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IMPACT EVALUATION

Evaluation of the Impact of Food for Assets on Livelihood Resilience in Senegal (2005 – 2010)

A Mixed Method Impact Evaluation

Vol. I - Main Annexes

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Annex 1. Summary IE FFA Phase II Terms of reference

Subject and Focus of the Evaluation

Foods for Assets (FFA) programmes form one of WFP's largest areas of investment over time. Measured by food tonnage, and level of direct expenses between 2005-2010, FFA programmes were the second largest of WFP's food distribution modalities, after General Food Distribution.

FFA programmes are intended to restore or build specific assets that contribute to livelihoods improvement, resilience and food security. Typical examples include rebuilding infrastructure, supporting access to markets, restoring the natural resource base, or protecting the environment, and reclaiming marginal or wasted land among others. Many FFA interventions also aim to reduce risk and increase the capacity of households to manage shocks.

Some FFA activities aim to improve impoverished and depleted natural environments by arresting soil erosion, reducing floods, increasing moisture into the soil profile, improving water management, and increasing vegetation cover, thus enhancing the land's capacity to withstand stresses without losing productivity. By improving the environmental base upon which many people depend for agricultural and forestry related livelihoods FFA can help strengthen the ability of food-insecure people to manage future risks and withstand shocks. If applied at a significant scale, FFA may also contribute to reduce climatic risks or foster adaptation of communities to climate change induced effects.

Not all food transfers conditional on work can be considered to be asset building. Some do not create durable productive assets, but rather address the immediate food insecurity of the participants by providing food for a non-asset producing activity. Some FFA activities may focus on lighter activities or simple repair of assets (such as in the case of low-technology, low-risk interventions). Where higher –technology, higher risk interventions are planned, more sophisticated and integrated approaches are needed that bring in the necessary technical capacity on the ground.

FFA in Senegal

WFP has been present in Senegal since 1964 and implemented Food for Assets activities since 1976. Senegal is subject to regular droughts, floods and salinization in coastal areas. Threats to food security include demographic pressure, poverty, locusts, low levels of food production, erratic rainfall, and low levels of education. Most rural households engage in subsistence agriculture, livestock husbandry and fishing, but agricultural production covers only half of the food demand. Obstacles to improving agriculture include erratic weather, deficiencies in water management, poor use of inputs, inadequate access to markets, the low value of agricultural products and soil degradation. Between 2002 and 2011, FFA took place under 3 Protracted Relief and Rehabilitation Operations and 2 Country Programmes designed to support communities to mitigate the effects of natural disasters and increase the long-term resilience of vulnerable people.

Objectives of the Evaluation:

The evaluation serves both accountability and learning purposes. The main objectives are to:

- Evaluate the outcomes and impact achieved so far (intended or unintended) by FFA on livelihood resilience;
- Identify changes needed to enable fulfilment of the potential impact of FFA on livelihoods resilience;
- Provide information about how FFA activities can be better aligned with new policies and guidance.

This evaluation is one in a series of five country evaluations to be carried out from 2012-2014. The evaluations will assess the medium term impact (impacts seen after 5-7 years) of past WFP operations where Food for Assets activities aimed to maintain or recover livelihoods and build livelihood resilience. In these evaluations *impact* is defined as the "lasting and/or significant effects of the intervention – social, economic, environmental or technical – on individuals, gender and age-groups, households, communities and institutions. Impact can be intended or unintended, positive and negative, macro (sector) and micro (household)." The evaluations will focus on creation or recovery of natural resource assets (soil, water, agricultural and forests) but also recognize the contributions of infrastructure and access assets to livelihoods resilience.

Users of the Evaluation:

Key stakeholders include those directly involved in the design and implementation of FFA projects including the FFA participants themselves. The Government of Senegal at the national and sub-national level is one of the key partners with WFP in the planning and implementation of FFA interventions. In addition, a number of cooperating partners, of which UN agencies such as FAO, international and national NGOs work together with WFP to implement FFA activities, provide agricultural inputs and technical assistance. Donor agencies that support FFA activities have a direct interest in the findings of the evaluation.

Evaluation Questions & Methodology:

The following three main evaluation questions will be addressed by the evaluations:

Question 1: *What positive or negative impacts have FFA activities had on individuals within participating households and communities?*

Question 2: *What factors were critical in affecting outcomes and impact?*

Question 3: *How can FFA activities be improved to address findings emerging from the analysis in Key Questions 1 and 2?*

The impact evaluation takes a mixed method approach. The four main components are:

- Quantitative survey of impacts at the household and community level;
- Qualitative assessment of impacts at the household and community level;
- Technical appraisal of assets and associated biophysical changes;
- Social and institutional analysis of networks and linkages.

Secondary data e.g. national household level surveys, census data and WFP monitoring data on inputs and activities will be used to complement primary data collected.

