
6. MAPPING OF VULNERABILITY TO FNIS	41
6.1. NUMBER OF PEOPLE VULNERABLE TO FNIS	41
6.2. CATEGORIES OF LIVELIHOOD GROUPS	42
7. THE FSN SITUATION PER PROVINCE	42
7.1. CABO DELGADO	42
7.2. NIASSA	43
7.3. NAMPULA	44
7.4. ZAMBÉZIA	45
7.5. TETE	45
7.6. MANICA	46
7.7. SOFALA	47
7.8. INHAMBANE	47
7.9. GAZA	48
7.10. MAPUTO	49
8. SCENARIOS	50
9. CONCLUSIONS AND RECOMMENDATIONS	51
9.1. CONCLUSIONS	51
9.2. RECOMMENDATIONS	53
10. ANNEXES	55
10.1. ANNEX 1	55

List of Diagrams

Diagram 1: Size of the family fousehold per province.....	12
Diagram2: Heads of family.....	14
Diagram3: Localization of the fields of HH.....	16
Diagram4: Food consumption of the HH.....	18
Diagram 5: Sales of products from this agricultural campaign.....	19
Diagram 6a): Consumer price of maize.....	20
Diagram 6b): Consumer price of imported rice.....	20
Diagram 7: Costs of basic basket for a family of 5.....	22
Diagram 8: AFs wo received remittances in the last 12 months.....	22
Diagram 9: Changes in remittances in the last 6 months, per province.....	23
Diagram 10: Time spent to fetch water during the dry season, per province.....	24
Diagram 11: Consumption of water from inappropriate sources, per area and per province.....	25
Diagram 12: Precarious quality of sanitation, per province.....	26
Diagram 13: Percentage of disabled and chronically ill, per age group.....	27
Diagram 14: Prevalence of fever in the last 2 weeks prior to the inquiry (chidren <5 anos).....	27
Diagram 15: Estimate of the number of orphans, per province.....	28
Diagram 16: Age group of AF members who passed away.....	29
Diagram 17: AFs where an ecopnomically active member died.....	29
Diagram 18: Categories of food consumption, per province – Rural Area.....	30
Diagram 19: Percentage of mills.....	31
Diagram 20: Duration of cereals and beans reserves.....	32
Diagram 21: Types of expenses of the HH.....	34
Diagram 22: Poverty of assets, per area.....	35
Diagram 23: Riches of assets in the rural areas, per province.....	35
Diagram 24: Setbacks and indications of survival strategies, per province – Rural Area.....	37
Diagram 25: % of HH with acute FNiS and livelihood groups 1 and 9, per province.....	40

List of Tables

Table 1: Number of people in acute FNiS.....	39
---	----

Monitoring Report on the Food and Nutritional Security Situation

EXECUTIVE SUMMARY

The report covers the analyzed period from June 2008 to August 2009.

The present evaluation concerned to the households and has as the major aim to assess levels of vulnerability to food and nutritional insecurity (FNI), estimate the number of vulnerable people to FNI, their location and the duration of needed assistance, and at defining the indicators of the acute FNI to be monitored.

The evaluation consisted in the gathering of primary, quantitative and qualitative information, based on a survey of 4,113 Households (AFs), 447 communities in 121 districts. The data were collected by 144 technicians, constituting 36 teams from all levels of the ministries, NGOs and partner institutions and SETSAN members, who to that end conducted the field work.

The sample was randomly set up and in accordance with statistical requirements defined and validated by the INE. The sample is valid at provincial level. Additional sample were set up for the critical districts identified by the SETSAN in the March 2009 monitoring, as well as for the productive districts with potential for local procurement identified by SETSAN during vulnerability assessment last March. For these cases the sample is validated and statistically representative at district level.

The analyses were guided by the ESAN II pillars: Availability, Access, Use and Utilization, Stability and Suitability to food. The data were processed with the help of statistical packages; the FSN indicators were crossed for the analysis; and the primary data were compared with the secondary information and with the FSN Baseline Study from 2006, which is being used as a reference. The qualitative evaluation of the FSN trend was conducted at provincial level and the resulting information is summarized in the present report.

Overall, as a conclusion it should be stated that: As general trend, FSN has improved and AFs, in general, showed good levels of food consumption (diet diversity) in all provinces in the country.

Even though there has been improvement on food availability and food consumption, AFs in Mozambique (64-84%), is still facing problems related to the marketing of food products, in particular in the districts producing maize and cassava. Problems of poor use and utilization of food persist, sanitation remains precarious in addition to inefficient nutritional education. Poor quality of diet was also reported in the provinces of Cabo Delgado (20%), Gaza (20%), Tete (11%),

Manica (10%) and Niassa (11%), in addition to parts of Nampula and the Centre (Zambézia).

The present evaluation indicates that about **281, 300** are in acute condition of FNiS, in 32 districts in 8 of the country's provinces, excluding Niassa and Cabo Delgado. These people will be needed immediate humanitarian assistance until March 2010. Livelihood groups 1 and 9, characterized by a high effective dependency rate, are vulnerable to FNiS due to their type of activities: low food production, food aid, poor income sources, such as *ganho-ganho*, and practicing of subsistence agriculture. The most vulnerable people to FNiS are mainly in the provinces of Tete, Inhambane, Sofala and Gaza.

The evaluation also indicates that prices of basic food stuff have fallen as a result of large supply and markets at central and northern regions of the country are showing high surplus of with maize and cassava. Actions to promote marketing, conservation and local purchase are crucial to introduce add value for the food chain.. The present evaluation noted that the markets function well; the results show that in the villages about 70% of the markets are operational..

In terms of food processing, it can be noted that the northern and central regions use mills to process maize, whereas in the southern region milling are almost inexistent. The installation of mills in the south could set women free to engage in other economic activities at household level.

Taking into account the rainfall conditions, the price variations ($\leq 50\%$ increases), and the duration of food stocks (≤ 1 month), the people identified in this evaluation in the extreme acute FNiS condition, need immediate humanitarian assistance until March 2010, and this is the scenario most probably to take place in the next 6 months in Mozambique.

The ongoing FSN interventions in the country are having positive impact in the reduction of the family households' vulnerability, to the effect that historic data on acute FNiS indicate that in the period 2004 – 2009 the incidence of "hunger" pockets in the country decreased, with the exception of the year 2005, which showed the largest number of people in acute FNiS, basically due to the occurrence of a severe drought.

Taking into account the scenarios described above, it is recommended the implementation of a range of interventions to enhance household's capacity to face setbacks; in addition it is recommended the to monitoring of the FSN situation in December 2009, through the following monitoring indicators: Prices of basic foodstuffs, Prices of animals, Level of humanitarian assistance (number of beneficiaries versus the number of needy people) and Precipitation.

1. Introduction

The 2008/09 rainy season in Mozambique was characterized by a late start of the rains in the southern region (November), with the exception of Inhambane where they started normally in October. In the central and northern regions the rains began in November and were below normal level and irregular up to December, and thereafter became normal till February, which had high positive effects to the good performance of food production. During this period, localized floods were reported in the Zambezi, Buzi and Pungué valleys.

Prior to the harvest, the country witnessed high prices (in some cases increases of more than 50%) of basic food products during the commercial year May 2008 to March 2009, in the districts of Mutarara, Quelimane and Ribaué, where prices showed increases of more than 150%, Massinga, Gorongosa, Chimoio, Alto Molócuè, Lichinga and Cuamba, where increases were between 100% and 150% above the prices compared to March 2008. In the markets of Maputo, Xai-Xai, Chókwè and Pemba price increases were not more than 50%.

Outbreak of cholera, which was at higher level compared to the previous year, affected 46 of the country's districts. Apart from this, the nutritional situation continued to be at an alarming level, despite the specific then ongoing programmes. For instance, the Low Birth Weight (BPN) rates were high (above 7%), with the exception of the Province of Maputo. Because of its disastrous and irreversible effects on children, it was recommended to carefully monitor this indicator.

In order to monitor the acute food and nutritional insecurity situation, the Technical Secretariat for Food and Nutritional Security (SETSAN), through its Vulnerability Analysis Group (GAV), carried out monitoring in October 2008 and March 2009, and identified a total of 23 critical districts.

In June 2009, the SETSAN made a projection concerning the FSN situation, and determined that an universe of 240,000 to 350,000 people were at risk of acute food and nutritional insecurity and needed humanitarian assistance, in particular food aid and support with inputs and access to water, up to the next harvest (April/May 2010).

In response to this decision, WFP calculated an estimated need of 19.300 Metric Tons (TM) of food to meet food requirement for the of the group mentioned above, including an additional 72.000 people who eventually could be exposed to food insecurity conditions after October. Further evaluation of households' vulnerability to acute FNiS was recommended to be carried out in June/July of 2009.

Historic data on FNS in the country show a positive trend given to the fact that the levels of FNiS tended to decline in the last five years (2004-2009). This has been due to Government and partners' efforts in the efforts of the implementation of humanitarian assistance and development interventions, which led to the reduction of the populations' vulnerability, and for an improvement of the livelihoods of households.

In the last five years (2004-2009), the population in a situation of FNiS has decreased. Historic data on numbers show about 202.000 people in 2004, about 801, 654 in 2005, around 240,000 in 2006, about 520,000 in 2007, about 450,000 in 2008 and about 281,300 in 2009. The vulnerability peak in 2005 was basically due to the occurrence of a severe drought with incidence in arid and semi-arid areas in the country.

The results summarized in the present report analyze the FNS situation in the country for period of May 2008 through August 2009 and incorporate the evaluations carried out in October 2008 and March 2009.

2. Objectives

The objectives of the FNS evaluation were:

General:

Assess the FNS conditions and the causes of vulnerability.

Specific:

1. Examine the food and nutritional security situation in the country, and the main causes of FNiS;
2. Examine the actual FNS situation in the country, and the root causes of FNiS;
3. Evaluate the impact of food and non-food interventions and devise recommendations on options to respond;
4. Estimate potential number of vulnerable people to FNiS, their localization and the duration of required assistance; and
5. Define future scenarios.

3. Methodology

The methodology used in the present evaluation included the development a set of instruments for data collection for quantitative data collection and to assess current situation through institutions in the districts and at community levels. Questionnaires for focus interviews and well as for market issues were also development being the former aimed to enhance information aboutvulnerable groups and their livelihoods.

To ensure the homogeneity of the process, SETSAN organized and realized:

- 9 Modules used as reference material for the capacity building of the team members;
- Trained 33 team members at central level who in turn trained 77 provincial team members;
- Quantitative interviews to AFs; and
- Qualitative Communities and Focus Group interviews..

Provided assistance from a specialist from the Regional Vulnerability Alynalysis Committee (RVAC) as well as from a national consultant, who followed all phase of the process were a value add in the design of instruments, technical capacity building, analyses and edition of final report.

3.1 Sample design

The samples were conceived in order to provide estimates about a set of food and nutritional security indicators for HH, as well as to determine the number of vulnerable people at national level in urban and rural areas and in all provinces of the country, with the exception of the provincial capitals and all Large Towns. The regions (each one of the 10 provinces) were defined as the main sample domains, and samples were selected in two phases:

- In each province, 40 census enumeration areas were selected, with probability proportional probabilistic size.. Using the same procedure, 60 areas were selected for Nampula and Zambézia, to reflect the weight of their populations relative to the country's total; and
- Subsequently a list was made of the AFs in the selected enumeration areas, and a systematic sample of 12 AFs for urban areas and of 9 AFs for rural areas was made.

The ASAN₁ from 2009 had coverage of 96.7% at the level of the enumeration areas allocated to the sample, because not all enumeration areas of conglomerations planned were visited during the field work period. In addition to this, out of 4.521 AFs planned for the 2009 ASAN sample, only 4.113 were successfully interviewed, corresponding to a response rate of 91.0%.

Given that the major source of sample error is the global sample of the enumeration areas covered, it was necessary to adjust for the final weights, especially for the provinces in the Southern region.. Thus, there was a final weight adjustment of 9.8% for Inhambane, 6.2% for Gaza and 3.5% for Maputo Province. In the other provinces adjustments remained below 1.7%, which is quite good.

The sample was stratified per urban and rural area of each province and is self-weighted, given to the fact that adjustments was made at the level of the weights, and the differences between the households used in the selection of the sample of households in each AE and those from the sample base (Census of 2007) are statistically zero. For the presentation of the results at national level, weights in the sample were used.

The 2009 ASAN is a stratified and multi-phase inquiry. The basis of the sounding of the 2009 ASAN consists of the preliminary list of the enumeration areas and of cartographic material from the III^d General Population and Habitation Census (III RGPH) for the rural and urban areas covered by the Inquiry.

3.2 Sample error estimate

Given that the 2009 FNSE was an inquiry based on samples, the results presented in this report are affected by two kinds of errors: sample and non-sample errors. Non-sample errors are committed during the data collection and processing phase, while sample errors result from the fact that only part of the population, and not the entire population, has been interviewed.

Five questions of major importance related to the SAN pillars were selected, with a view to test the validity of the inquiry. For each variable, the corresponding estimated value was included (Estimate on average or percentage-wise), the standard error and the number of cases (without weighing and the weights), for which the characteristic under consideration was investigated. In addition to the standard pattern, the design effect was also included (Design Effect), and the coo variance (CV) to 95% of reliability.

The examination of the frameworks shows that in general the standard errors are small and that the sample can be classified as accurate; this is particularly clear in the column of relative errors (variation coefficients). The design effects are reasonable for most estimated value.

¹ FNSE – Food and Nutritional Security Evaluation

3.3 Field Work

The evaluation's field work followed the previous schemes of vulnerability evaluations, but this time with the following characteristics:

- A national sample representative at provincial level;
- Two sub-samples concerning the critical districts (VA - February 2009) and one concerning to the districts with potential for local markets;
- Randomly selection of about 447 clusters in 21 district, and 4.113 AFs surveyed;
- AFs and Communities' Interviews (including institutions and focus groups).

AFs' interviews were meant to provide empirical data on the food and nutritional security situation of the rural and semi-urban populations in Mozambique. To that end, the questionnaire was structured to capture the various dimensions of SAN. .

The technicians at central and provincial level were subjected to an intensive 5-day training, in order to review the basic SAN and vulnerability concepts, and to familiarize themselves with the instruments, including the use of the PDAs.

A total of 36 teams, consisting of 144 technicians from various sectors, were involved in an interactive process that included a scheme of trainers of trainees, that is, a team trained at central level accepted the responsibility to replicate the training of the provincial teams and later to facilitate the performance of this group during the execution of the work.

3.4 Review of secondary data

Several reports, among which stand out: the MICS, which reports on the nutritional situation and the current state of health and sanitation; SIMA, which present various issues related to the market behaviour; the TIA, which is a national reference with respect to agricultural statistics; the DAP-DNSA, which reports on the situation and performance of the agricultural campaign; reports from various sectors, United Nations Agencies, NGOs and other institutions, in particular the IDPPE, SETSAN, INE, INGC, MCI, PMA, FAO, Save the Children, WV, etc., which one way or another have been reference sources during the preparation and analytical phases, in order to better understand the present situation.

3.5 Analytical Methods

The analytical methods used were not different from the ones applied previously in other GAV rounds, in particular those that refer to the baseline study which was conducted by means of four main analytical procedures:

- ii. Descriptive Analysis – frequencies and means;
- iii. Comparative Analyses – ANOVAS;
- iv. Model of Analyses – Regressions; and

Analyses of Strata – two-phase stratum

The data obtained were downloaded from the PDAs and converted in SPSS and STATA for analytical purposes. For a better understanding of the inter-relationship among data on the

AFs' food security, key variables were analyzed and compared between the AFs classified by taking into account characteristics of livelihood conditions (social unit) and by geographical area (provinces).

Thus, there are two main levels of analysis discussed in this report:

- Administrative level, mainly at province level and when applicable at the level of the critical districts; and
- Livelihood level .

The analysis at administrative level reflects the provincial findings, these being the lowest possible analysis unit, although the reference to critical districts is made when appropriate, in order to have a statistically valid representativeness.

The data on food and non-food expenditure, income diversity, possession of assets and livelihood strategies were analyzed with a view to better characterize the AFs' vulnerability profiles and forecasts – jointly with the prognosis of agricultural production and market information – the probable food and nutritional security situation during the up coming months.

INAM's forecast for rainfall and the INGC Contingency Plan were of prime importance for the creation of three scenarios between October 2009 and April 2010, disaggregating information down to administration post level. This innovation allowed for a more consistent perspective with respect to spatial scenarios and estimating the populations at risk.

3.6 Limitations of the study

- Difficulty in using the PDAs; and
- Large sample in view of the existing financial resources.

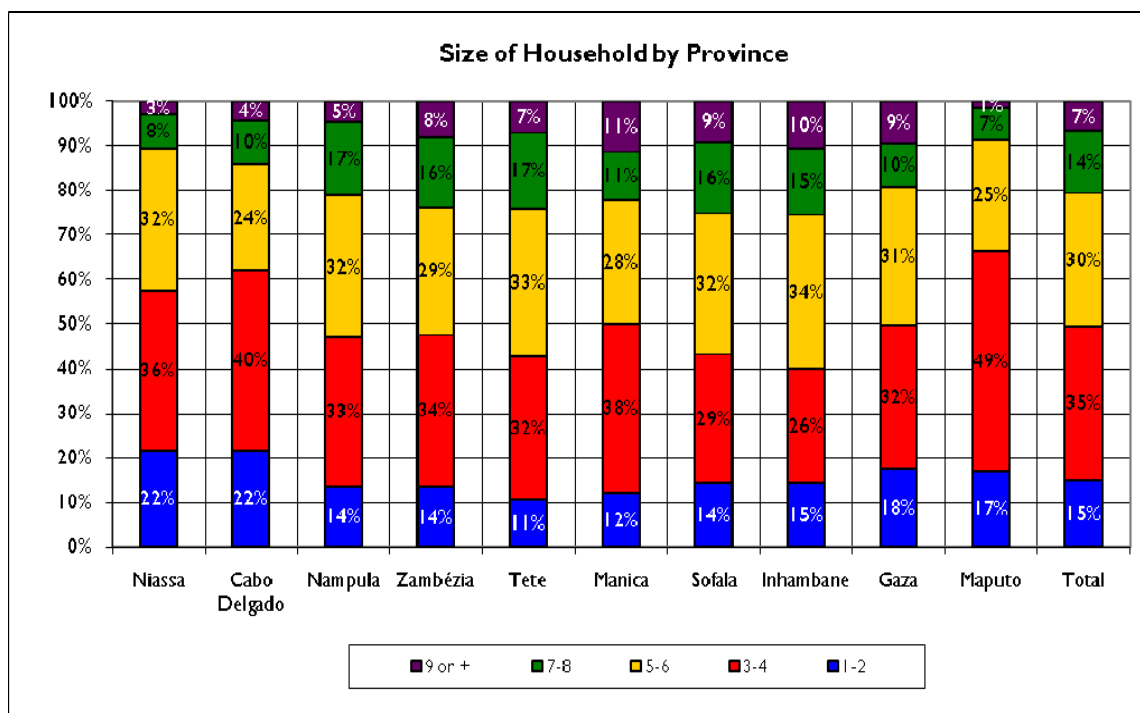
4. Main Findings

The field results are summarized while taking into account the pillars of the Strategy and Action Plan for Food and Nutritional Security (ESAN II), namely the production and availability of food, access, use and utilization, stability and suitability of food. Data were collected from the AFs, thus socio-demographics are also analyzed in order to evaluate present state of food and nutritional security at household level.