Roles & Responsibilities

The evaluation team, from the firm Baastel includes both internationally and nationally recruited members with a strong technical background in conducting independent evaluations of this nature. The team is complemented by a local company that will conduct the field surveys.

The evaluation is funded and managed by WFP's Office of Evaluation. Elise Benoit is the WFP evaluation manager for the evaluation in Uganda, and Jamie Watts is the WFP senior evaluation manager for the series of 5 evaluations.

Timing & Key Milestones

Inception mission: 8th-12th April 2013

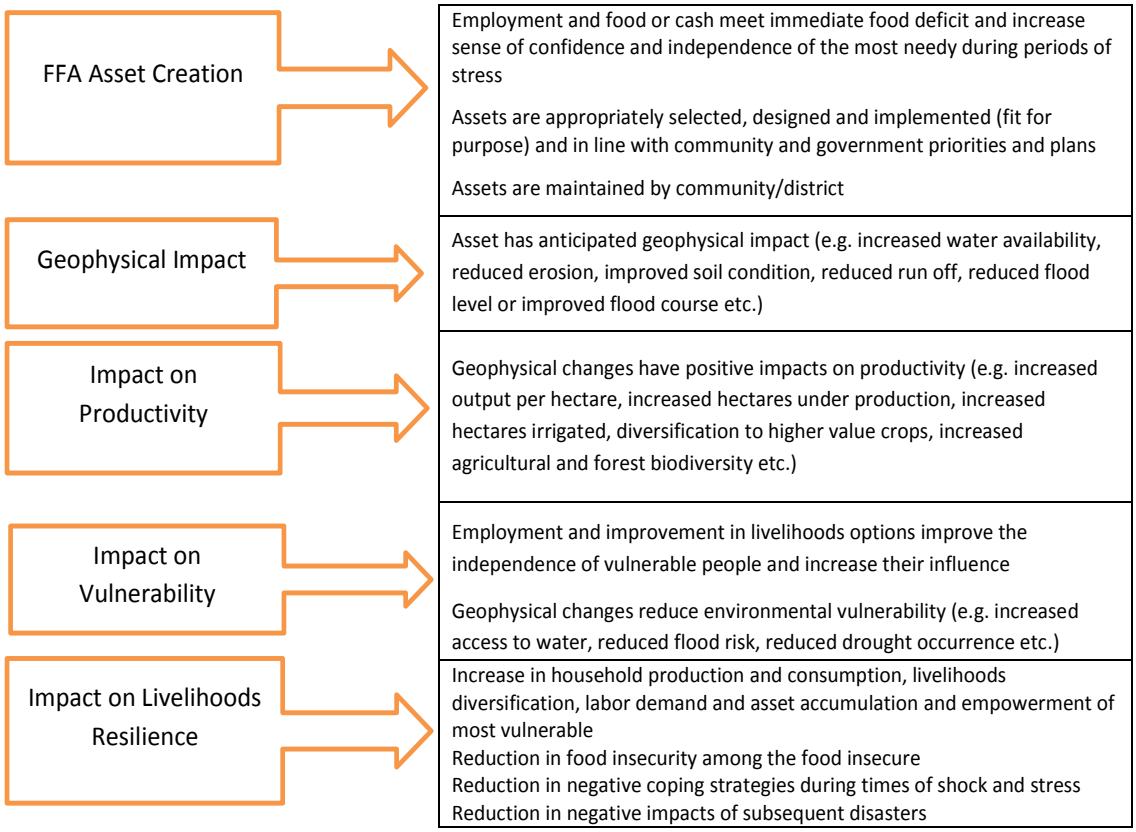
Evaluation mission: 12th May – 2nd June

Reports

- Draft evaluation report available for comment by September 2013.
- The Summary Evaluation Report will be presented to WFP's Executive Board in February 2014.

Annex 2. Summary of Theory of Change and Methodology

Simplified ToC for FFA



Source: ToR

Scope of the Impact Evaluation

The impact evaluation of the FFA work in Senegal focused on the three main separate, yet linked, projects implemented between 2005 and 2010 by the WFP Country Office in Senegal (WFP SEN CO) with a FFW/FFA component, namely: PRRO 10188.1 (2005 – 2008) and PRRO 10612.0 (2008-2011) and CP 10451.0 (2007-2011). Apart from the 3 key evaluation questions of the series, as requested by COSEN, consideration of the sustainability of assets in particular with respect to the impacts of climate change on vulnerable communities were also examined.

As set out in the Series TOR, the primary focus was on the NRM FFA and their impact on livelihoods in villages where these were implemented[1]. In the Senegal context, access assets and Village Cereal Banks (VCB) - which have become a substantial intervention modality in terms of volume in the WFP SEN CO since 2009 – were taken into account as contextual and contributing factors with potential direct

[1] In the context of Senegal, the term village is the lowest level of administration which the evaluation will address – this is where FFA was implemented and where the assets are located.

and indirect ramifications on livelihood development, land productivity gains and resilience-building for addressing food scarcity shocks during the lean season.

Baastel hired A&B Consulting of Dakar as the local firm to conduct the field data collection. The evaluation mission was conducted from May 15, 2013to June 4, 2013[2] but which extended through to June 21st for the field data collection. A training session for the A&B field data collection team, managed by the A&B local coordinator, was conducted from May 19 to May 21 in Thiès prior to the conduct of the field data collection which lasted from May 23 to June 21, 2013.

Sampling

This evaluation proceeded with a universe of 65 FFA programs/villages where assets reported by COSEN to exist. These programs were reported to have reached 13,820 participants across 14 departments and 7 regions. The impacts of created assets on geophysical and village characteristics were assessed using qualitative methods at the village level.

A **stratified** sampling was used to select villages for a representative examination by departments[3] and projects within which village assets were created. As well, a **purposive** FFA activity selection was used to ensure that the whole portfolio of the types/categories of FFA interventions was represented. Agro-ecological and livelihood zones were considered as these constitute part of the overall analysis.

Finally, as a means of locating the assets, a Reconnaissance mission was conducted by the two A&B supervisors (from May 15 to 18), prior to the actual evaluation to determine the existence of the assets and locate the villages to be surveyed. This exercise served to confirm the location of treatment villages (TV) and their assets in a first instance, and to identify/locate/validate the comparison villages (CV). The CVs were selected to be as similar as possible to the TV, the main difference being the lack of an FFA program to build an asset in their village. The main factor for comparison is geographic proximity as it maximizes possibility for similar agricultural conditions, similar climate and similar socio-economic conditions. Village demographics, the existence of other programs and natural resources, as well as the potential for spillover from FFA programs were also considered.

Table 1 below represents the final sample of surveyed villages based on population size following the Reconnaissance Mission. The method for determining sample size was developed by Baastel's statistician and verified for each village sample. As the reorganization of administrative boundaries in 2008 had changed the boundaries of villages which existed at the time of FFA implementation – these now had to be located within newly assigned administrative regions. The sample size in each village was determined by the parameters established by the Baastel statistician.

[2] The date which the field data collection was completed by A&B Consulting
[3] Departments also overlap quite closely with different agro-ecological zones, which will allow for another level of analysis in the final report.