4.1. Household Sociodemographics households

Socio-demographic aspects were analyzed, taking into account the following: the composition of the AFs, the heads of the AFs and the effective dependency rate of each household.

Diagram 1: Size of the family household per province



4.1.1. Composition of the Family Household

The size of the AFs, depending on the age composition, is an important indicator of the work force as well as of the potential burden facing the families when it comes to food security.

On average, the size of the AFs was 4.8 people, with a median of 5, which corresponds to the values reported by the SAN baseline study from 2006 (4.3) and those from the 2003 IDS (4.5).

Diagram 1 illustrates that 35% of HH interviewed had 3 to 4 members, and 30% had 5 to 6 members. In addition one notes that 15% of the AFs had 1 to 2 members and 7% had 9 or more members. The variations per province show that 25% of the AFs in Zambézia, Sofala and Inhambane had 7 or more members and over 60% of the AFs in Cabo Delgado and Maputo had 4 members or less.

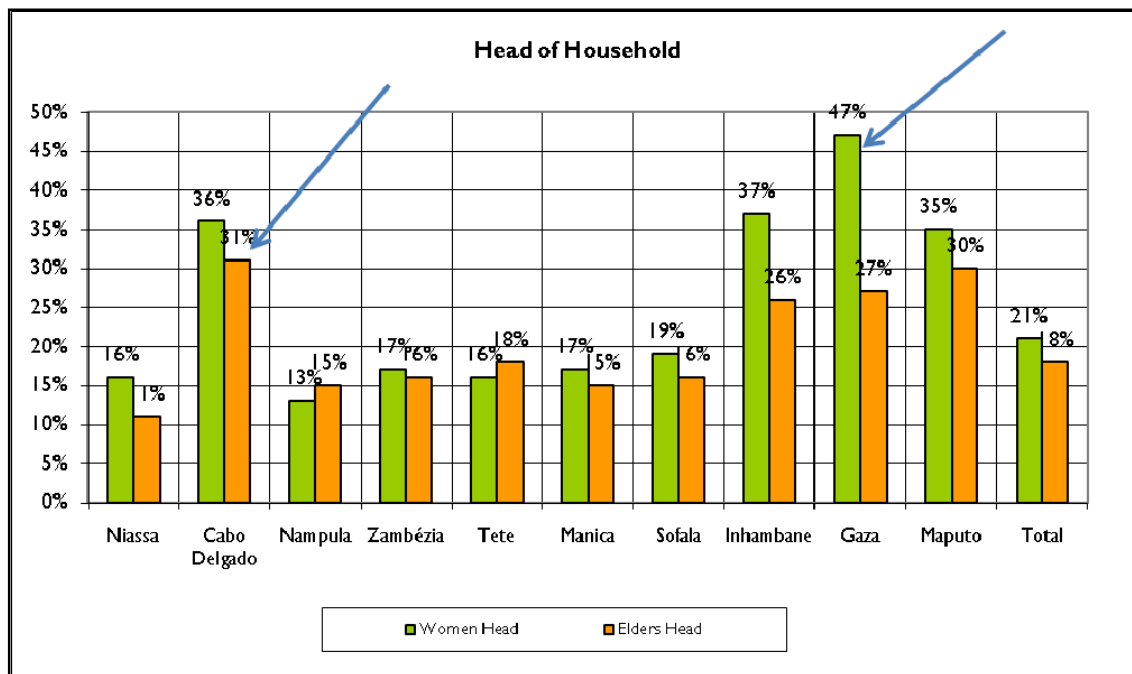
4.1.2. Heads of Family

In the sample a total of 18% of AFs are headed by people of 60 years of age or older, while 21% are headed by women, which is less that reported in the SAN baseline study (29%) and in the 2003 IDS (26%).

As illustrated in Diagram 2, the province of Gaza has the largest proportion of women heads of family, followed by the provinces of Inhambane and Cabo Delgado. The first two cases may be associated to migration and to the high HIV/AIDS prevalence rate.

Elderly heads of families are most observed in the province of Cabo Delgado and Maputo, while Niassa is the province with the lowest percentage in this category.

Diagram 2: Heads of Household



Contrary to the distribution of women heads of family, the elderly heads of family appear more in the rural areas, with the exception of Cabo Delgado, Nampula and Zambézia. This trend may be explained by the rural exodus of youth, looking for better living opportunities.

4.1.3. Dependency Rate

The effective dependency rate measures the relation between the active work force (productive) and those who are non-productive, and, by inference, the availability of labour in the household. The effective dependency rate varies between 57% in Sofala to 47% in Manica and Maputo. The data indicate that the dependency rate is within acceptable parameters, because it is the rates of over 80%² that pose problems.

High dependency rate (>80%) observed among the AFs occurred mostly in the province of Gaza (20%), followed by Inhambane (17%), Manica (15%), and Cabo Delgado (14%), headed by women, the elderly and children.

Disaggregating the data in the three dependency types, reveals the following:

- Between 35 to 65% of the AFs headed by women show a high dependency rate. The highest values are found in Gaza (47%), followed by Inhambane (37%), Cabo Delgado (36%) and Maputo (35%), the lowest rate was found in Nampula (13%);
- The proportion of AFs with an effective dependency rate is higher among the elderly, being over 70% in all cases. This means that these households probably have an adult at home, but at least two elderly people and in some cases they have children; and
- The results indicate that few AFs are headed by children.

²It is assumed that a rate of 80% is the limit of the balance between active and non-active force, in other words, then it is impossible for the adults to meet the requirements of the elderly, children and disabled.

The demographic pattern observed in the present evaluation shows that AFs with a high dependency rate have a limited work force at hand, something which does not allow them to produce sufficiently nor to enter into the job market, which conflicts with their major responsibilities and burdens with respect to the carrying of household members..

4.2. Production and availability of food

Considering the pillar of production and availability of food, the provincial reports show that, overall, production and availability of food improved between August 2008 and August 2009.

4.2.1. Production

The survey showed increases in production, basically due to an increase in the areas cultivated by the AFs. Compared to 2007/08 agricultural campaign, 33% stated that they increased the area in 2008/09, and from these 65% mentioned that they would increase more still the area for food production, 34% would maintain the area and only 2% intended to reduce it in the next crop season..

As far as concern to the production for 2008/09 agricultural season, the data indicate that 89,5% of the AFs reportedly had collected some crop at the time of the interview (August 2009). However, an analysis per province shows that there are differences, with the provinces of Manica, Niassa, Nampula, and Zambézia standing out with more than 90% of the families having harvested while in the province of Gaza this is a mere 58%.

Taking into account the crop calendar, which in the southern region ends much earlier, it can be stated that the case of Gaza is more worrying, because it means that 42% of the families practically did not harvest their food in the agricultural campaign, due to being exposed to climatic setbacks.

From the AFs who had stated having reduced the area of the 2008/09 campaign (21%), 52% plans to increase the area in the 2009/10 agricultural campaign, 45% will maintain the cultivation area and only 3% intends to reduce it. Without doubt, major changes may occur among those who stated to have maintained the area (46%). From these, 40% has the intention to increase the area as against 58% who intend to maintain it and 2% who will hopefully reduce it.

4.2.2. Availability of food

The provincial reports highlighted the fact that in general there is evidence of a substantial improvement in the availability of food in all provinces, due essentially to good rainfall conditions, the existence of programmes to intensify and increase areas under cultivation, among other things. Meanwhile, this does not imply absence of occurred pockets of food deficits, if we take into consideration that food and nutritional insecurity (FNI) depends on a combination of factors, related not only to availability but also to access, use and utilization, stability and adequacy of food, and to other factors such as setbacks, which are important determinants.

The analysis of food availability, on the other hand, took three essential factors into account: (i) land, (ii) seeds and (iii) the conservation of food.

4.2.2.1. Land

In general, 89% of the families have access to the country's arable land, which is about 36 million hectares. The two most frequent forms of acquiring land are inheritance (51%), and in the semi-urban areas there are a significant proportion of families that have access to land through leasing (10%) or through offering by family members (10%).

Diagram 3 illustrates that 35% of the AFs state to have fields in high land only, 34% in low-lying areas and 20% in low and high areas. The provinces of Niassa (62%), Tete (58%), Nampula and Zambézia (39%) are the ones with the highest percentage of AFs with fields in low-lying areas.

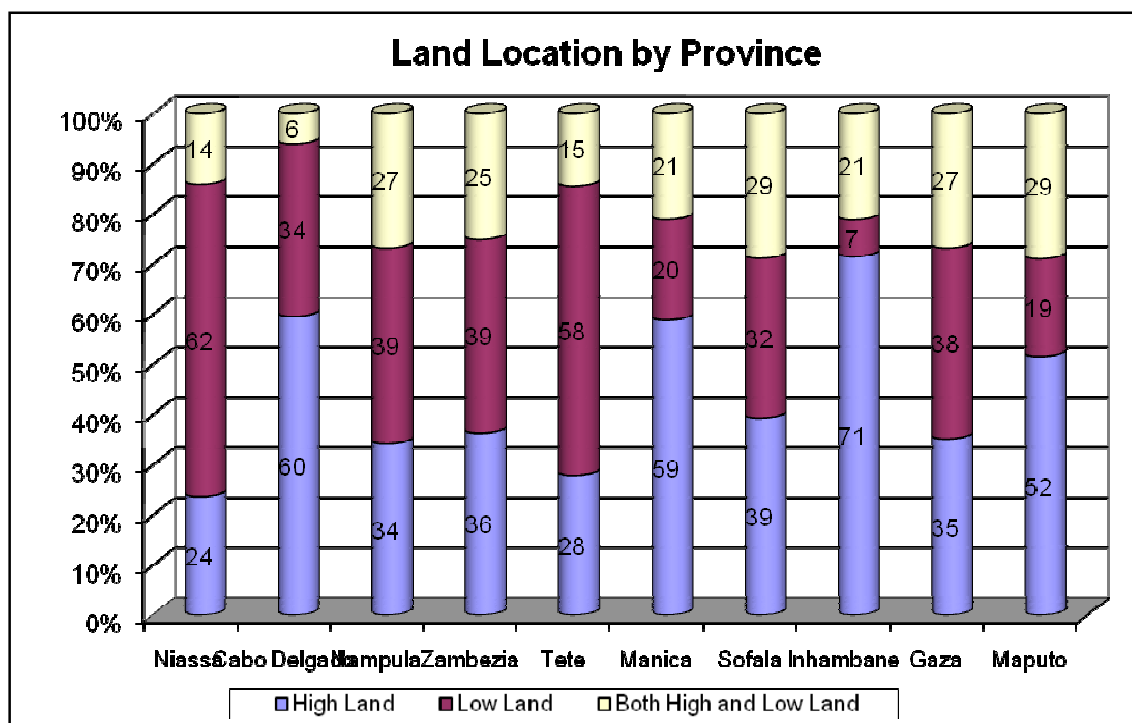


Diagram 3: Localization of the AFs' fields

Taking into consideration the proportion of families with fields, be it in low be in high areas, which vary from 6% in Cabo Delgado to 71% in Sofala and Maputo, one may state that:

- Declining on dependency of rainfed agriculture, that is, un-irrigated agriculture,, with the exception of Inhambane, Cabo Delgado and Manica, where it continues to be high;
- There is clear evidence of an increase in the use of land in low-lying areas, which maybe evidence on the increase of intensive agriculture, reflecting the Government efforts to increase food production as a means to struggle against poverty and hunger in the country; and
- The increase of the proportion of families with fields in high and low areas also reflects efforts to mitigate risk strategy with respect to the uncertainty of rains, and is evidence that the constraints concerning access to land have been reduced.

The results indicate that about 53% of the AFs cultivate areas smaller or equal to 1 hectare and of those 15% has areas of less than 0,5 ha. This may be a limiting factor in the physical availability of food at AF level and must be related to the issue of high effective dependency rate. The results indicate as well that 29% of the AFs cultivate between 1 and 2 hectares and 17% cultivate 2 or more hectares.

The reasons for reducing the area cultivated for food crops are summarized as follows:

- High dependency rate among the AFs;
- Not having the desired area (42%);
- The area is completely occupied (25%);
- Not having sufficient resources for cultivation (33%);
- Occurrence of climatic setbacks (21%); and
- Not having resources for cultivation.

The data show that the AFs with effective dependency rates above 80% cultivate less than 1 ha. The present evaluation also shows that about 18% of the AFs do not have sufficient land and that from these 80% has an area of between 0,5 and 1 ha. The groups that reduced the cultivated land due to climatic setbacks are concentrated in the provinces of Zambézia, Sofala and Cabo Delgado.

4.2.2.2. Seeds

Access to sufficient good quality seeds also constitutes one of the conditions for production, and consequently for the availability of food. Generally speaking, the main source for the acquisition of seeds is the own production, followed by buying locally, and seeds offered by neighbours.

The main source for maize and beans seeds is the own production, with respectively 52% and 43%. The second important source is buying locally, with 19% and 14% respectively for maize and beans. The third source is offerings by neighbours, which show that there, continue to existing social protection networks.

As far as the acquisition of cassava slips and sweet potato foliage is concerned, the main sources of this propagation material are own production, followed by offerings from neighbours and buying locally.

Most interviewees stated that the quality of the seeds is good (77% for maize and beans). A very small percentage refers to very good or bad quality of seeds.

4.2.2.3. Conservation of food

The analyses show that more than half (53%) of the families keep their cereals in traditional granaries, 28% keeps them in bags and 12% hanging in the kitchen. The data indicate also that only 4% of the AFs use improved granaries, 25% of the AFs take recourse to chemical treatment, 19% is not acquainted with post-harvest knowledge, and 32% stated that treatment is not available. The results here analyzed closely tally the information from the Agricultural Survey conducted by the MINAG.

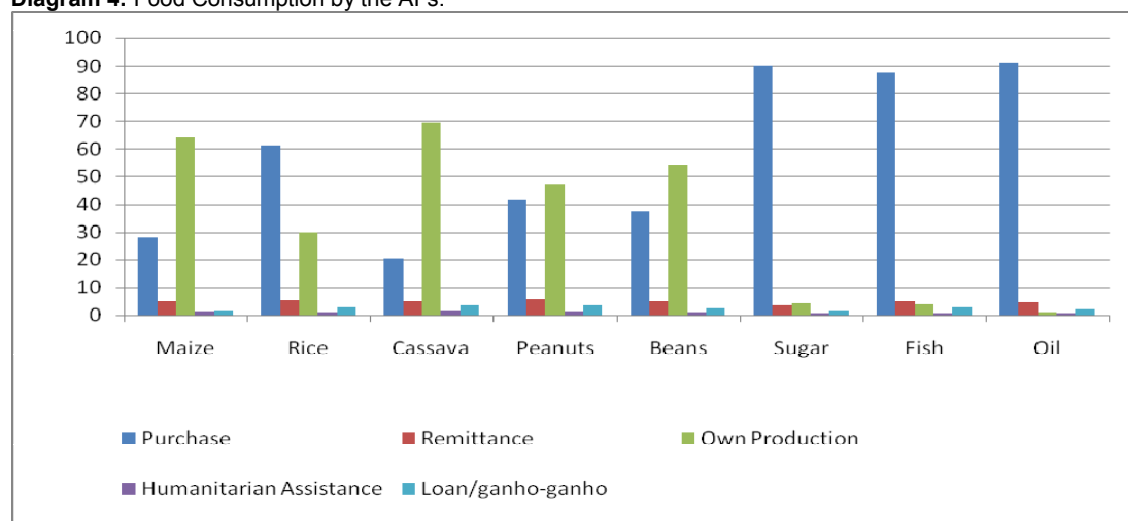
4.3. Access to food

The analysis of the access to food takes into account the AFs' physical or economic access to food taking into account the following issues: food sources, the selling and availability of food on the market, price variations of food and of basic food basket, and remittances, all of which are aspects that are analyzed in disaggregated form.

4.3.1. Sources of food for consumption

The analyses illustrated in Diagram 4 show that most AFs (64% and 70%) consumed maize and cassava from their own production and 28% and 20% used the market to acquire maize and cassava respectively.

Diagram 4: Food Consumption by the AFs.



The scenario for rice is very different, and most AFs (61%) have market as their main source, whereas 30% consume rice from own production.

In the case of groundnut and beans, the market and own production are the two most important sources, but for sugar, fish and cooking oil market is the most important source by far (90% for sugar, 87% for fish and 91% for cooking oil).

It can be noted that sources such as loans, *ganho-ganho*, remittances and food aid, although they are not much mentioned, may be exclusively used by the most vulnerable families, something which could only be shown if the analyses were made per district and per livelihood group.