Table 2.1. Final Sample of Villages Surveyed by Population size

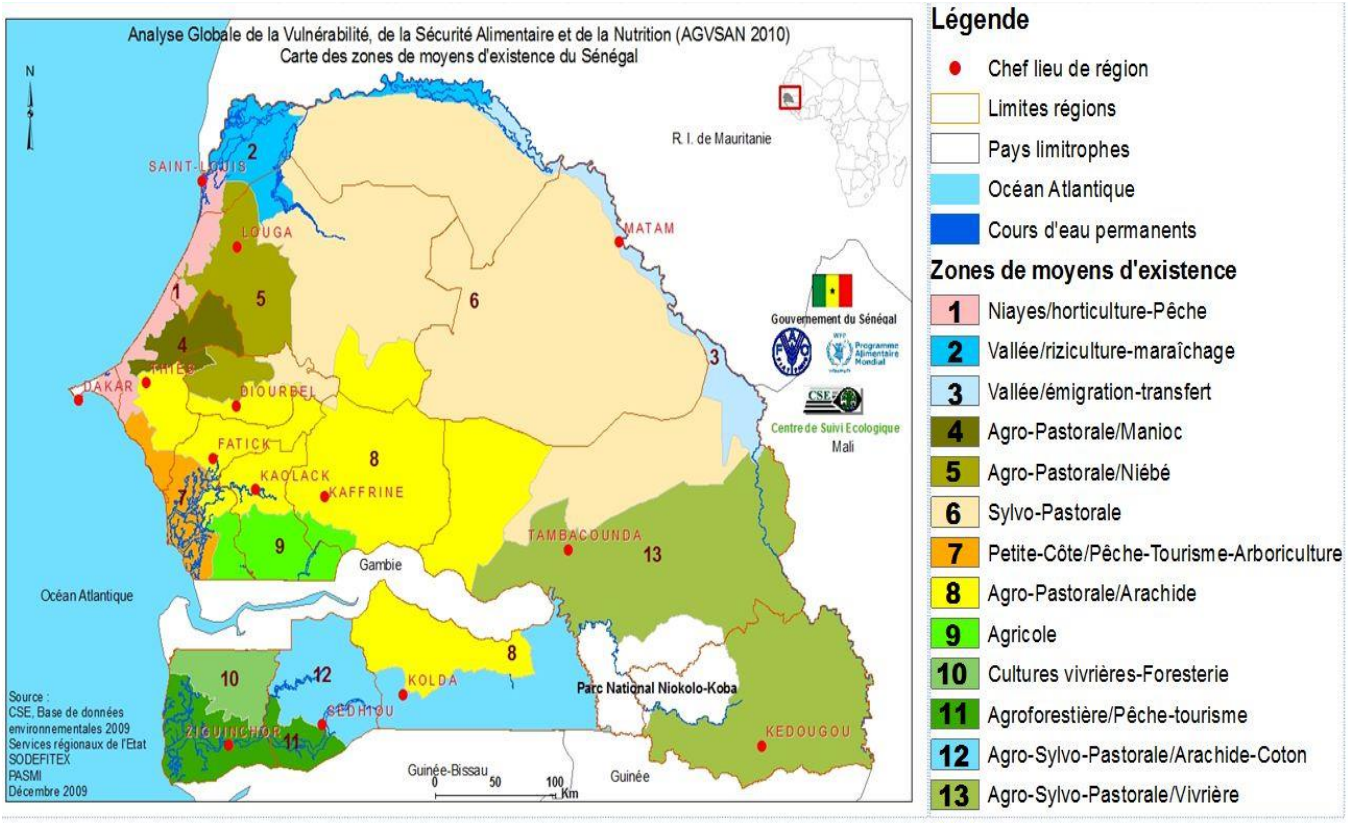
#	TREATMENT VILLAGE	POPU-LATION	# HH	SAMPLE	COMPARISON VILLAGE	POPU-LATION	# HH	SAMPLE
1	MISSIRAH MOURIDE	397	24	20	MISSIRAH PEULH	289	34	28
2	MABO1	1083	104	56	MABO 2	545	101	54
3	SAM THIALENE	223	14	14	SAM NGUÈYÈNE	276	15	12
4	MANKACOUNDA RIP	145	16	15	MAMBI WOLOF	167	20	18
5	KOHEL	459	60	42	PASSY RIP	720	50	35
6	TÉLLAYARGOUYE	1366	100	54	DIANÉ	2154	209	79
7	KEUR BABOU DIOUF	166	45	33	KEUR MALICK FADY	499	94	52
8	LOUGUERE FAFABE	889	106	55	LOUGUÉRÉ DIALLOUBÉ 1	175	21	19
9	LABGAR WOLOF	410	40	29	LOUMBEL KÉLÉLI	155	15	14
10	SYER 1	655	24	19	BINGUEL	251	21	20
11	TAÏBATOU	2800	300	86	GOUREL BARI	945	315 (est.)	124
12	KHOSSANTO	2132	231	49	MAMA KONO	2250	151	61
13	GOULOUMBOU	630	90	52	KOULARY	440	24	23
14	BODÉ	700	36	26	ELENA	719	132	59
15	TOBOR	3092	362	77	GUÉRINA	187	24	21
16	THIOBON	1386	166	83	DJIMANDE	719	94	59
17	KAYLOU	393	69	37	EDIOUMA	198	30	23
18	ÉDIOUNGOU	805	132	49	NIAMBALANG	876	56	41
19	HAMADALLAYE	399	57	30	TÉMENTO SOCÉ	665	37	28
TOTALS		**18130**	**1976**	**826**		**12230**	**1443**	**770**
FINAL SAMPLE TOTAL								**1596**

Household surveys reached in total 1596 persons located in both treatment villages [where beneficiaries and non-beneficiaries were interviewed] and comparison villages [where only non-beneficiaries were interviewed].

In total, **76 focus groups** were held, 38 in treatment and 38 in comparison villages. In each, half (19) were held with women and the other half (19) were held with men in both treatment and comparison villages.

The data collection was held in six livelihood zones as per the Figure 1 Livelihood Zones (2010) latest map: Zone 5: Agropastoral Cowpea; Zone 6: Sylvopastoral; Zone 8: Agropastoral Peanut, Zone 11: Agroforestry-Fishing Tourism; Zone 12: Agro-sylvopastoral/Peanut-Cotton; Zone 13: Agro-sylvopastoral/Food Crops, which provide an overview of the overall agroecological, production and market access. Annex 5C provides a description of the Livelihood Zones relevant to this evaluation. Figure 1 provides a map indicating the livelihood zones of the surveyed villages.

Figure 2.1. Livelihood Zones where the evaluation was conducted (Zones 5, 6, 8, 11, 12 and 13)



Source : WFP/FAO/SE-CNSA/CSE/FEWS NET. 2010. COMPREHENSIVE FOOD SECURITY AND VULNERABILITY ANALYSIS (CFSVA)

Table 2 presents an overview of villages sampled and their agro-ecological & livelihood zones.

Table 2.2. Sample Villages by Agro-ecological and Livelihood Zones

#	Region, Department, Arrondissement Rural Commune	Treatment Village	Comparison Village	Agro-Ecological Zone	Livleihood Zones	# Livelihood Zone
1	TAMBACOUNDA-KOUPENTOUM KOUPENTOUM-KOUTIABA WOLOF	MISSIRAH PEULH	MISSIRAH MOURIDE	BASSIN ARACHIDIER	AGRO-SYLVO-PASTORAL VIVRIÉRE AGROSYLVO PASTORALFOOD	13
2	KAOLACK-NIORO MBIRKILANE-MABO	MABO 1	MABO 2	BASSIN ARACHIDIER	*AGROPASTORAL ARACHIDE/* AGROPASTORAL PEANUT	8
3	KAFFRINE-KAFFRINE KATAKEL-DIOKOUL MBEULBOUK	SAM THIALENE	SAM NGUEYENE	BASSIN ARACHIDIER	*AGROPASTORAL ARACHIDE/* AGROPASTORAL PEANUT	8
4	KAOLACK-NIORO PAOSKOTO-POROKHANE	MANKACOUNDA	MAMBI WOLOFF	BASSIN ARACHIDIER	*AGROPASTORAL ARACHIDE/* AGROPASTORAL PEANUT	8
5	KAOLACK-NIORO MÉDINASABAKH-MÉDINASABAKH	KOHEL	PASSY RIP	BASSIN ARACHIDIER	*AGROPASTORAL ARACHIDE/* AGROPASTORAL PEANUT	8
6	FATICK-FATICK NIKHAR-PATAR	TELAYARGOUYE	DIANE	BASSIN ARACHIDIER	*AGROPASTORAL ARACHIDE/* AGROPASTORAL PEANUT	8
7	FATICK-FOUDIOUNGNE-SOKONENIORO ALASSANE TALL	KEUR BABOU DIOUF	KEUR MALICK FADY	BASSIN ARACHIDIER	*AGROPASTORAL ARACHIDE/ AGROPASTORAL PEANUT*	8

#	Region, Department, Arrondissement Rural Commune	Treatment Village	Comparison Village	Agro-Ecological Zone	Livleihood Zones	# Livelihood Zone
8	MATAM-RANÉROU VÉLINGARA FERLO-LOUGRÉ THIOLY	LOUGOURE FAFABE	LOUGERE DIALLOUBE	SYLVO PASTORAL	SYLVO-PASTORAL /SYLVOPASTORAL	6
9	LOUGA-LINGUÈRE DODJI-LABGAR	LABGAR WOLOF	LOUMBEL KELELI	SYLVO PASTORAL	AGROPASTORAL-NIEBE/ AGROPASTORAL COWPEA	5
10	LOUGA-LOUGA KEUR MOMAR SARR-SYER	SYER 1	BINGUEL	SYLVO-PASTORAL	AGROPASTORAL-NIEBE/ AGROPASTORAL COWPEA	5
11	TAMBACOUNDA-TAMBACOUNDA	TAÏBATOU	GOUREL BARY	SÉNÉGAL ORIENTAL	*AGRO-SYLVO PASTORAL/ VIVRIÉRE* AGRO-SYLVO PASTORAL/FOOD	13
12	KÉDOUGOU-KÉDOUGOU SARAYA-SARAYA	KHOSSANTO	MAMA KONO	SÉNÉGAL ORIENTAL	*AGRO-SYLVO PASTORAL VIVRIÉRE* AGRO-SYLVO PASTORAL/FOOD	13
13	TAMBACOUNDA-TAMBACOUNDAMISSIRAH-NÉTÉBOULOU	GOULOUMBOU	KOULARI	SÉNÉGAL ORIENTAL	*AGROFORESTIERE/ PECHE-TOURISME* AGROFORESTRY/ FISHING-TOURISM	11
14	ZIGUINCHOR-BIGNONA TENDOUCK-MANGANGOULACK	BODÉ	ELANA	CASAMANCE	*AGROFORESTIERE/ PECHE-TOURISME* AGROFORESTRY/ FISHING-TOURISM	11
15	ZIGUINCHOR-BIGNONA TENGHORY-NIAMONE	TOBOR	GUÉRINA	CASAMANCE	*AGROFORESTIERE/ PECHE-TOURISME* AGROFORESTRY/ FISHING-TOURISM	11
16	ZIGUINCHOR-BIGNONA TENDOUCK-KARTIACK	THIOBON	DJIMANDE	CASAMANCE	*AGROFORESTIERE/ PECHE-TOURISME* AGROFORESTRY/ FISHING-TOURISM	11
17	ZIGUINCHOR-ZIGUINCHOR-NYASSIA-NYASSIA	KAILOU	EDIOUMA	CASAMANCE	*AGROFORESTIERE/ PECHE TOURISME* AGROFORESTRY/ FISHING-TOURISM	11
18	ZIGUINCHOR-OUSSOUYE LOUDIA OUOLOF-OUKOUTE	ÉDIOUNGOU	NYAMBALANG	CASAMANCE	*AGROFORESTIERE/ PECHE-TOURISME* AGROFORESTRY/ FISHING-TOURISM	11
19	SÉDHIOU-GOUDOMP DJIBANAR-SIMBANDI BALANTE	HAMADALLAYE	TÉMENTO SOCE	CASAMANCE	*AGROSYLVOPASTORAL/ARACHIDE-COTTON*AGROSYLVO-PASTORAL/PEANUT-COTTON	12

Changes in sample due to issues encountered during the field data collection

Changes were made to the sample treatment villages initially proposed as the security problem in the south became a limiting factor during the data field collection. In Kaylou and Ediouma, for example, investigators were escorted by twenty military personnel due recent kidnappings of 12 Handicap International de-miners. As a result, several villages were exchanged for others for reasons presented in Table 3.