4.3.2. Selling of Products and availability on the market

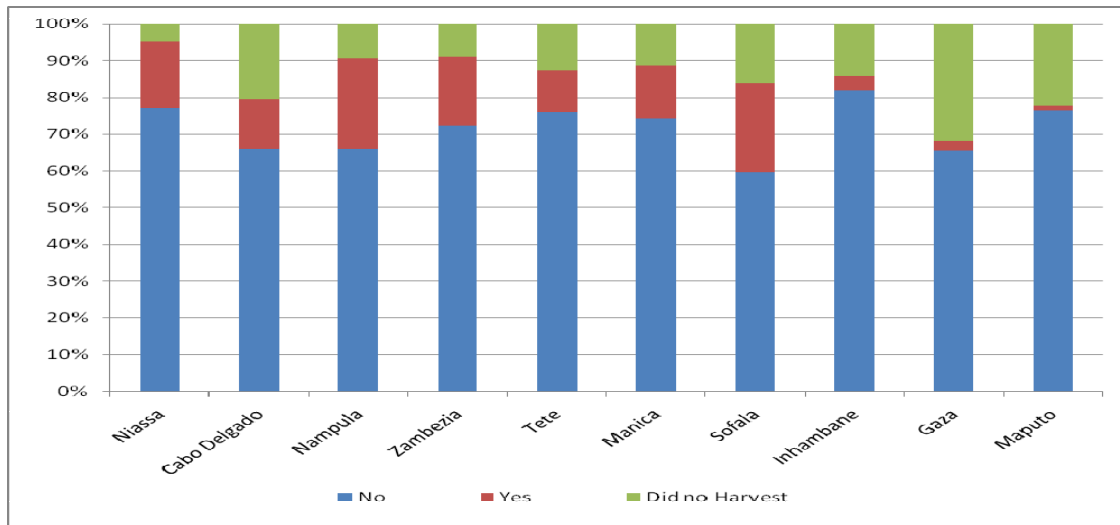
The data concerning selling of products from this agricultural season (Diagram 5), show that in the southern region less than 5% of the families sold part of their production, compared with 25% in Nampula and 24% in Sofala.

About 70% of households indicated that there is a market in their village, all of which are operational.

The products most frequently present on the markets of these villages are manufactured products or things brought from outside the village, such as cooking oil, sugar, salt and soap,

which can be found in more than 95% of the markets. From the cereals, rice is more easily available than maize kernels.

Diagram 5: Sales of products from this agricultural campaign

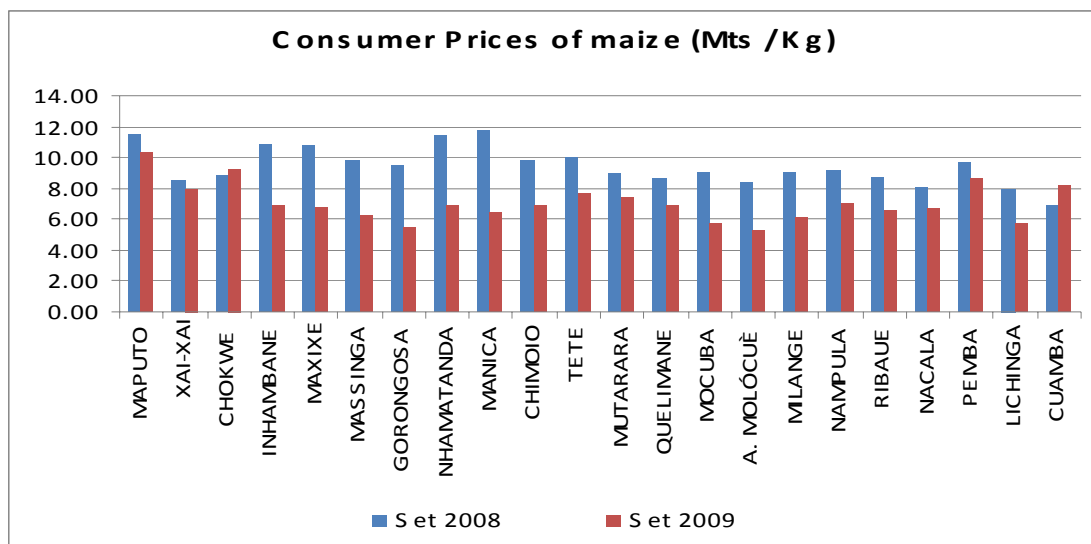


4.3.3. Price variations of food products

The data from the Agricultural Market Information System (SIMA-MINAG) show that the prices of several food products, such as maize, rice, cooking oil, butter bean and groundnut, in September 2009 were low compared to the same period of 2008. The regional variations of the maize prices (Diagram 6a) show that:

- In the central region the prices decreased sharply, especially in the districts of Manica (45%), Gorongosa (42%) and Nhamatanda (40%); and
- In the southern region, the towns of Xai-Xai and Chókwe, both in the Province of Gaza, did not show major price variations between 2008 and 2009.

Diagram 6a): Maize price for the consumer

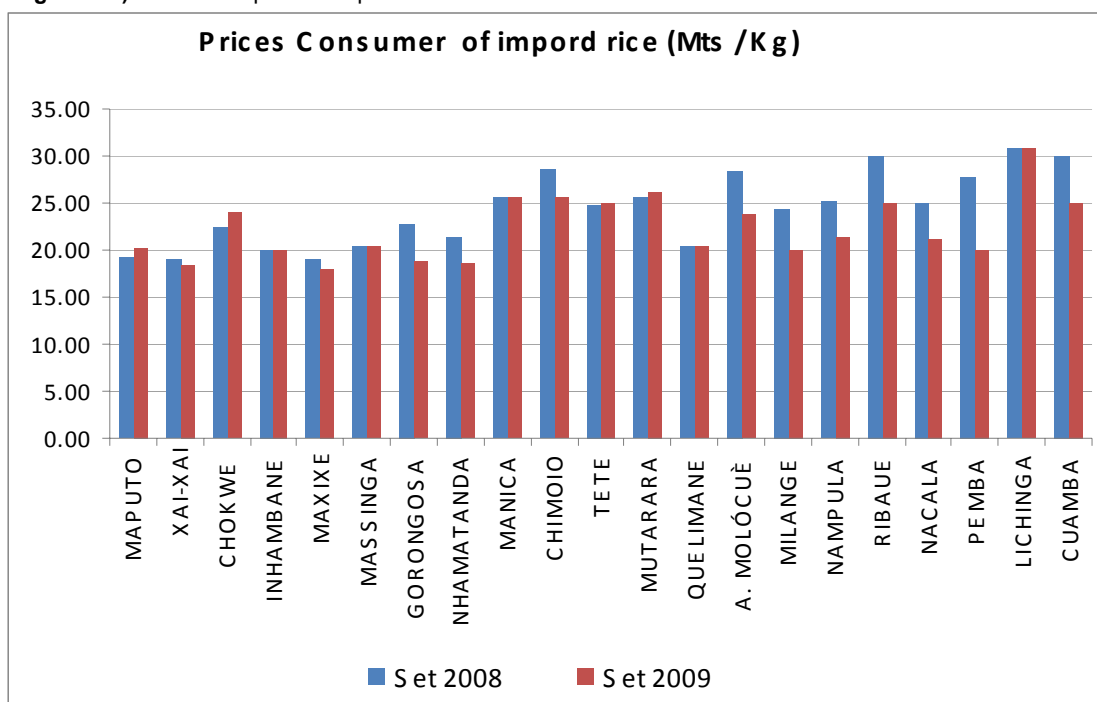


In September 2009, the lowest prices (under 6,00 Mts/kg) were encountered in Gorongosa, Mocuba, Alto Molócue and Lichinga. Higher prices, above 8,00 Mts/kg, were encountered in Maputo, Chókwè, Pemba and Cuamba.

Diagram 7b shows the regional variations concerning rice in the period under analysis, with the following highlights:

- In the central region prices decreased 18% in Gorongosa, 13% in Nhamatanda and 11% in Chimoio;
- In the southern region there were no large changes in the rice prices; and
- The rice prices are relatively low in the markets of the southern region and in part of the central region (Gorongosa and Nhamatanda).

Diagram 6b): Consumer price of imported rice .



The reduction on price of rice in the country's central and northern regions is related to the low market price of maize. The highest rice prices, over 25,00 Mts/kg, were practiced in Manica, Chimoio, the town of Tete, Mutarara, Ribaué, Lichinga and Cuamba, considered interior areas far from the ports.

The same source shows that the consumer price of ordinary beans increased in Xai-Xai (6%), Chókwè (12%), Nhamatanda (29%), Chimoio (33%) and Mutarara (28%). Prices of small groundnut increased in Chókwè (26%), Gorongosa (23%) and Chimoio (13%). These prices are between 18,00 Mts/kg in Mocuba and 43,00 Mts/kg in Chókwè and Chimoio.

Most markets witnessed a decline on prices of cooking oil, most sharply in Massinga, Mutarara and Nampula, which reported a decrease of more than 30%.

Prices of cooking oil varied between 38,00 Mts/lt to slightly more than 70,00 Mts/lt.

4.3.4. Basic basket

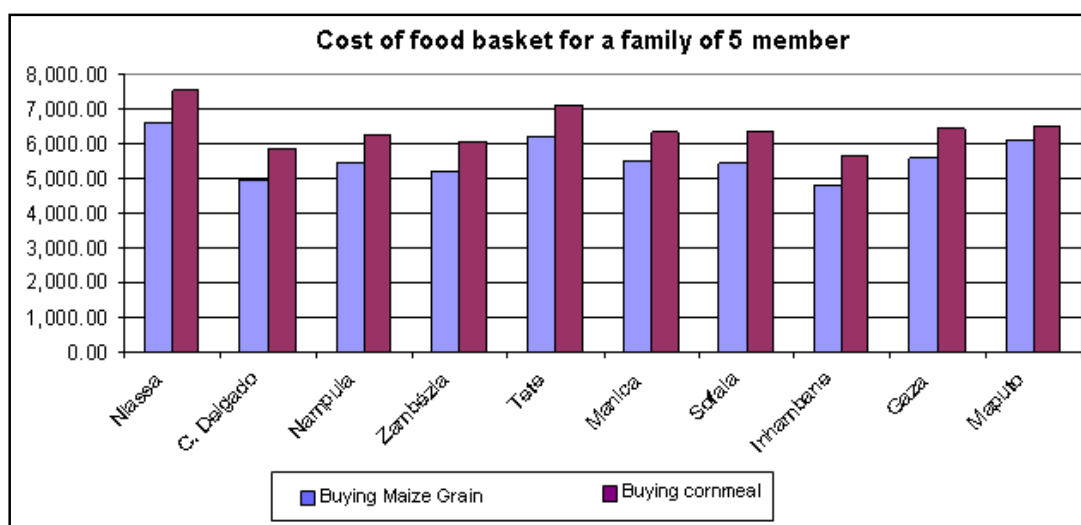
The cost of the basic food basket was determined in accordance with the MISAU presentation, which lays down that per month one person should consume: 3 kg of rice, 9.1 kg of maize flour, 2.0 kg of dry beans, 0.5 kg of groundnut, 3.5 kg of dry fish, 0.5 liter of cooking oil, 1.2 kg of sugar, 1.0 kg of salt, 3.4 kg of green foliage and 3.6 kg of seasonal fruit. The basic food basket was determined based on the price survey undertaken by SIMA between June and July of 2010.

Taking into account that among the cereals, maize flour is most important for consumption (9.1 kg of maize flour against 3 kg of rice), two costs of the basic basket were calculated, on the basis of two main sources of maize flour:

- a) Assuming that the families buy maize kernels or use maize from their own production, which was valued on the basis of the local market price plus the milling costs of 2,00 Mts/kg; and
- b) Assuming that the families buy industrially processed maize flour (most expensive source).

Thus, the average cost of a basic basket for a family having 5 members is 6.380,00 Mts/month for those who buy industrially processed maize flour and 5.556,00 Mts/month for the AFs who use maize kernels from their own production or buy maize kernels on the market and have it milled. In some districts, such as Niassa, Nacala, Mopeia, Morrumbala, Magoé, Tsangano, Machaze, Muanza and Marromeu, where industrially processed maize flour is expensive, a family that consumes maize from their own production or that has access to maize kernels on the market, may save 1.000,00 Mts/month or more for the purchase of other goods. For the southern region, where most people do not process maize in mills, costs may be some 100,00Mts/month lower.

Diagram 7: Costs of a basic basket for a family consisting of five.



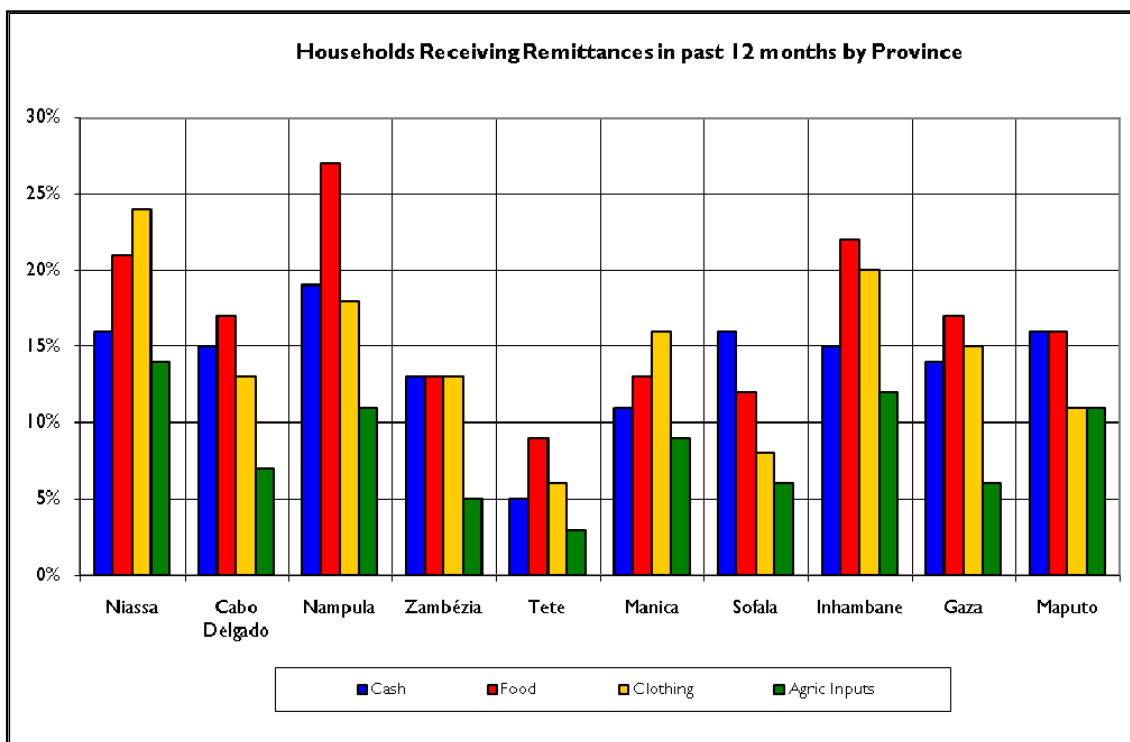
(The presence of local fish (fresh or dried) in markets contributed significantly to reducing the costs of the basic food basket, as in the case of some districts in the Provinces of Inhambane and Zambézia. The high costs observed in the provinces of Niassa and Tete are related to the high prices of rice, cooking oil and fish in some districts.

4.3.5. Remittances

The results show that the main remittances received in the last 12 months concerned: money, food, clothing and production inputs.

Diagram 8 shows that the province of Tete has less AFs who stated to receive remittances of any type, while the province of Nampula scores best on remittances.

Diagram 8: AFs who received remittances in the last 12 months.



It is clear that remittances of food are most common, followed by those of clothing. Remittances of money has some importance as well as and in fact 18% of the AFs in Nampula, 16% in Niassa and Sofala stated to have received money.

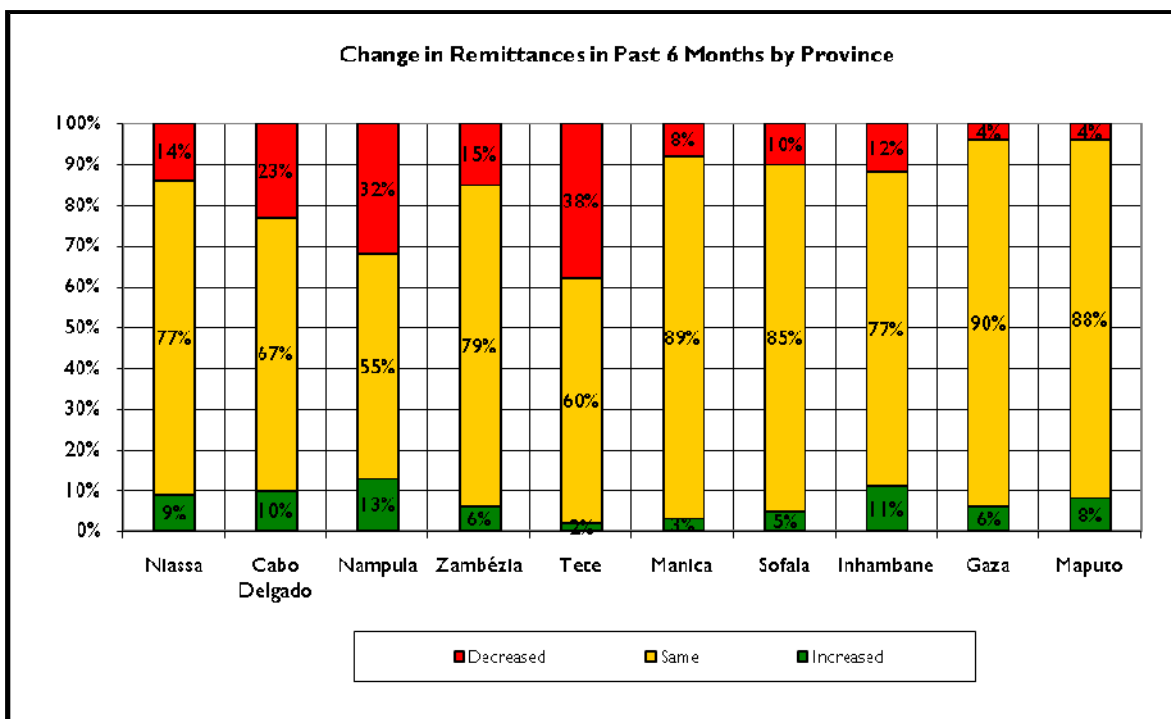
It could also be noted the positive effects of migration in the provinces of Inhambane, Gaza and Maputo, where food, clothing and money are prominent.

Finally, remittances of inputs are most prominent in Niassa, followed by Nampula, Maputo and Inhambane.

Concerning changes in remittances in the last 6 months per province, most AFs stated that remittances did not diminish (Diagram 9).

An exception applies to the province of Tete, where 38% of the AFs declared having received less remittance. The same is true for Nampula, where one third of the AFs mentioned a reduction. However, this same province has the highest percentage of AFs who stated to have received more remittances. Other provinces that reported increases were Inhambane, Cabo Delgado and Niassa.

Diagram 9: Changes in remittances in the last 6 months, per province.



4.4. Use and Utilization of Food

The use and utilization of food was analyzed, taking into account: (i) water and sanitation, (ii) sources of energy for the preparation of food, (iii) health, and (iv) education.