Table 2.3. Changes of Treatment Villages from Original Sample

Original Treatment Village	Name of changed Treatment Village[4]	Name of Final Comparison Village	Reason for Change of Treatment Village
Diané	Têlayargouye	Diané	This issue was resolved through an exchange with an agent from the *Département des Eaux et Forêts* which facilitated the finding of the reported asset in Têlayargouye; as Diané did not receive any FFA, it was selected as the comparison village.
Médina	Kohel	Passy Rip	The specific reported asset was a reforestation project with

[4] Where there are no villages mentioned, there were no changes

Original Treatment Village	Name of changed Treatment Village[4]	Name of Final Comparison Village	Reason for Change of Treatment Village
Sabakh			*Eucalyptus* and *Anacardium occidental* situated on the highway between Kohel-Médina Sabakh. This asset disappeared for lack of maintenance. Kohel was chosen as a replacement to Médina Sabakhas, as the population having participated in the asset creation came from the former. Similarly, responding to criteria of proximity, distance from the main roads, the number of habitants, level of development, the village of Passy Rip was selected instead of Ndiba Ndiayène which was more developed, more populated and situated on a paved road, 14 km away from the treatment village.
Thiobon		Djimande	Data obtained for CV selection came from the village chief.
Tobor		Guérina	Data for selection of CV was obtained from ACRA, the organization which was responsible for the establishment of the drinking water supply system in the village.
Kaylou		Ediouma	Data for selection of CV was supplied by the village chief where the population has migrated due to security issues.
Katoure	Labgar Wolof	Loumbel Kéléli	Labgar Wolof was added after Katoure was abandoned for security reasons.
Khossanto		Mama Kono	Data for selection of CV was obtained from the sub-prefect of Sabadola.
Taïbatou		Gourel Bari	Taïbatou as a result of the reorganization of administrative boundaries in 2008 is now under the Commune de Tambacounda.
Gouloumbou		Koulary	Data for selection of CV was obtained from the sub-prefect of Sabadola.
Lougéré Fafabé		Lougéré Dialloubé 1	Louguéré became a part of Matam following the reorganization of adminstrative boundaries in 2008.
Guidick	Syer	Binguel	Binguel replaced Guidick as it was 15 km from the treatment village and it was closer to Syer 1 which received FFA and has a population of 24 HHs.

Adapted tools of the Evaluation

Several tools were developed and contextualised for the evaluation in Senegal [and translated into French (see Volume 2 Annex 1). Prior to undertaking the field data collection, the local survey team from A&B was trained in the use of the tools developed for the evaluation. These consisted of both qualitative information and quantitative data gathering tools. Table 4 below illustrates evaluation tools used for treatment and comparison villages:

Table 2.4. Tools Used in Treatment and Comparison Villages

Treatment Villages	Comparison Villages
• Village profile • Asset assessment • Institutional analysis • Household surveys • Focus groups • Key Informant Interviews	• Village profile • Institutional analysis • Household surveys • Focus groups • Key Informant Interviews

The tools for data collection and information gathering to assess the factors and contributions to the impacts of FFA are described Table 5 below:

Table 2.5. Administration of the qualitative/quantitative data collection tools

#	TOOLS AND SAMPLE SIZE	DESCRIPTION
0[5]	Reconnaissance of Sampled villages *38 villages*	connaissance mission to ensure location of treatment village sampled and identify comparison villages for 19TV and 1 CVs.
1	Village Profile *38 village profiles*	ch village is described by a detailed village profile for (both treatment and comparison) completed before and during the evaluation. (In A&B Report)
2	Asset Assessment (AA) *(19) in the treatment villages from 65 identified possible sites*	e assets assessment protocol based on the "Village Asset Score" (VAS) developed by the WFP as in the FFA Manual-Annexes E-1. The asset was photographed, the location plotted for all treatment villages (villages can be located as identified by GPS in A&B Report.
3	Household Survey (HHS) *1596 total number of HHS based on size of villages and statistically validated by Baastel statistician.* *Conducted In both Treatment and comparison villages*	e household survey (HHS), the main quantitative data-gathering tool was divided into three HHS tools based on a modular design to address the three types of beneficiaries. (Beneficiaries are those who live and eat in the HH that received the FFA ration in exchange for work/training/recovery). These HHS directed to: 1. Beneficiaries of FFA in TV 2. Non-beneficiaries of FFA in TV 3. Non-beneficiaries of FFA in CV
4.1 & 4.2	Focus Groups Discussions – at village level *(76 FGD 38 with men, 38 with women)*	each of the treatment and comparison villages, two Focus Groups per village were convened in each village, one of women and another of men.
5.2	Semi-structured interviews 1 with key informants at village/other rural level (SSI 1) *(at the village level: 38)*[6] SSI 1: 38 villages – at least one SSI per village (by A&B) 43 SSI conducted in villages by A&B	ring the asset verification process, supervisors met several individuals in the process of locating villages. Additional interviews occurred to inform the institutional analysis. all **131 SSI** were conducted. **A&B Consulting conducted 43 SSI** (A&B Consulting Report, 2013) while **Baastel conducted 88** (Annex 13. List of persons met.)
5.2	**27 Semi-Structured Interviews** with WFP Implementing Partners (SSI-2) See Table 1 in Annex 6.16 for list of 16 partners interviewed	-ese interviews conducted by the Baastel team focused on the actual implementation of FFA on the ground, the practical aspects of FFA implementation through partners.
5.3	**40 Semi-structured interviews** – with key stakeholders at the regional and national level (SSI 3) . 7 with national government agencies . 11 with regional and local authorities . 10 with donors . 6 with NRM projects	y Informant Interviews also conducted by the Baastel team, provided an overview of security in Casamance, shocks and climate change; intensity of WFP operations, level of migration, level of coordination, partnerships, and complementary activities.

#	TOOLS AND SAMPLE SIZE	DESCRIPTION
	. 6 with FFA beneficiaries	
5.4	**21 Semi-structured Interviews** with WFP CO / SO level (SSI 4) -	Interviews with Key WFP personnel at COSEN and in the sub-offices further strengthened the contextual aspects of FFA implementation and forward looking strategies.
6	Institutional Analysis as attached to all of the tools: HHS, FGD, SSI and village profile	Institutional analysis was reconstructed from various tools of the evaluation.

Data collection methods

Primary quantitative data were collected through HHS.

With respect to qualitative data, two focus groups were held in each village: one for men only and another separate one for women. These focus groups were conducted to collect supplementary information on the FFA program, their participation (if they were beneficiaries) or their perception of results as well as recommendations they could bring for improving the program. To deepen their responses and to collect additional information on the programs their results, the following authorities were sought out:

- For the villages, at the administrative level: (prefect, sub-prefect, etc.) and other village leaders (village chief, leaders of local committees or development associations, local opinion leaders, and technicians involved in the zone). Women's groups were also met within the sample villages.
- Other key individuals included key partners who supported the execution of the FFA program such as: ANCAR, DRDR, CRS, Caritas, Symbiose, World Vision (See A&B report and main evaluation report for lists of people met). Evaluation report lists the many stakeholders consulted.

Qualitative data was also gathered through 131 Semi structured interviews (SSI) with stakeholders across the board (by Baastel Senior Evaluators), as outlined in the inception report. This information was used to cross-check/triangulate the quantitative data. A&B Consulting conducted 43 SSI (A&B Consulting Report, 2013) while Baastel conducted 88 (see Annex 13 – List of people met).

Secondary data was consulted at the national level, local census, and available data from WFP monitoring to complete the data collection for the evaluation.

Theory of Change /Logic Model based approach & Use of the Evaluation matrix

The logic model – see above - for the evaluation provided the overarching framework for both data collection and eventual data analysis. The Impact Evaluation worked with the Simplified Logic Model and the Theory of Change to demonstrate results and verify its hypothesis (See Annex 4 for findings summary against both the TOC and the logic model). The revised Evaluation Matrix (at the inception report stage) guided the evaluation (See Annex 3).

Quality Control and Analysis of the field data

Baastel assumed the overall quality assurance for the evaluation. The data collection process was overseen by Baastel while A&B Consulting managed the field data collection, conducted daily verifications of this data in the field.

The local coordinator along with the A&B statisticians accompanied the field team in the field to address issues of data collection in situ as well as record the data on a day by day basis as well as to ensure quality of the data. In the event that the HHS was not satisfactory, a second review was conducted the next day. Spot checks of the field data collection process was also done by the Baastel team (8 of the sampled villages).

The data was further verified by Baastel's statistical expert to ensure its credibility. The data in its entirety was systematically triangulated to ensure its veracity prior to finalizing the conclusions of the evaluation.

Coding and analysis of data

The data was coded and captured in CS Pro and transferred into Excel and SPSS for quantitative analysis. Similarly with the focus group data, which were transcribed from Dictaphone and then entered into Excel. The primary quantitative data supplied the descriptive statistics based on different indicators (totals, frequency, averages, deviations) while the multivariate analyses and cross-tabulations allowed for an examination of correlations and differences between certain factors.