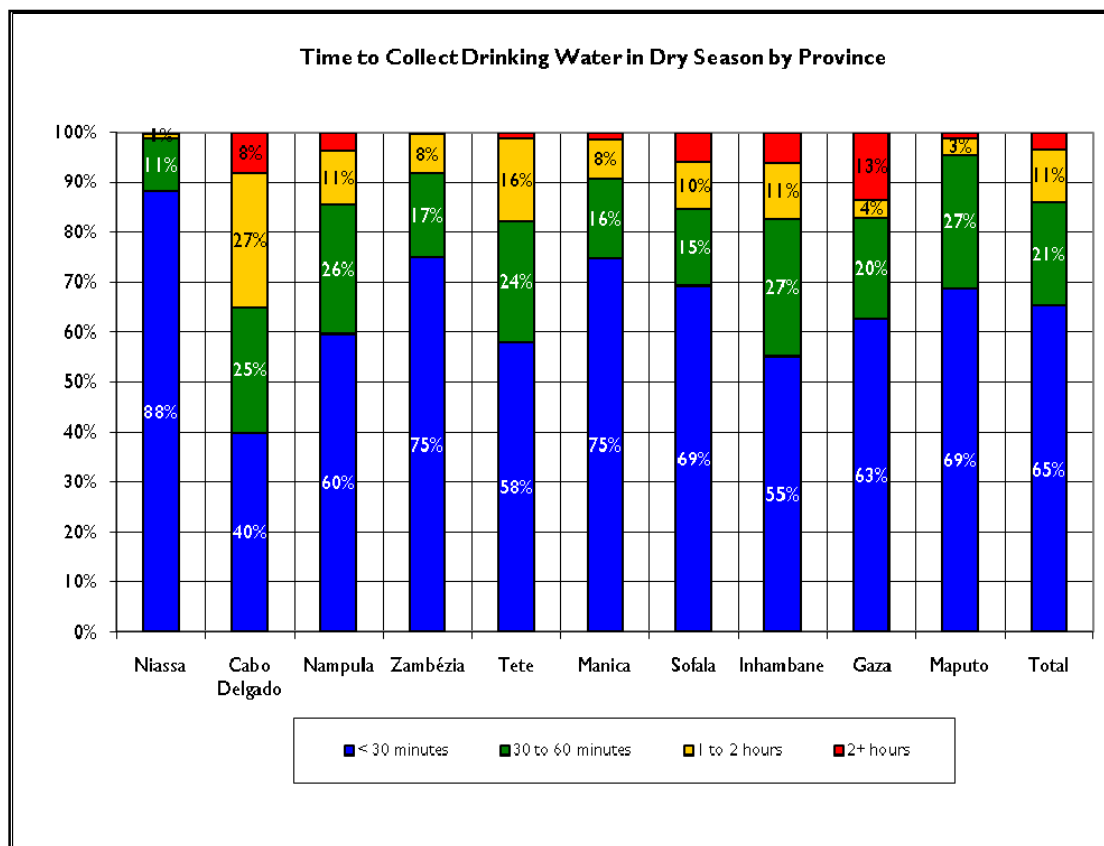
4.4.1. FNS, Water and Sanitation

Access to water (rivers/lakes, holes, unprotected wells, protected wells, public water supply) is measured in function of: the time it takes to obtain this precious liquid and its quality during the dry period (June – August 2009).

In general, more than 60% of the AFs needed less than 30 minutes to fetch water for consumption in the dry period (Diagram 10). The province of Niassa stands out (88%) as one that needs less than 30 minutes, whereas Cabo Delgado is worst, with 40% of the population needing less than 30 minutes to fetch water but almost 30% takes up to 2 hours to fetch water for consumption. In some parts of the province of Gaza, some 13% spend more than 2 hours.

The quality of the water consumed by households varies from province to province and the province of Maputo has the highest percentage of people (72%) who consume protected water (network, pump or protected well) and the provinces of Cabo Delgado and Nampula have the lowest rates (44%) of families consuming protected water.

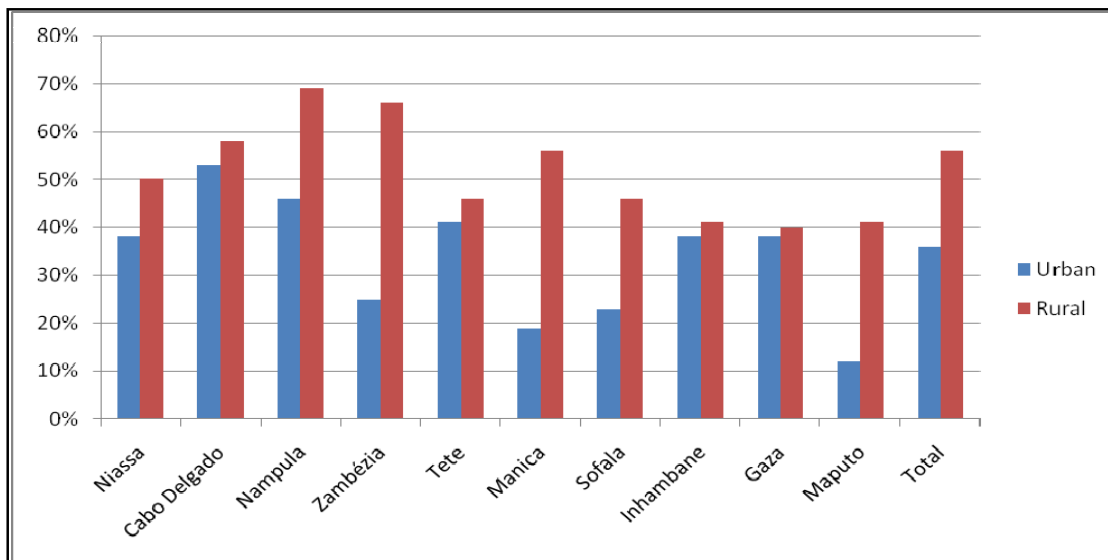
Diagram 10: Time spent to fetch water during the dry period, per province.



Related to the water source is the question of treating water for drinking. All in all, 17% of the AFs treat water prior to consumption, 78% treat it with bleach and the remainder cook it. The provinces of Niassa (6%) and Tete (7%) have the lowest percentages of AFs who treat water for consumption, whereas the provinces of Sofala with 42%, Maputo and Manica (both with 25%) are the ones where the largest proportion of the AFs treat water.

The improvement in water consumption is not only measured by the reduction of the distance to access. Diagram 11 shows the part of the AFs who use water from an unsuitable source for consumption, comparing urban with rural areas. .

Diagram 11: Water consumption from inappropriate sources, per region and province.



In general, water quality has been improved. The AFs in the provinces of Nampula and Cabo Delgado seem to be the ones consuming most water from unsafe source, while Gaza, Inhambane and Maputo have the best conditions in relation to the rural areas. Cabo Delgado is not only the province with the worst conditions in rural water consumption, but also in the urban areas, followed by Nampula e Tete. Manica and Sofala are the provinces with the best water sources in the urban areas.

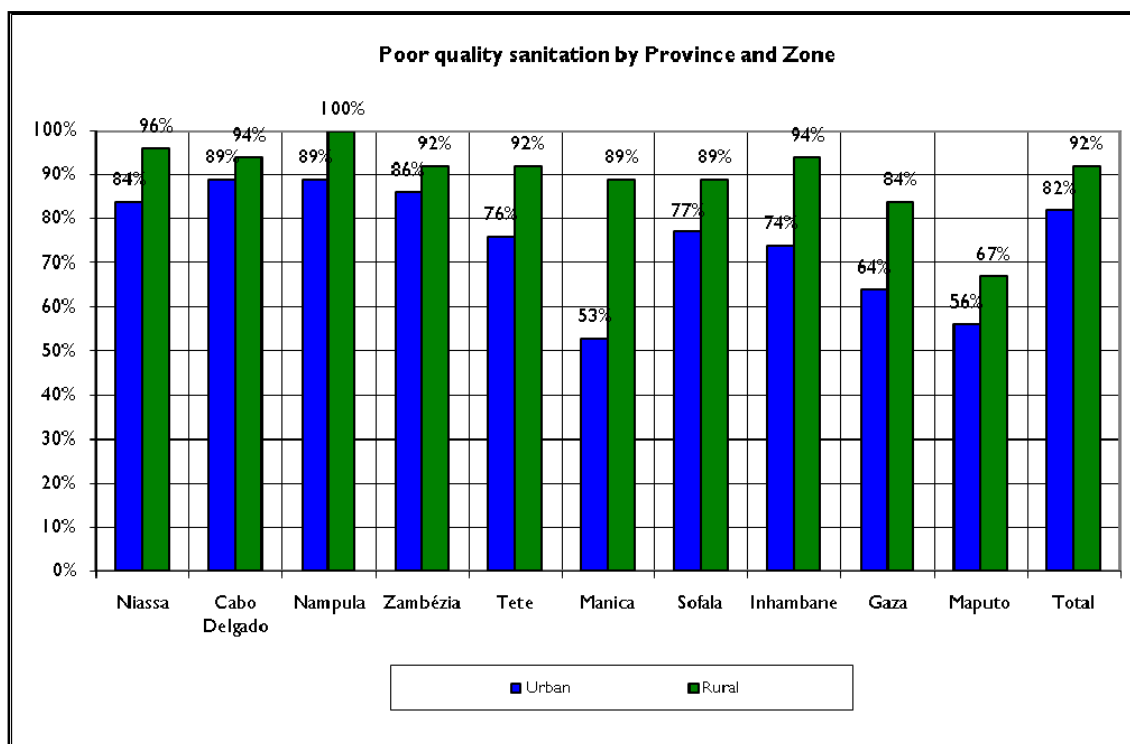
The province of Sofala also does very well in terms of water treatment. More than 40% of the AFs in this province treat water, followed by 25% in Manica and Maputo. In the remaining provinces only 6% of the AFs in Niassa and 8% in Tete state to treat water. Most families in the places where water is being treated say they use chlorine instead of cooking water, which is a positive sign because it shows that those who are treating water are following the most adequate institutional recommendations.

The overall calculation shows that differences persist in access to drinking water, between rural and urban areas. According to the sample, it is estimated that 43% of the AFs in the rural areas and 64% in the urban areas have access to water within acceptable standards. These percentages are above the one reported by MIC for rural areas (30%) and below the one for urban areas (70%).

A limited number of AFs in the country has access to improved latrines. In general, sanitation of about 90% of the AFs is poor. The worst sanitation conditions were found in the province of Nampula, where AFs use unimproved latrines, defecate in the open or in the bush.

Sanitation conditions tend to be better in the semi-urban areas than in the rural environment (Diagram 12), but generally speaking the quality of sanitation is precarious.

Diagram 12: Poor quality of sanitation, per province



In the province of Maputo, about two thirds of the AFs in the rural areas and slightly more than half of the AFs in semi-urban areas, were exposed to precarious sanitation conditions. Meanwhile, according to the sample the province of Manica shows the best sanitation conditions.

4.4.2. Sources of energy for the preparation of food

Firewood and charcoal continue to be the main sources of fuel for the preparation of meals. However, about 20 - 30% of the AFs only use charcoal to prepare food in the semi-urban areas in the provinces of Zambézia, Tete, Manica, Sofala and Maputo. In the rural areas, firewood is used by almost all AFs, with the exception of the province of Maputo, where some AFs also use charcoal. This practice has serious implications for the environment.

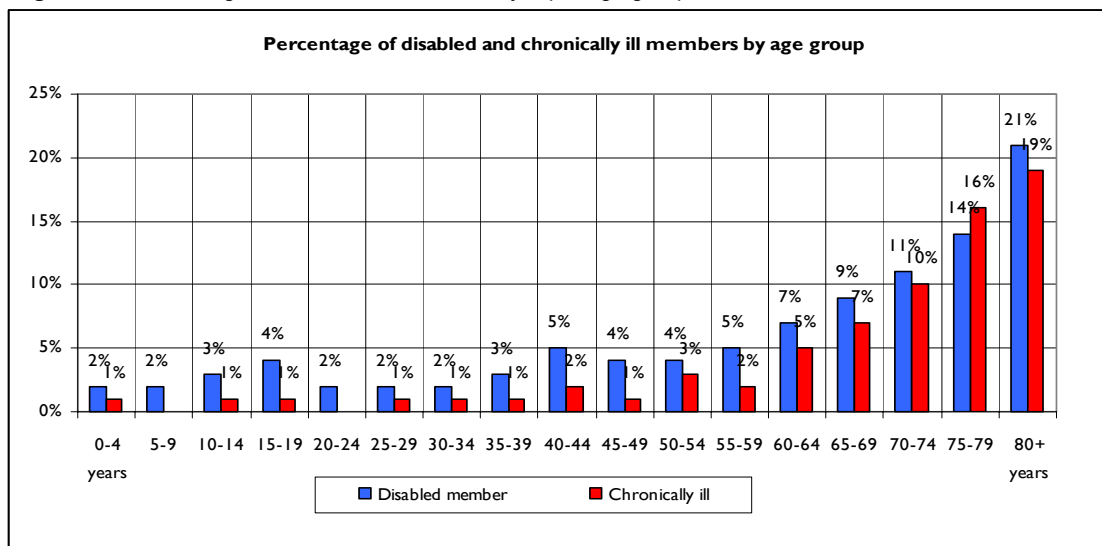
4.4.3. Health

The health evaluation concerned every member of the AFs, including the people who had been ill for less or more than 3 months, and it also recorded the presence of physically or mentally disabled family members.

The results show that in general the highest rates of disabled and chronically ill people are found in the age group of >65 years. (Diagram 13).

Seen per province, the analyses indicate that Inhambane has the highest percentage (29%) of disabled, while in the case of chronically ill people the provinces of Sofala (12%) and Nampula stand out (7%).

Diagram 13: Percentage of disabled and chronically ill per age group

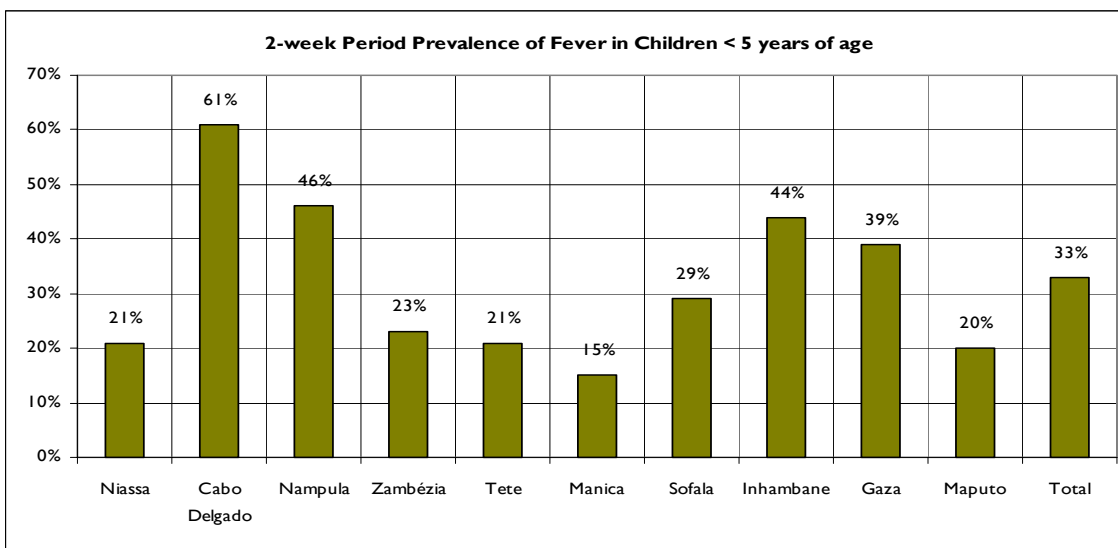


From the group of chronically ill, more than 60% reported to have procured treatment, including almost all in the provinces of Sofala, Inhambane, Cabo Delgado and Zambézia, and only 15% in Maputo and 17% in Tete. Those who did not procure treatment gave various reasons for not doing so, among which stand out taking recourse to traditional healers, lack of qualified health personnel, in addition to lack of funds, problems related to transport and distance.

The acutely ill are normally measured in terms of occurrence of fever, in particular among children under 5 years of age. About 33% of the children had had fever in the two weeks prior to the survey. This exceeds the 24% reported by MIC in 2008 and IDS in 2003, but these differences may be due to the moment of data collection in the field.

The incidence per province (Diagram 14) shows that 60% of the children were recently exposed to fever in Cabo Delgado, followed by 46% in Nampula and 44% in Inhambane. Meanwhile, Manica (15%) had the lowest incidence.

Diagram 14: Prevalence of fever in the last 2 weeks prior to the inquiry (children <5 years)



4.4.3.1. Orphaned Children

Orphans are defined as children between 0 and 17 years of age who live in an AF without father, mother or without both.

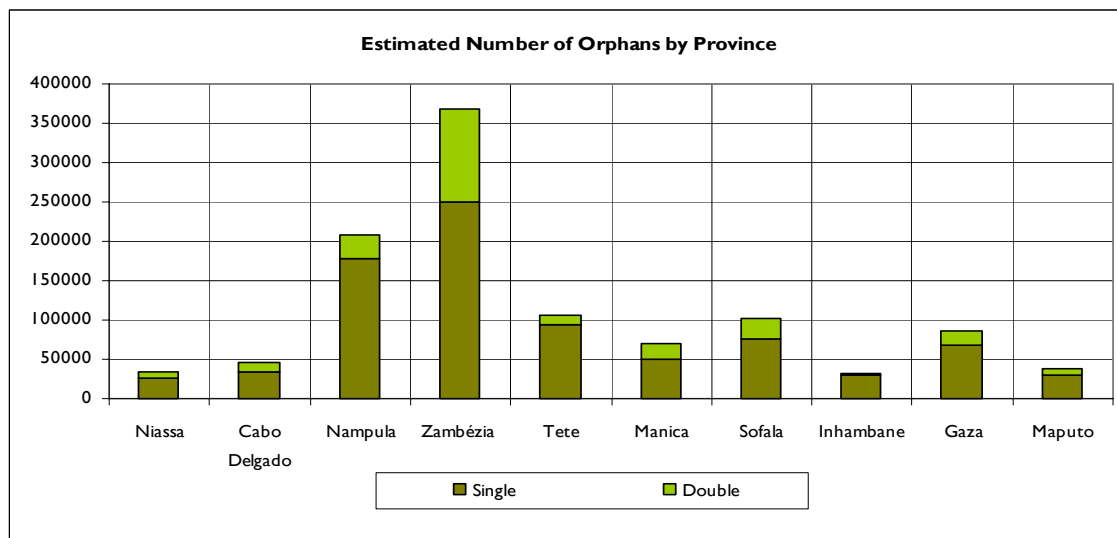
From the total of surveyed children, 13% are orphans, 2% lost their mother, 8% their father and 3% lost both.

There are variations per provinces, especially:

- The percentage of orphans who lost their father is generally three times higher compared to those who lost their mother and the provinces more likely to host them are Gaza, Inhambane, Tete, and Sofala; and
- The group who lost both father and mother is most prominent in Zambézia, Sofala, Gaza and Manica.

This situation has implications, because orphans who lost their father implied higher number of widows leading to higher exposure of household to social vulnerability.

Diagram 15: Estimate of the number of orphans per province



The provinces with the smallest proportion of orphans are Niassa, Cabo Delgado and Nampula, and when compared in terms of distribution among semi-urban and rural areas, the first tend to have the highest proportion of orphans.

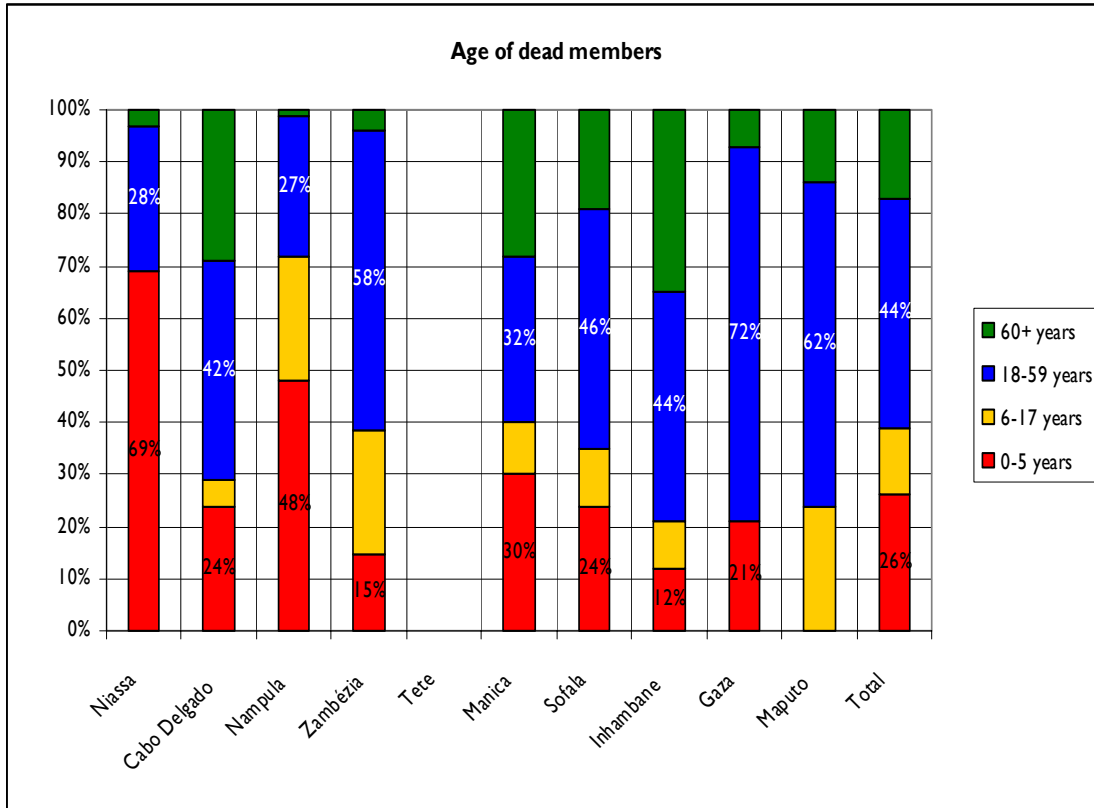
The province of Zambézia, followed by Nampula presents the highest numbers of orphans, according to Diagram 15. The lowest absolute numbers are found in the rural areas of Inhambane and Niassa.

4.4.3.2. Deaths of AF members

The loss of life of AF members is very important, particularly when evaluated in terms of gender, age and role that deceased member might have played within household.

In general, only 4% of the AFs reportedly lost someone in the last 12 months.

Diagram 16: Age group of the AF members who passed away.



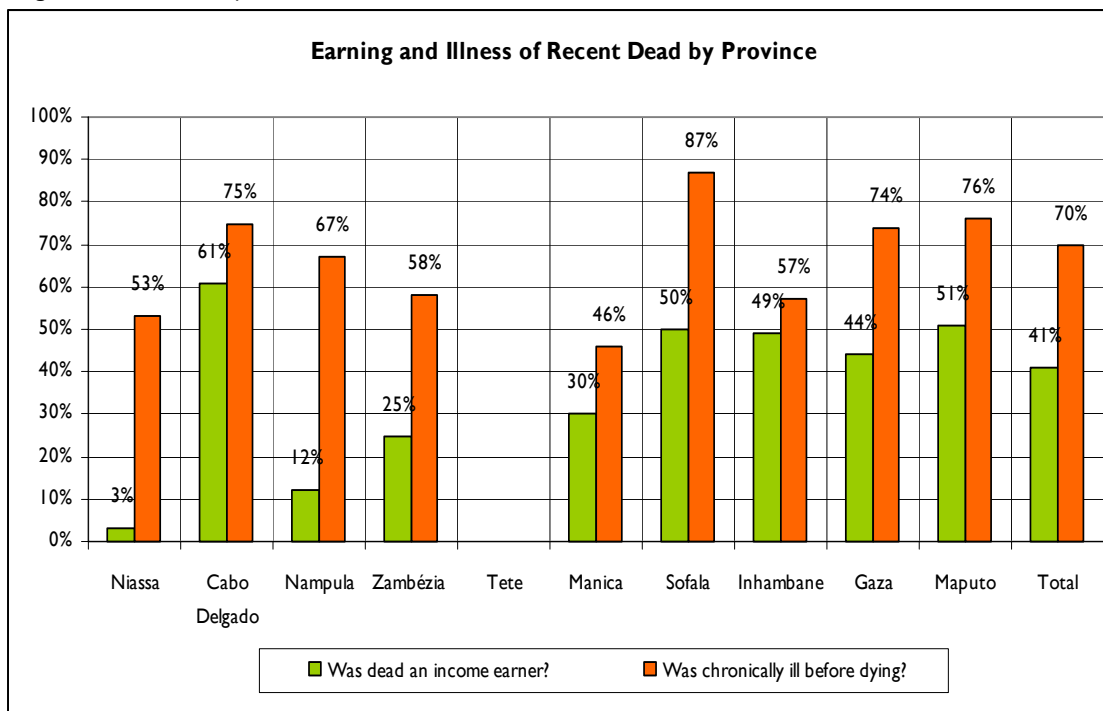
The percentage of deaths of AF members varied from 11% in Cabo Delgado and Sofala to 7% in Inhambane and 3 - 4% in the other provinces. Only 2% in Niassa, 1% in Maputo and 0% in Tete reported no death at all (Diagram 16).

A death may be an approximate indicator for evaluating AFs affected and infected by HIV/AIDS. In general, almost two thirds of the deaths were male, with variations per province. In Niassa and Inhambane, more women died while in Manica and Sofala equal numbers of women and men died.

Nampula and Niassa present a different pattern, in that most deaths occur among children, while in Inhambane and Manica about 30% are elderly. The deaths of economically active members were most common in Gaza, followed by Maputo and Zambézia.

Diagram 17 indicates the percentage of deceased members of AFs who were productive and whether or not they were chronically ill before death.

Diagram 17: Deceased productive household members and illness status before death



The Diagram shows variations per province, Cabo Delgado, Maputo and Sofala reported the highest percentages. Almost nothing was observed in Niassa and Nampula which correlates with the fact that death in these provinces were mostly children. In Sofala (87%) almost all recent deaths concerned people who were previously chronically ill, followed by C. Delgado, Gaza and Maputo (about 75%).

4.4.4. Diet diversity

Investigation results show that the diversity and frequency of the diet³ are proxy indicators for measuring food consumption at AF level. The retrospective consumption of the last 7 days was used to establish three categories: “poor” consumption, “limited” consumption and “acceptable” consumption.

In the northern provinces, maize is the product consumed daily by the AFs in the rural areas, followed by beans during 4 days/week. In Niassa maize is consumed daily, followed by beans during 4 days/week and fats during 3 days/week. Vegetables and fish are, in average, used 2 days per week in this province. In Cabo Delgado and likely in Niassa, maize, beans and cassava are consumed during three days/week. In Nampula the same group of food is consumed during 4 days/week.

In the provinces in the central region, consumption is more diversified, with the exception of Zambézia, which is slightly poorer and shows a lower frequency in the use of cereals and greens, but with higher seafood consumption. The consumption of fruits and vitaminized tubers are very poor in the interior provinces, especially in Manica and Tete, where they are consumed in a weekly basis.

³ Diet diversification is defined as the number of food or group of food consumed in the course of a certain period of time. Thus, AFs with poor consumption, consume daily only cereals and vegetables (FCS ≤ 21); AFs with average consumption, FCS: 21-35 indicating that they consume cereals, vegetables every day and legumes and oils up to 4 days per week; while acceptable consumption is and FCS above 35.

In the southern provinces, consumption is much more diversified, with the exception of Gaza, which shows poor consumption. Sugar is more frequently consumed in the southern region than in the other parts, especially in the semi-urban areas in Inhambane. In average, greens and fats are consumed three days/week. Meat does not play a role in consumption.

In general, 7% of the semi-urban AFs and 11% of the rural ones show poor food consumption, while 16% of the semi-urban and 20% of the rural AFs have a moderate consumption. 78% of the semi-urban and 66% of the rural AFs respectively have an acceptable consumption (Diagram 18a an b). Overall, the quality of diet has improved, compared to the SAN Baseline Study of 2006.

Diagram 18a: Food consumption categories per province – Peri-Urban Area

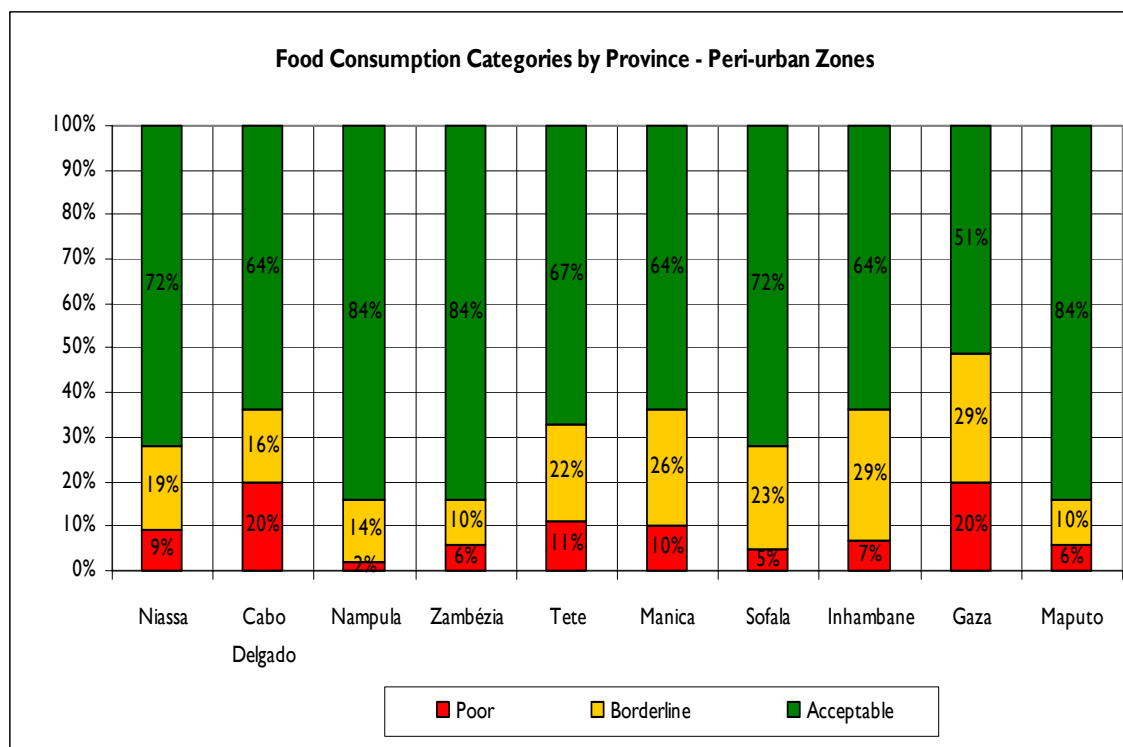
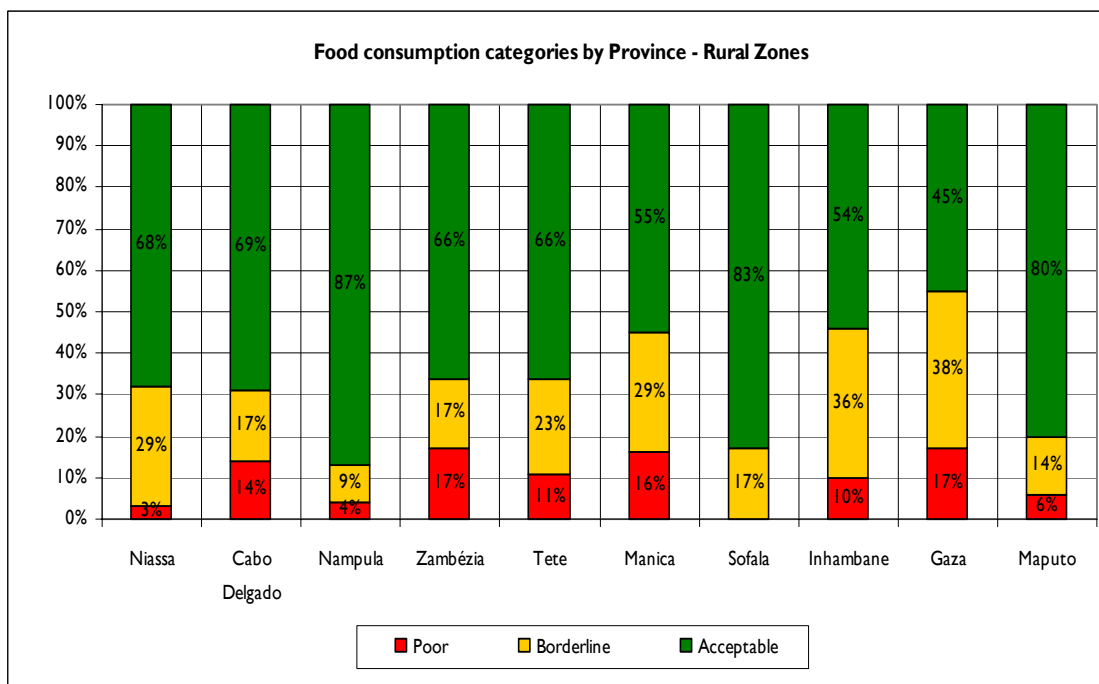


Diagram 18a: Food consumption categories per province – Rural Area

As far as the rural areas are concerned, Gaza is the province with the lowest number of people having an acceptable food consumption level, followed by Inhambane and Manica. Meanwhile, the best results are found in particular in Nampula, followed by Sofala and Maputo, with more than 80% of the AFs having an acceptable consumption.

The situation is particularly alarming among the AFs in the semi-urban areas of Gaza, where only 50% of the AFs achieve acceptable diet level

Diagram 18b: Food consumption categories per province – Rural Area



In the rural areas, Gaza again trails in terms of poor diet quality, with only 47% of the AFs having an acceptable consumption and 17% having poor consumption.

Furthermore, in the province of Manica, about 55% of the AFs in the rural areas had an acceptable diet, 29% scored moderate and 16% poor. In the province of Zambézia 17% of the rural AFs has poor food consumption while two thirds achieve an acceptable consumption level.

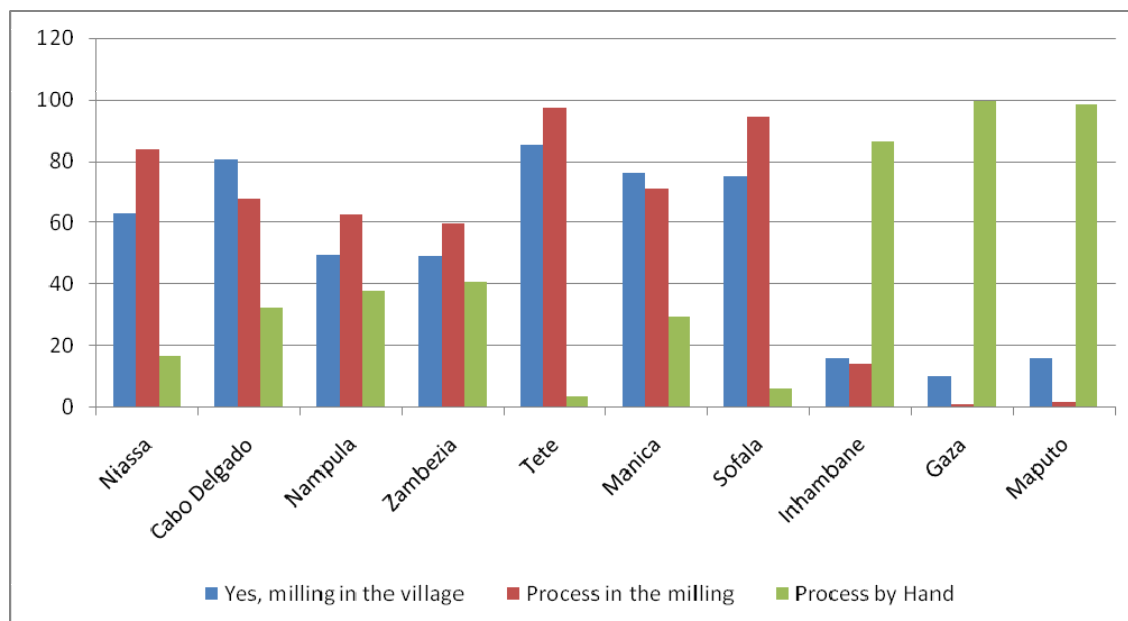
The data also show that there are no significant differences between the AFs headed by women and the other ones, with respect to the levels of “poor” and “limited” consumption. Nevertheless, there is a slight difference with respect to the quality of diet at acceptable level.

4.4.5. Processing

Processing of food may contribute to improving the use and the conservation of food.

It is interesting to note that the existence of mills seems to be interlinked to the areas with most production. Thus, in the northern provinces, especially Cabo Delgado and Niassa, there are mills in 81% and 61% of the villages covered (Diagram 19).

Diagram 19: Percentage of mills



A total of 52% of AFs indicated that there was a mill in their village and a total of 64% of Afs said that they processed maize in these mills while the rest did this by hand. Tete is the province with highest proportion of villages with mills in the sample (85%), followed by Manica and Sofala 76% and 75% respectively.

Meanwhile, Gaza is the province with the lowest percentage of villages having mills (10%) followed by Inhambane and Maputo with 16%. Thus, the results indicate that in the southern region 90% processes maize by hand.

With respect to rice, less than 2% of the household uses milling services. Among those that process maize in a mill, most (64%) walks less than 30 minutes to the mill closest nearby, while another 20% walks more than an hour. About 17% of those who process in a mill state that they paid some money for the transport from their home to the mill.

As far as the price of milling is concerned, the southern region reports relatively high prices, compared to those from the country's central and northern regions. In Maputo and Gaza, the most common price for milling 1 kg of maize is 3,00 Mts and in Inhambane it is 2.29 Mts. In the other provinces, the most frequent prices vary between 1.00 and 1.14 Mts/kg, with the exception of Cabo Delgado, where most people paid 2.00 Mts/kg.

4.4.6. FNS and Education

The education of girls and women has a positive correlation with improvement of use and utilization of food in the AFs.

In general, the results show that about 80% of the of eligible children 6-17 years of age attend primary school and 7% secondary school. These numbers approximate those reported by MIC (2008). On the other hand, About 5% had dropped out in recent years and another 10% had never enrolled. despite recognizing that from these some may enroll at a later stage. When comparing school attendance of girls and boys, one can note that:

- Enrolment for girls is lower than boys in Niassa (-7%), Cabo Delgado (-7%), Zambézia (-4%), Sofala (-4%) and Manica (-3%). It is the same or higher in all other provinces.
- The groups with the highest percentage of children 'never enrolled' are girls in Niassa (18%) and both boys and girls in Nampula province (15%).
- The highest reported drop-outs were found among girls in Cabo Delgado (10%), girls in Niassa (9%) and boys in Gaza (8%) provinces. Socio-cultural factors may support this evidence. In the first case premature marriage may play a role, while in the second case it may be linked to herding activities and migration
- The highest percentages of children that were enrolled and attending secondary school were found in Sofala (16% - both boys and girls) and Maputo (15% -both).

4.5. Stability of Food

The analysis of food stability considered the duration of food stocks, income sources and the possession and selling of animals at AF level.

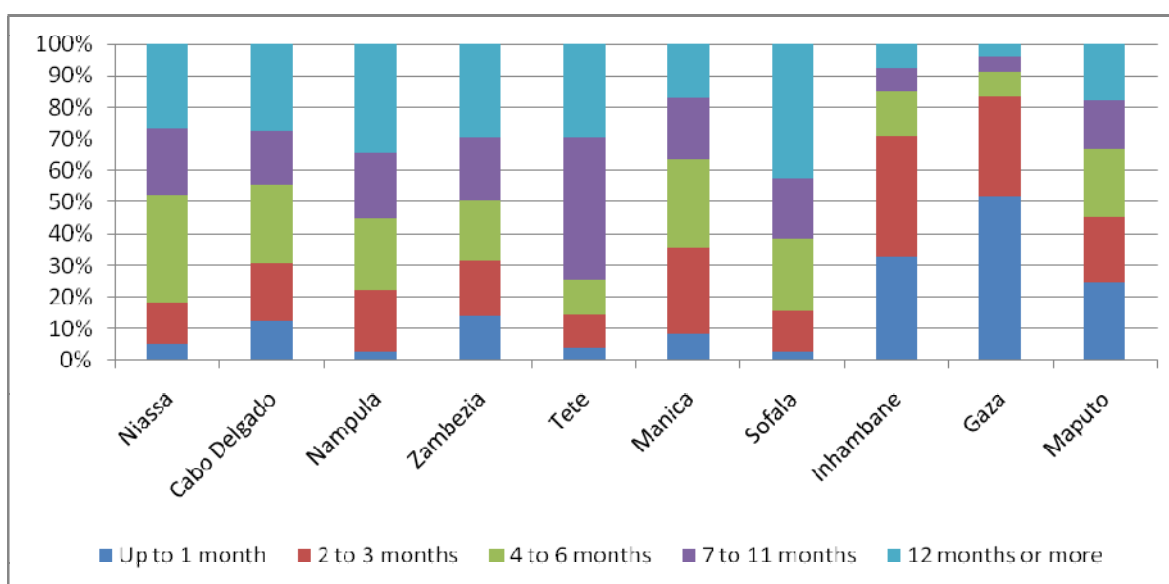
4.5.1. Duration of Cereals and Beans Stocks

Diagram 20 presents data about number of months potentially covered by cereals and beans stocks from own production

Gaza Province shows the lowest percentage of households (4%) with stocks for 12 months. In this province, 52% of the AFs have stocks for **up to one month** and 32% for up to 3 months.

It should be noted that the analyses made by the SETSAN in March 2009 showed that the districts of Guijá (90%), Chicualacuala, Chókwè, Chinde, Chibuto, Morrumbala and Mopeia had food reserves for less than 1 month. Therefore one should be aware of need for permanent monitoring of these districts.

Diagram 20: Duration of cereals and beans stocks.



In Inhambane province, in Inhassoro district, all interviewed households declared that their reserves would last up to **three months**. Other districts in this situation are Machaze, Mabote, Machanga and Funhalouro.

In the central and northern regions, more AFs indicated reserves enough to cover 4 to 12 months for de consumption.

Sofala was the province with the highest proportion of AFs (42%) with food reserves for more than 12 months, followed by Nampula.

Among others, the following were presented as reasons for reduction of food reserve: poor production (63%), lack of labour (25%), insufficient area for cultivation (22%) and post harvest losses (18%).

4.5.2. Income Sources

In general, data show that the production and selling of food crops is the most important source of income for about 41% of the AFs, followed by casual labor mentioned by about 28%. Few households (13%) indicated that in their family at least one member was employed earning a salary (the most secure livelihood).

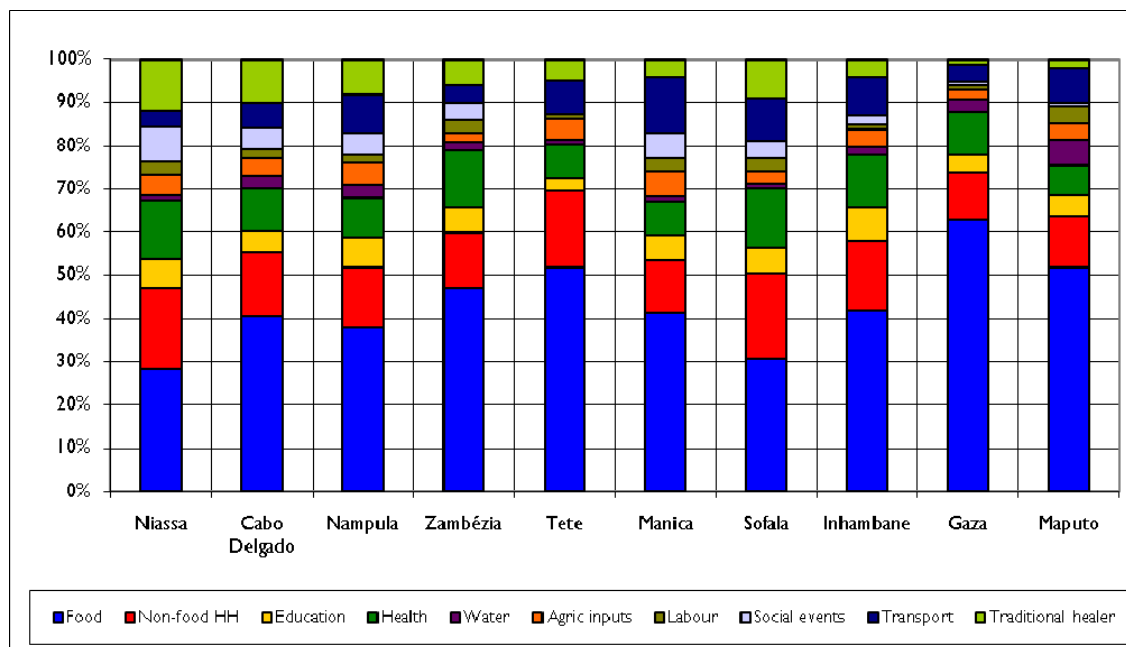
Regarding the diversity of income sources, 47% of the AFs indicated that they had only one income source and about 35% had 2 sources. Around 14% of the AFs stated to have 3 income sources. From a vulnerability perspective, it should be noticed that among those with one source of income, the bulk are staked around insecure activities, 26% is engaged in production and selling of food products and 21% does seasonal work. Only 13% indicated to live from a salary.

A cross-analysis of the diversity of income sources and quality of diet, shows that from the group of AFs with only one source of income a higher proportion of AFs (12%) has a poor diet, while among those with two or more sources of income only a small part (7%) has a poor diet. The data also show that among the group of AFs with only one source, a higher percentage (12%) of AFs has an effective dependency rate of 80% (9% for those with 3 sources).

4.5.3. Expenditure

Food is very important in the consumption and expenditure of the AFs. The current SETSAN's evaluation reported that food expenditures were the most important among all the expenditures reported by AFs varying from 29% in Niassa to 63% in Gaza (Diagram 21).

Diagram 21: Household Expenditures by Categories



Expenditure on items for personal use was ranked second, varying between 11% in Gaza to 19% in Niassa.

Expenses related to education have more weight in Inhambane (8%), Nampula and Niassa (7%), while those related to health were highest in Sofala and Niassa (14%), followed by Zambézia (13%) and Inhambane (12%). The northern provinces have most expenses related to traditional doctors, and they are also among the provinces having most expenses related to health, although access to health units is lowest here.

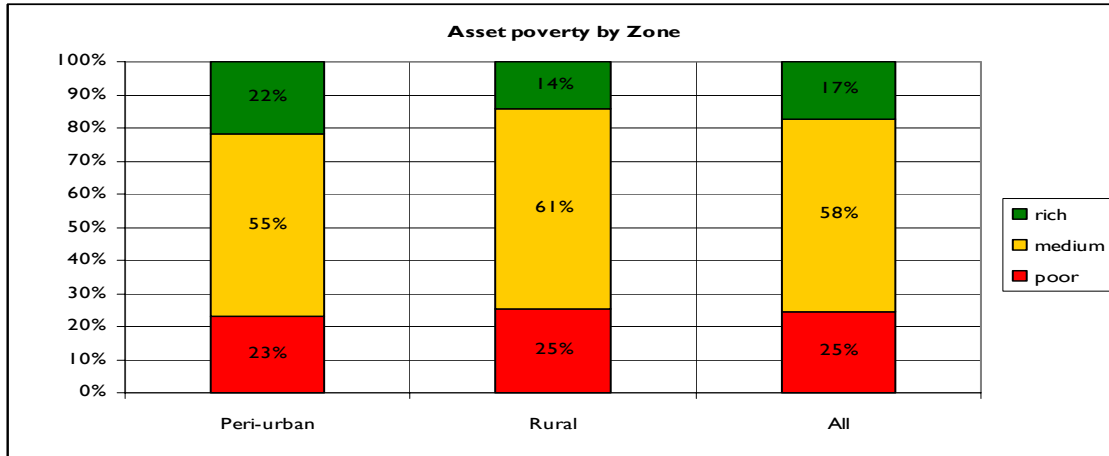
4.5.4. Possession of Assets

4.5.4.1 Productive and Non-productive Assets

The survey collected data on asset ownership from each household (21 assets, both productive and non-productive). The data was then analysed considering whether the households own that particular asset or not. Then households were classified as asset 'poor' (0-4 different types of assets), asset 'medium' (5-9) or asset 'rich' (10 or more).

According to the Diagram 22, the AFs in the semi-urban areas show slightly better conditions than those in the rural areas. However, in the general calculation, the sample shows that 17% are considered rich, 58% are in the average situation and 25% are poor, with the category "poor" showing large variations between the rural and urban areas. The study shows that the possession of goods is related to the quality of house, food consumption and the proportion of monthly expenses on food. AFs with few possessions show a poor food consumption and spend more on food.

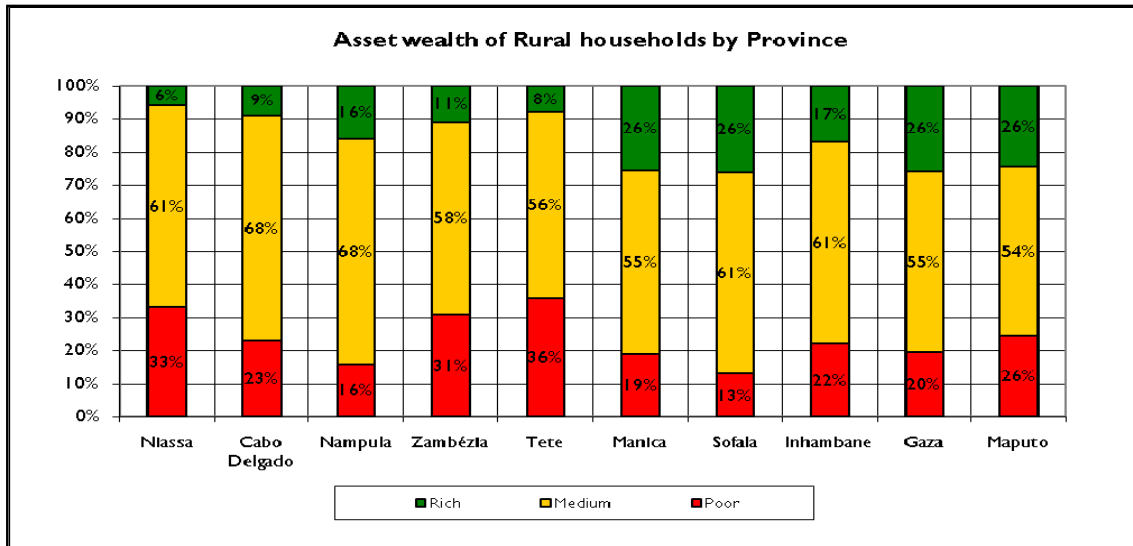
Diagram 22: Poverty in terms of assets per area



Concerning the rural areas per province Sofala showed the smallest proportion of AFs with a low possession of assets while Manica, Sofala, Gaza and Maputo showed the highest proportion of the richest AFs.

In all provinces, the proportion of AFs with average possession of assets is above 50%.

Diagram 23: Wealth Ranking in terms of assets in the rural areas, by province.



Possession and Selling of Animals

The possession and selling of animals play an important role for households, because animals are both a source of protein, when consumed, and income when sold, and in the case of cattle they may also serve for animal traction in agriculture.

Analyzing the dynamics in selling animals in the last three months before survey, the data show that few households sold animals, that is, about 8% sold poultry, about 6% sold at least one goat, sheep or pig, and less than 1% sold at least one head of cattle.

Looking at by provinces, Tete (10%), Manica (11%), Inhambane (13%) and Sofala (17%) shows the highest percentage of AFs who sold poultry, whereas the provinces of Maputo and Niassa showed the lowest percentage, of about 3%.

Concerning the selling of goats, sheep or pigs, the provinces of Tete and Manica stand out with both 12% and Sofala with 13% of the AFs.. Afs engaged in selling animals stated that they did so to: meet daily expenses (55% for poultry and 48% for goats), buy food (30% for poultry and 33% for goats) and pay for emergencies (16% for both).

4.6. Suitability of Food

Being access to food one of the basic human right, the ESAN indicates the importance of reducing the use of extreme survival strategies⁴ at AF level, as a way to ensure human dignity. Concerning this pillar, the frequency and severity of the AFs' exposure to food stress were analysed.

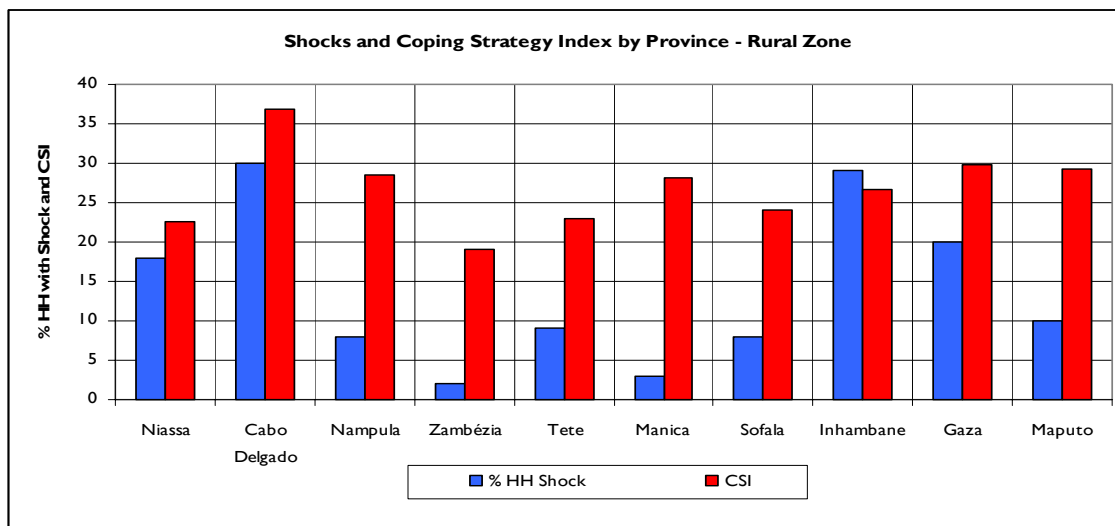
The analysis shows that 11% of the AFs stated that on certain occasions was exposed to the situation of not have sufficient food or were unable to cover their essential expenses during the last 12 months prior survey.

The Coping Strategies Index (CSI) measures the frequency and severity of a number of common household coping strategies⁵ for addressing shortfalls in food supply and combines the information into a single CSI score.⁶ And illustrates the dimension of food scarcity. On average, the CS⁷ scores remained on 25, with lower scores in the semi-urban areas (24) in comparison with the rural areas (25.7).

The analyses illustrated in Diagram 24 show that AFs in the provinces of Cabo Delgado, Gaza, Maputo, Nampula Manica and Inhambane are using more survival strategies (over 25), whereas the CSI is lower in the province of Zambézia.

The AFs in the provinces of Sofala, Gaza and Maputo had a relatively high CSI level, but an very low level of shocks. The province of Cabo Delgado had the highest percentage of AFs reporting shocks that might affect the FNS, followed by Inhambane, Gaza and Niassa. AFs in Zambézia and Manica appeared to be less exposed to low level.

Diagram 24: Shocks and Coping Strategy Index – Rural Areas –



⁴ Refers to the venue used by AFs to mitigate, minimize or eliminate effects of food stress that they may be exposed to.

⁵ Coping strategies assessed: skipping meals, reducing portion sizes, reducing the number of meals, borrowing food, eating less preferred foods, eating wild foods, eating immature crops, begging and engaging in casual labour.

⁶ Coping strategies assessed: skipping meals, reducing portion sizes, reducing the number of meals, borrowing food, eating less preferred foods, eating wild foods, eating immature crops, begging and engaging in casual labour.

⁷ When CSI scoring is low that means that AFs were exposed to low level of food stress and were able to meet their food needs which means that they were within the acceptable parameters for food security..

5. Ongoing FNS Interventions

5.1. Favourable environment

Various Government Development Plan are on place, among of which it maybe highlighted: the Action Plan for the Production of Food (PAPA), the Rainy Season Contingency Plan, The Food and Nutritional Security Action Plan (PASAN), the Food Subsidy Programme, School Gardens, the Economic plan for District Development (PEDD), the rehabilitation and construction of infrastructures all of which have brought upon a favorable environment not only to reduce vulnerability and occurrence of hunger pockets in the country, but also improvement of the livelihoods of the populations, in particular those social groups who are most vulnerable to food and nutritional insecurity.

5.2. Investment Trends per FNS pillar

5.2.1. Availability

The Ministry of Agriculture distributed seeds (e.g. 125 tons of potato, 698 tons of rice, 1.379 tons of maize and 1.197 tons of wheat seeds); distributed 50 tractors, and assisted 208.000 producers, which allowed for a production and productivity increase in the 2008/09 agricultural campaign.

For the 2009 – 2010 agricultural season, MINAG plans to acquire and distribute about 125 tons of maize seed and 40 tractors.

The Institute for the Development of Small-Scale Fishery has implemented several integrated programmes for fishing in the coastal areas; promotion of fishery in the interior; aquaculture; conservation techniques and credit. These programmes are aimed at improving food and nutritional security, generating income. In addition these programs also contribute to the improvement on the quality of basic services, namely the construction of schools, health posts, water holes etc. The NGOs have also played an important role by undertaken various actions for the development of agriculture and livestock breeding.

5.2.2. Accessibility

Activities underway such as: rehabilitation of the commercial network; construction of silos and bridges; improvement of maintenance and repairs of main railroads and waterways have provided a new dynamic in the circulation of people and goods in all regions in the country. This has had a direct impact on the transaction cost particularly with respect to consumer and other basic goods.

Definitely, market performance is much better compared to the results presented under baseline study and the current evaluation indicates that 70% of the villages visited have markets operating in a good condition..

As per construction of silos in the provinces of Sofala, Zambézia and Nampula, with a capacity of 18 thousand tons. Such event, for which the MIC is in charge, will enhance food reserve capacity for the country and reduces post-harvest losses (currently around 30-40%).

5.2.3. Use/Utilization

Activities carried out by the MOPH and its partners with respect to construction of water wells and holes have improved household access to this precious liquid. More than 65% of the AFs declared that they are spending less than 30 minutes to fetch water for consumption, according to the results of the present evaluation.

With respect to cholera, the MISAU in coordination with its cooperation partners undertook the treatment of water in areas affected by the cholera outbreak; in addition they have carried out monitoring activities and provided treatment to people ill with cholera.

The interventions developed in the area of nutrition were:

- Nutritional education for the population in the Health Units and communities including high profiles related to the dissemination of issues related to sanitation.
- Provision of Vitamin A supplements to children of 6-59 months, iodine in the provinces of Tete, Zambézia, Nampula and Niassa and de-worming of children of 12-59 months and iodine supplementation for women after giving childbirth;
- Treatment of serious malnutrition, within hospitals, with supplements of therapeutic milk and PlumpyNut; and
- Provision of ambulatory supplements, namely PlumpyNut, CSB and enriched porridge, to children with moderate malnutrition, in the community.

5.2.4. Humanitarian Assistance

The Government in partnership with WFP has implemented food aid program through two venues, namely Recuperation and Relief, and through the “Recuperation and Relief Programme” - PRRO.

The Relief component aims at satisfying food needs as per SETSAN's recommendations under Vulnerability Analysis Group (GAV). For this programme, the WFP jointly with its partners assisted about 189.836 people from October 2008 through May 2009, having made available about 19.463 tons of food.

The a Recuperation component has the following aim: response to the need to generate goods for the community as a way to mitigate the effects of natural disasters (protection and promotion of livelihoods); assist needs for people living with HIV and AIDS, vulnerable children, as well those with health and nutritional problems; in addition still support to the coordination and implementation of others programs carried out by various sectors with respect to the issues mentioned above (MISAU, MMAS and INGC). This component covered 131.000 beneficiaries from October 2008 to May 2009, corresponding to 15.650 tons of food.

In order to enhance and stimulate national production, the WFP has been promoting the local purchase of food, and, in that capacity, has purchased about 37.500 MT since 2008, valued at about USD 15 million. The products bought locally include maize, maize flour, vegetables and vegetal oil.

Mapping of Vulnerability to FNiS

In order to assess vulnerability to Food and Nutritional Insecurity (FNiS)⁸ the following indicators were taken into account: food reserves, income sources, food consumption, survival/coping strategies, shocks and possession of productive assets.

6.1. Number of people vulnerable to FNiS

The number of people exposed to and at of FNiS is approximately of **281.300** (Table 1). It was estimated based on the assumption FSN has not deteriorated in the country since last forecasts done by by SETSAN in June 2009. In fact, on the contrary, the results presented in the preceding chapters indicate that there has been a generalized improvement in food consumption among AFs throughout the country.

Table 1: Number of people in acute FNiS.

Provinces	Nr. of people in acute FNiS
Niassa	
C. Delgado	
Nampula	10.594
Zambézia	21.079
Tete	72.320
Manica	17.780
Sofala	57,687
Inhambane	43.107
Gaza	36.421
Maputo	22.305
Total	281,293

Thus, the number of people in an extreme FNiS conditions was estimated by taking into account the following:

- AFs who are using more often the extreme/severe coping strategies;
- AFs showing poor consumption;
- AFs poor in productive assets;
- AFs with one single source of income ;
- AFs with cereals reserves for one month, and
- AFs suffering from natural shocks.

The criteria used to identify AFs at risk it was considered only people under the most vulnerable livelihoods⁹, among of which those with food reserves for more than 3 months, receive remittances, charity, food assistance and have precarious income sources and practice such as: *ganho-ganho*, the selling of homemade alcoholic beverages, handicrafts, etc.

The provinces of Niassa and Cabo Delgado do not present people in a situation of food insecurity, notwithstanding the fact that these two provinces show poor diversify of diet. Still permanent monitoring is required for these cases.

The spatial distribution of the population in extreme acute FNiS per district is shown in Annex 1.

⁸ Vulnerability to acute FNiS refers to the temporary lack of access to food and is frequently caused by the unexpected occurrence of a setback, such as drought, floods, cyclones, an abrupt decrease of food production or an abrupt price increase, the occurrence of cholera, malaria, red grasshopper, etc.

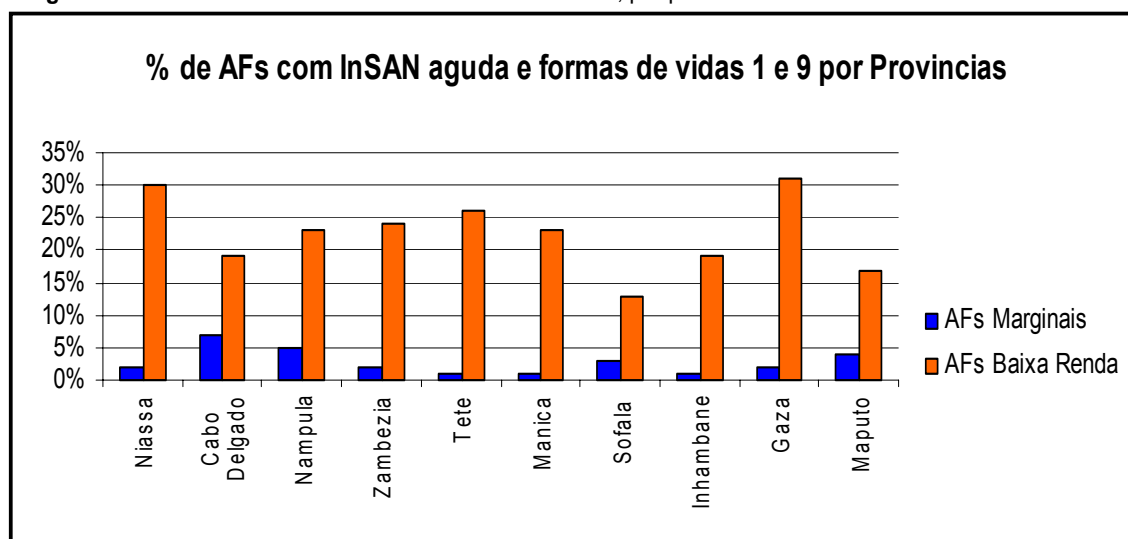
⁹ Livelihoods refer to relatively homogenous AF groups which have been formed on the basis of their activities, income sources, sources of consumed food. The nine groups analyzed in this report were limited by this definition.

6.2. Categories of Livelihood Groups

Livelihood conditions as well as demographic characteristics were the two elements brought upon to help refine the identification criteria of AFs in a situation of extreme FNiS.

The data show that 1,30% of the total AFs interviewed are the most affected by acute FNiS and are under highly vulnerable conditions. When analysed by livelihood groups, 23.1% of AFs within G1 is under such conditions followed by 13% within G9. Graph 25 illustrates further spatial distribution of these vulnerable groups within the two social livelihood categories.

Diagram 25: % of AFs in acute FNiS and livelihoods 1 and 9, per province.



For the description of the vulnerable AFs, especially of the Livelihood Groups (Marginal AFs) and G1 (Low income AFs) the following characteristics were taken into account:

- AFs showing a high effective dependency rate; and
- AFs within G9 dedicate themselves more to production and those of G1 more to informal labour and subsistence agriculture.

6. The FNS situation per Province

7.1. Cabo Delgado

The 2008/2009 agricultural campaign registered a production of 419.137 tons of cereals (maize, millet, rice and baby corn), as against 320.297 tons of the previous campaign, corresponding to an increase of 31%, 143.980 tons of legumes and 968.223 tons of tubers (cassava and sweet potato).

Vegetable production was 3.866 tons, as against 3.018 tons of the previous campaign, corresponding to an increase of 28%.

Animal breeding is significant and has a positive influence on the AFs, ranging from consumption, sales and the realization of ceremonies.

The **availability of food improved** in comparison with the previous period, due to the recent harvests, offering a minimum consumption period of **4 to 12 months** in some areas. The province is self-sufficient in maize, cassava, beans, groundnut, millet, baby corn and fish.

The markets have sufficient and diversified products. Prices are high, which affects the buying power of the AFs, especially of the most vulnerable.

The INAS, by means of various programmes, provides social assistance to vulnerable groups.

Despite the evolution in terms of new sources, water in the rural areas continues to pose a problem, due to the long distances and the time required to reach water sources, which varies between 2 to 6 hours. The water coverage rate in the province is 61.6%.

The **nutritional situation (vigilance)**, in the province: according to the data referring to March, April, May and June of 2009, the nutritional indicators did not show much fluctuation.

Food diversity is poor, despite the abundant production of various crops. However, there are improvements with respect to the cases of **acute and serious malnutrition**.

7.2. Niassa

The rains were regular and growth of food and commercial crops is satisfactory. In general, production has been larger than the last agricultural season, so that the food consumption is secured for a period of 7 to 12 months (next campaign). An increase of more than 100% was reported in the production of meat, with the exception of chicken. Registou-se uma subida em mais de 100%, na produção de carnes, excepto frango.

Poor production in the districts of Lago (village of Metangula) and Marrupa (seat of the district) is related to the deterioration of the soils due to their intensive use. Land is generally not constituting a constraint for the AFs, although most possess very small areas, of between 0,5 and 1.5 hectares.

In some localities (above all in the districts of Lago and Sanga), the AFs face difficulties in expanding their areas due to the occupation of land by some reforest projects. Taking into account the INAM's forecast for the rainy season, the 2009/10 agricultural campaign looks promising.

The good existing pasture conditions contribute to the breeding and development of various kinds of animals. Animal breeding reported improvement, despite the fact that its economic value is not being recognized.

Although animals able to help in preparing the land do exist, the use of animal traction is zero. Diseases like Newcastle, and ticks and lice are reported. The practice of burning vegetation continues to be a preoccupation, especially during the period when land is being prepared, despite the awareness campaigns realized by the committees and the local authorities to manage these fires.

In general, food is **available for the next 7 to 12 months** (next campaign), provided the producers do not engage in uncontrolled marketing of their surpluses. The districts of Marrupa and Lago expect a deficit in availability of cereals for the next 2 months (till November). Seeds are guaranteed, taking into account the own production, the local market, input fairs and the provision through SDAE and/or NGOs.

As far as food reserves are concerned, the districts of Nipepe, Cuamba, Mecanhelas, Ngauma and Sanga have the best conditions, while those in Marrupa and Lago are less good. It is estimated that between 80 to 97% of the AFs have reserves for more than 4 months, 3 to 30% for 3 to 4 months and 50 to 60% for less than 1 month (especially in Marrupa and Lago).

The markets have sufficient quantities of necessities. Prices are high, owing to the increases in the supply centers. It is expected that the situation will deteriorate in the coming months, reaching a low in the period of November to February 2009. The FNS situation is stable, but there are pockets of FNiS, especially in the districts of Marrupa and Lago, where 60 AFs are at risk.

The communities do not have social protection networks, except in the agglomeration of Burunde in the district of Sanga, where vulnerable children are being supported through the distribution of food products and by means of a field cultivated for the production of food.

Among the formal interventions set up by the Government and NGOs stand out: assistance of 5.912 families within the context of the various social protection programmes by the INAS, the distribution of mosquito nets, home care for the sick, nutritional education and access to medicine, distribution of seeds and agricultural inputs, water supply, construction of improved latrines, promotion of associations in the communities, sanitation and HIV and AIDS.

The main water sources are: waterholes, small water supply systems, rivers, wells and springs. The water quality is good.

The populations use traditional latrines, with a trend to change to improved latrines, due to the intervention of some NGOs.

The most frequent diseases are malaria, diarrhoeas, sexually transmitted diseases, prolonged cough, conjunctivitis, epilepsy and umbilical hernia.

The **nutritional situation in the period under analysis is reason for alarm**, in particular the low birth weight indicator. The consumption of animal proteins and diet diversity are poor.

7.3. Nampula

The production of cereals increased 16%, of legumes 20% and of tubers 9%. It is expected that production of the 2nd season, the present campaign, will be good. The FNS will be stable until 2010, except in Mossuril, Mogincual and Memba. The practice of uncontrolled burning of vegetation remains worrisome.

In general, the number of animals tends to grow and health conditions are continuously improving in almost all districts. It is estimated that more than 93% of the families possess at least three goats and each family has on average six to eight chickens. The main animals are goats, poultry and cattle. The quality of pasture and water for drinking remain acceptable.

Most districts have food reserves for more than 7 months. **In general, the FNS situation remains stable**, and the use of extreme survival strategies has significantly been reduced. The most vulnerable groups continue to be children, the elderly and women. Another group standing out are sex workers.

The prices of agricultural products, above all of cereals, increased considerably, between 40 to 50%, in periods of shortages. The markets have sufficient quantities of necessities (cooking oil, soap, sugar and salt) and reported price rises in the course of the last six months. Informal vendors dominate the markets.

The INAS provided social support to about 1.399 people, namely women, the elderly, disabled people and chronically ill, by means of the programmes for Direct Social Support, Food Subsidies and Income generation, Community Development and social Benefits for Work.

In general, the districts in the interior continue to feel the chronic problem of water shortages, the AFs walk long distances to fetch water. The quality is not good and it is not suitable for human consumption.

The most common diseases in most districts are tuberculosis, malaria and hernia. Most districts do not report cases of malnutrition.

7.4. Zambézia

The 2008/09 agricultural campaign is characterized by a late start of the rains, in particular in the low-lying areas. Registered precipitation in the months November to January was poor, dispersed, seasonal and insufficient for the development of the crops, especially of rice in the districts of Namacurra, Nicoadala, Inhassunge, Mopeia and Chinde.

From the 1st ten days of February onwards, precipitation was partially sufficient for the recuperation of some crops, with the exception of rice, which already had entered in hydroid stress.

An area of 1.214.607 ha of various crops was planned in the 1st and 2nd season, 1.262.659 ha were cultivated, which produced 3.347.916 tons, 3.319.426 ton of which 680.252 tons were cereals and 2.456.404 tons tubers.

Food reserves increased in comparison to February and are sufficient to feed the population until the next harvests. In terms of availability, the province does not have a food deficit. Meanwhile, due to specific climatic conditions in some places and the unfettered selling of maize and beans, **localized scarcity of food** may occur in the districts of Chinde, Morrumbala, the Chire River valley, Inhassunge and Mopeia, from January/February onwards. All in all **the nutritional situation in the province is good**.

7.5. Tete

Precipitation during the 2008/09 agricultural campaign was good, which contributed to the production of food in quantities that satisfy the needs of the AFs.

The districts with signs of FNiS are Magoé, Cabora-Bassa, Changara and Mutarara.

The province managed to **improve some FNS aspects**, taking into consideration that some second season crops, the populations are harvesting, which will offer the populations more stability, provided they hold on until the end of the campaign

7.6. Manica

The 2008/09 agricultural campaign was better than the previous one. The production of cereals reported a 20% increase, that of legumes 27% and that of tubers 7%. The total cereals production was 904.033 tons, which represents an increase of 134.743 tons in comparison to the 2007/08 campaign.

Production of the 2nd season of the ongoing campaign is expected to be good, and **the food situation will be stable until January**. Despite this, in the districts of Machaze, Guro, Tambara and Macossa, some AFs may take recourse to barter or other means to obtain food, which is why permanent monitoring is recommended.

In general, the number of animals is on the increase and their state of health is improving continuously. It is estimated that more than 88% of the families possess de families possess at least three goats and each family has on average six to eight chickens..

The general condition of cattle is good, despite the scarcity of rains in some districts. Sporadic losses of animals due to infestation by ticks have been reported in the districts of Bárue and Manica.

Meanwhile, an animal vaccination campaign was realized in February and March, including vaccination against Newcastle.

There were no problems reported concerning pasture and water for the drinking of animals, despite the effect of uncontrolled burning of vegetation.

The availability of food and reserves will be enough for 2 to 4 months, for most AFs in the province.

The FNS situation generally remains stable. However, hunger pockets may be reported in Machaze (Chipopopo and Chipudje), Macossa, Guro and Tambara during the next 2 – 4 months, which may be minimized by taking recourse to other sources for the purchase of food (buying, bartering or remittances).

The markets have sufficient quantities of necessities (cooking oil, soap, sugar and salt) and reported significant price rises in the course of the last six months. Striking is the availability of agricultural products on the markets. The prices of agricultural products, especially of cereals, increased considerably, with about 50%.

The INAS assisted about 4.246 people, through its social assistance programmes in the province.

In general, the quality of water varies from good to bad. Compared to the first months of the year, the water quality tends to deteriorate. Despite the growth registered in terms of water sources, these continue to be wanting.

The average distance continues to be more than 7km, with streams, rivers and traditional wells being the mains sources in the rural areas.

Malaria, diarrhoeas and HIV/AIDS are the most common diseases. Cases of malnutrition have diminished in most districts.

The districts of Machaze, Bárue, Macossa, Guro and Tambara present **high indications of malnutrition**.

7.7. Sofala

The second season of the 2008/09 agricultural campaign showed positive results, with increases in the production of vegetables and legumes, albeit not enough to satisfy all food needs, especially in Chemba, Maringué and Machanga.

Livestock breeding improved and pastures are available. Prices of animals remain stable, compared with the same period of last year.

Food is available for a period of 6 months, taking into account the expected cereals production. Due to dryness, the man-animal conflict, pests and uncontrolled burning of vegetation in some areas of the districts of Cheringoma, Chemba, Caia, Maringué, Machanga, Chibabava, Muanza and Dondo, there may be a disruption in food stocks for AFs from November onwards.

The situation of the markets in the districts is not satisfactory, except in the district seats and in some localities where there are shops/market stalls. The prices of necessities vary, depending on the transport costs.

Distributed on credit were 455 tons of seeds of various crops, and 12,8 tons of seeds of various crops were made available, together with 11.574 agricultural tools and instruments, by means of the agricultural input fairs.

Water sources are close to the AFs, meanwhile, during the dry season people from some hamlets walk between 20 and 25km to fetch water.

The AFs from some localities consume water from puddles and traditional wells, because water from holes is salty.

Sanitation continues to be a major problem for the AFs, because most of them do not use latrines. The most frequent diseases are: malaria, diarrhoeas, tuberculosis associated to HIV/AIDS, scabies, bilharzia and chronic malnutrition. The nutritional situation of children is acceptable.

In sum, the **situation with respect to food and nutritional security in the province of Sofala is good.**

7.8. Inhambane

Due to regular rainfall (registered from 10 December onwards), associated with inputs being made available on agricultural fairs, the agricultural campaign has been good, except for some areas in the districts of Panda and Funhalouro, owing to rains being irregular and poorly distributed. In the second season especially, vegetables contributed significantly to the improvement of the FNS.

Livestock breeding is good, because there is an evolution of the number of animals and there were no outbreaks of diseases. Meanwhile, cases of Newcastle have been reported in poultry, mainly chicken.

In general, all visited districts will be stable in terms of availability, access and utilization of food, till October. The visited districts have food reserves until October. After this period, some areas of these districts may experience temporary FNiS, in particular areas in the districts of Inhassoro, Govuro, Vilanculo, Panda, Mabote, Funhalouro, Homoine, Jangamo and Zavala.

The local markets do have basic products to satisfy demand. However, due to the high prices associated with the global financial crisis, access is limited because of the limited buying power of the most vulnerable AFs in particular.

The transport and entry of products in the agglomerations are wanting, because of the precarious condition of the access roads, except for those near the seats of districts.

The quality of water tends to improve and a significant increase in the number of sources of drinking water is reported. The main sources are holes, protected and unprotected wells and tanks.

The most common diseases in the period under analysis are: malaria, tuberculosis and HIV/AIDS. Problems with malnutrition were registered in the district of Jangamo, due to food habits.

7.9. Gaza

Rainfall during the period of March to August was above normal in the north of the province and normal in the remaining districts, except for Guijá and Bilene, where it was below normal. The 1st season produced 1.518.000 tons of various products.

In general, the animal population did not show significant changes as compared to the same period of the year before. Nevertheless, the number of cattle in the south, especially in the districts of Chókwè and Guijá, showed a considerable increase. Meanwhile, the cattle is in need of water.

In the north, in the districts of Massangena and Chicualacuala, food reserves may last some 3 months. In Chigubo and Mabalane, due to poor production, cereals may be exhausted in the next two months.

In the south, except for the northern part of the district of Guijá where the present agricultural campaign did not lead to good results, cereals reserves may last until the next agricultural campaign.

Considering the duration of food reserves in the districts of the north, the situation might deteriorate, especially in the south of the districts of Chicualacuala, Mabalane and Guijá.

In the agglomeration of the northern districts (Chicualacuala, Mabalane, Chigubo and Massangena), with the exception of the villages, market dynamics are poor. Prices of products in the north are the highest of the province.

The markets are most dynamic in the southern districts (Chibuto, Manjacaze, Xai-Xai and Chókwè), which turned into suppliers for the remaining districts of the province. Prices are low, both for agricultural products (maize, cassava, vegetables) and for manufactured products (sugar, salt, pastas, etc.)

The INAS assisted 8.037 people through the social assistance programmes in the course of the first half year.

Water for consumption is a major preoccupation, especially in the districts from the north. The population shares the water sources with cattle. Not having an alternative, they drink unclear water that has not received any treatment.

Between January and June, the district of Chicualacuala registered the most critical level (12,8) with respect to low birth weight, followed by Chibuto with 9,7. Massingir was the district with the lowest percentage (3,9).

7.10. Maputo

The rains started in October 2008 in the province of Maputo, and registered an accumulated 537.81 mm. From the total of 192.516 tons planned in the first season of the 2008/09 agricultural campaign, 100.697 tons were actually produced.

Despite the favourable agricultural situation, there are signs of food becoming unavailable in some families in the districts of Magude, Moamba, Matutuíne and Namaacha, from October onwards, and this may concern more than 15.000 people.

From the 4 districts, Magude with 7.500 people and Moamba with 2.500 people need immediate assistance and the other ones need to be monitored.

The state of health of the animals is very good, owing to the implementation of sanitary assistance programmes. Despite adverse climatic conditions, which affected pasture and the watering of animals, the number of animals increased with 10% for cattle, 30% for pigs and 21% for small ruminants, compared to 2007.

In general, food is available for most AFs, due to the good harvests of maize and beans in particular.

Seed reserves are guaranteed for the next campaign. It is estimated that 10% of the production of each family forms the seed reserve in each agricultural campaign, despite the difficult storage conditions due to the poor state of granaries, cultural reasons and the lack of training.

The markets in the district seats are well supplied with products. However, in the interior the markets are rudimentary, little dynamic and predominantly informal. In general, the growth of the markets is visible, but their dynamic is subject to the conditions of the access roads. The prices of basic products in the interior did not suffer significant variations.

The social protection network in the communities is still very fragile. The INAS assisted 6.868 people in the first six months of 2009, through its social assistance programmes. On the other hand, from January to June, about 30.000 people received free food aid from the WFP.

The main water sources in the province of Maputo are: holes with pumps, small systems, dams, rivers, wells and springs. Water supply is deficient, both in terms of quality and quantity. There are areas where water begins to be scarce, because of the lack of rain and/or the retreating water table.

Sanitation in the province is considered to be positive, in particular at community level. a. Meanwhile, the use and dissemination of improved latrines is still incipient. The main diseases are malaria, diarrhoeas, tuberculosis and rheumatism (in the elderly). HIV/AIDS continues to be a preoccupation in the communities.

Generally speaking, the nutritional situation is not alarming, but some care is needed with localized cases. None of the visited districts showed signs of malnutrition. The poor growth rate is 1.5% (when it is 16% the situation is alarming), while the low birth rate was 7.6%.

This rate (BPN) tends to stabilize, while the poor growth rate tends to register improvements in the course of the last three years.

7. Cenários

The scenarios analyzed here are based on the following **assumptions**:

- Price variations of basic food do not exceed 30%;
- Adequate humanitarian assistance covering more than 80% of needs;
- Regular start of rains;
- Incidence of shocks: droughts, floods, cyclones; and
- Steady current trend for source of incomes with respect to the most vulnerable AFs.

In the most probable scenario, most AFs throughout the country will generally have their food security guaranteed in the next six months. Nevertheless, it is estimated that 267.000 people will remain in a situation of food insecurity until the next harvests in April 2010.

Still within this scenario, further temporary needs may come up if a cyclone strikes and reach some districts in the coastal area and if severe or moderated floods occur in the low basin hydrographic areas..

Possible events that may shift changes on the scenario for the next 6 months are the following:

- Reduction on price of food ;
- Changes in animal prices;
- Limited humanitarian assistance; and
- Observance of Scenario 1 defined by the INGC¹⁰

The Worst Case Scenario will take place in case of: food prices rise more than 50%; rains start late; the beginning of the 2009/10 agricultural campaign is delayed and humanitarian assistance only covers 50% of the estimated needs. If such conditions are met ten, those people at risk may turn out to acute FNiS condition. This means that more than 267.000 people will be needed assistance not excluding possibility of further districts to be included besides those already considered.

A decrease on food prices could mean an increase in access to food through purchase in the markets, and benefit those AFs who are net buyers in to meet their food needs.

A decrease in the prices of animals may lead to a deterioration in terms of barter (cereal – animal), which will reduce access to food for households who own animals.

An inadequate humanitarian assistance would imply household's ability to meet their needs on food and/or inputs. Thus, they may become highly insecure in terms of food which may imply on deterioration of food insecurity levels.

Any delays on the starting of rainfall for the next main agricultural season may imply further increase on the period of shortages of food faced by households, delay on the availability of seasonal crops from next harvest besides water shortages particularly in the southern region .

¹⁰ Scenario 1 of the 2009/10 Contingency Plan: small-sized threats including: strong winds and rains, localized inundations, moderate drought, floods whose risk is considered low, and cyclones

Any outbreak of disease leading to restriction on movement of animals and by inference selling, would cause disruption on income sources for AFs, which would have implications on food security.

The coastal areas in all regions are at risk of being hit by storms and cyclones, which are prone to occur in this period, if we assumed that the cyclone season lasts from November to April. Severe storms, including cyclones of category 2 or higher, would lead to the following: Storms accompanied by intense rains and strong localized winds, causing significant damages to crops, trees and infrastructure.

The impact would be most severe in the coastal areas in the provinces of Inhambane, Sofala, Zambézia, Cabo Delgado and Nampula. Depending on the magnitude of the storm and timing that it strikes, can lead to household exposure to temporary risk of food insecurity, due to loss of food reserves and limited access to the markets.

Indicators to be monitored are

- Prices of basic foodstuffs;
- Prices of animals;
- Level of humanitarian assistance (number of beneficiaries vs. number of needy people); and
- Precipitation.

8. Conclusions and Recommendations

9.1. Conclusions

The results of the present evaluation reflect the actual FNS situation in the country from June 2008 – August 2009. The main conclusions can be summarized as follows:

- The evaluation showed that food consumption did not deteriorate, rather there has been FNS general improvement throughout all over the country. Nevertheless, there are still some FNIS pockets with about 267.000 people under extreme FNIS conditions;
- Diet diversity improved substantially, widely in all provinces.. The evaluation showed that at present only 11% of the AFs have a poor diet, while in 2006, 21.8% of those interviewed indicated a very poor diet. In general, 83% of the AFs enjoy an adequate diet quality. Gaza and Cabo Delgado are the provinces with the worst figures;
- The present analysis showed that the groups of AFs with only one income source have a larger proportion of households (12%) with poor consumption level, whereas those with two or more income sources have a small proportion of households (7%) experiencing such level;
- The absence of extreme climatic events and outbreaks of diseases. Nevertheless it localized cases of inundations, dryness and cholera did take place but all for which actions for mitigation were taken in a timely manner.
- The evaluation showed that the stability on food prices, and localized increases, have had a positive effect on farmers by improving their purchasing power

- In general, the provinces in the southern region present a higher proportion of households having reserves lasting up to one month. For these household, they must have alternatives for purchasing cereals and beans, such as purchasing power, remittances etc.. Otherwise, they will be forced to face a decline in the quality of their diet and start consuming low quality or cheap food, from October onwards;
- The 2008/2009 rainy season performed well with direct positive effect on harvesting for 2008/09 agricultural season throughout the country. This should also include good performance of the 2nd season which should be stood out;
- There were significant improvements on time spent to fetch water for consumption during the dry season, in all provinces. Most noticeable are the provinces of Niassa, Nampula, Zambézia, Manica, Sofala and Maputo, where more than 60% of the interviewed AFs spent less than 30 min;
- The ongoing diversified interventions in the country are contributing to the reduction of the vulnerability to FNiS. Among others, they include the distribution of various seeds, tractors, the construction of silos, technical assistance mainly led by the Government, the construction and rehabilitations of roads and bridges, social infrastructure (in particular water sources), the integrated IDPPE programmes, and finally the dynamic role of NGOs in the various activities carried out;
- Agriculture and selling agricultural products continue to be the main source of income (41%) for AFs, followed by ganho-ganho (28%), while few AFs reported to have employment (13%);
- The Agricultural Market Information System at MINAG indicates that food prices (maize, rice, beans, cooking oil, groundnut and other products) in September 2009 were relatively lower compared to the same period in 2008;
- .
- In general the survey results shows that, 70% of the villages covered had markets in a good conditions and operational and that, and the northern and central provinces have considerable quantities of maize and cassava for trade;
- The average costs of the basic minimum basket for a family of 5 were 6.380,00 Mts/month, while in October 2008 the same basket would cost about 3000 Mts. For those who buy industrially processed maize flour, costs were 5.556,00 Mts/month; esta conclusão precisa ser revista porque não foi mencionado no texto. Em nenhuma ocasião se mencionou o custo da cesta em Outubro 2008
- In general, the remittances and gifts received by households did not show changes in the period under analysis. The three southern provinces received more remittances, however, it should be noted that in the provinces of Niassa, Nampula, Maputo and Inhambane AFs received more remittances in the form of production inputs;
- The study indicated that the possession of assets is positively correlated with the quality of the house, the possession of animals, food consumption and with the proportion of monthly food expenditures . AFs possessing few assets show poor food consumption and spend little on food;
- Generally speaking, AFs in Cabo Delgado, Gaza, Maputo, Nampula, Manica and Inhambane used more intensive coping strategies (over 25), while the CSI was lowest in Zambézia;

- From the 9 livelihood groups, two were identified, namely groups 1 and 9, as those which seems to include the most vulnerable groups. These groups not only have the highest proportion of elderly and women as head of household, but also the highest proportion of AFs with a poor quality of diet, few or no alternative income source at all, a high proportion of AFs depend on food aid, and on gifts of and begging. In addition, these are the groups which also include a high proportion of chronically ill, children suffering from fever in the last few weeks; and
- In the most probable scenario, most households throughout the country in general, will have food security guaranteed in the next six months. It is nonetheless estimated that **281, 300 people** will remain at risk of food and nutritional insecurity until the next harvests in April 2010.

9.2. Recommendations

The main recommendations of the present evaluation indicate in general that one should:

- Ensure immediate humanitarian assistance for 267,000 AFs in a situation of extreme acute FNiS for the period from October 2009 through March 2010, in addition to the need for monitoring population at risk;
- Ensure that humanitarian assistance is directed towards the most vulnerable livelihood groups, namely the AFs of Groups 1 and 9, until the next harvest; and
- Monitor the FNS situation in the country so that the worst case FNiS scenario does not occur. If this scenario does happen, then it is necessary to provide humanitarian assistance to 1.30% of the Mozambican population at risk, described in this report.

The following recommendations per thematic area are highlighted:

Agriculture:

- Promote the conservation of food, including the treatment of harvested products in the AFs' granaries, taking into account the fact that production is high and that humidity this year is higher, which is a favorable conditions for higher post-harvest losses; and
- Support farmers and producers with improved technologies (preparation of the land, quality seeds, phytosanitary treatment, fertilizers, etc.).

Markets and Prices:

- Stimulate adequate selling and conservation (in silos, improved granaries, etc.) for the agricultural products, in particular maize and cassava, in the surplus provinces of the Centre and North;
- Monitoring prices and the market performance for basic food stuff including selling and transport, with special attention to the linkage from surplus to the deficit areas;
- Promote local purchases in surplus areas; and
- Promote local purchases of maize, cassava and beans in the surplus areas as a way to stimulate farmers and producers to intensify food production.

Water and sanitation

- It is urgent to promote sanitation programmes throughout the country, because the evaluation indicates that more than 90% of the interviewed people live in a precarious sanitation environment; and
- Proceed with the programmes to increase the number of water sources and ensure the availability of water in some districts prone to droughts in the provinces of Maputo e Gaza.

Social protection

- Proceed with the social transfer interventions (money vouchers, seeds, and school material).



9. ANNEXES

10.1. Anexo 1.

1. Acute FNIS population per District

Province	District	FNIS Popul. 2009
Maputo	Magude	5,405
	Matutuine	6,863
	Moamba	5,748
	Namaacha	4,289
	Total	22,305
Inhanbane	Funhalouro	13,120
	Govuro	5,623
	Mabote	9,371
	Homoine	4,839
	Massinga	4,531
	Panda	5,623
	Total	43,107
Gaza	Chicualacuala	6,890
	Chigubo	9,844
	Chibuto	9,844
	Mabalane	9,844
	Total	36,421
Sofala	Chibabava	5,687
	Cheringoma	24,375
	Chemba	14,625
	Machanga	13,000
	Total	43,062
Manica	Tambara	3,620
	Macossa	2,386
	Guro	2,620
	Machaze	9,160
	Total	17,786
Tete	Changara	17,016
	Cahora Bassa	8,508
	Mágoe	12,762
	Mutarara	34,033
	Total	72,320
Zambézia	Inhassuge	4,540
	Morrumbala	3,783
	Mopeia	6,228
	Chinde	6,528
	Total	21,079
Nampula	Mossuril	2,572
	Mogincual	3,471
	Memba	4,552
	Total	10,594
Total		281,293