Annex 3. IE FFA in Senegal Evaluation Matrix

HHs: Household Survey, FGD: Focus group discussion, SSI: Semi Structured Interview, IP: Implementing Partners

Revised Evaluation Matrix				
Sub questions	**Indicator**	**Source of verification**	**Relevant sections or comments**	**Analysis Approach**
Question 1: What was the WFP FFA programme in Senegal?				
PRRO 10888.01 description PRRO 10612 description CP 14451 description	Objectives Planned vs realized activities List of Assets and beneficiaries	PRRO and CP Project documents, SPR WFP Field and M&E reports IP reports Secondary Data	Reconstruction from Secondary data analysis and Review of documents SDA	Descriptive Baseline for the evaluation
Question 2: What positive or negative impacts have FFA activities had on individuals within participating households and communities?				
Q2.1 To what extent are the assets created still functioning to the standards and for the purposes expected?	Use of the asset as compared to its expected use. Effective life expectancy/functionality of the asset created. Rate of Utilization	Technical appraisal/Asset Assessment SSI with Key informants and SSI with WFP, Government and IPIPs technical services (Forest, Agriculture) HHs, FGD, Village Profile Secondary data literature review on typical Assets WFP Technical Guidelines	AA question 2 HHs step 5 FGD with men and women question no 1 SSI with IPs and Key informants question no 2 and 8 Village Profile	Comparative between TV beneficiaries and non-beneficiaries in TV and non-beneficiaries in CV Comparison of asset condition to expected technical standards

Q2.2 What bio-physical outcomes (i.e. erosion, water availability, flooding, and vegetation cover, production from agriculture or forestry) have been associated with the assets developed?	Rate of Erosion Number of hectare of land recovered Water availability (irrigation) Agricultural productivity (yields before and after) Vegetation cover (before and after) Bush fire rate Micro climate Biodiversity increase/decrease(fish, birds, small mammals, mosquitoes) Positive /negative impacts on environment (e.g. weeds, invasive species, soil acidification, pesticides.)	Technical appraisal, AA, site visits Focus group discussions with men and women and HHs SSI with IPIPs and other projects Technical set of indicators per assets created Others project results Literature review for Comparison of typical Impact of specific Assets Context analysis on biophysical environment Livelihoods description Other Environmental Assessments Guidelines (CSE, R4)	AA question no 1, 2 HHs step 5 FGD with men and women question no 2 SSI with IPs and others projects question no 7	Comparative between TV beneficiaries and non-beneficiaries in TV and non- beneficiaries in CV Comparison with standards Assets from secondary data and Village profile
Q2.3 What others impacts (sociological and others) are linked to the FFA Asset creation? How were impacts affected by migration and conflict?	Social impact (Community cohesion, self-esteem), Migration, Conflict, Cost saving, Participation, Empowerment	HHs and FGD with men and women and others WFP Evaluation Comparison with Environmental and Social Standardized Impacts of each type of Assets	HHs step 5 FGD with men and women question no 4 SSI with IPIPs question no 5	Comparative between TV beneficiaries and non-beneficiaries in TV and non-beneficiaries in CV with a focus on special questions for Casamance Comparison and triangulation with secondary data
Q 2.4 What effects have these outcomes had on	Soil quality analysis (structure, humidity, salinization)	Technical appraisal, AA, site visits	AA questions no 10 to 14	Comparative between TV beneficiaries and non-

land productivity?	Number of ha reforested, type and quantities of forest product collected Bush fire rate Comparison with the situation before on yields, type and number of ha of culture	HHs and Focus group discussions SSI with Technical services and key informants Secondary data (reports on land degradation in Senegal)	HHs step 5 FGD with men and women question no 3 SSI with IPs questions no 7	beneficiaries in TV and non- beneficiaries in CV Comparison with secondary data and triangulation with different informants
Q2.5 What effects have the biophysical outcomes had on the food security and livelihoods of participating households and communities?	Quantity of food generated and consumed Income generated and Use of Income Changes in coping strategies with shocks/vulnerability Livelihood diversification strategies/activities Access to food and quality of food	HHs and FGD with men and women SSI with IPIPs, and Key informants (CR, ARD) Secondary data (surveys) if available at the Village level Health Services and Health Statistics (?)	HHs Step 6 FGD with men and women questions no 5 SSI with IPs and key informants section no 2	Comparative between TV beneficiaries and non-beneficiaries in TV and non- beneficiaries in CV Comparison with secondary data and triangulation with different informants i
Q2.6 How were impacts distributed among different wealth categories, and between men and women?	Number of Women beneficiaries and Number of Women involved in the construction of each Asset Impact on the workload Number, quality of assets, income/consumption, empowerment and power relations, workload, disaggregated by socio-economic status and gender.	HHs and FGD with men and women SSI with IPIPs Secondary data (other WFP evaluation, WFP statistics)	HHs step 8 FGD with women questions no 7 SSI with IPs question no 4	Comparative between TV beneficiaries and non-beneficiaries in TV and non- beneficiaries in CV
Q2.7 What effects did FFA outcomes and participation in FFA programs have on women and girls including distribution of resources, power and workload, and empowerment and status?	Changes in the level of empowerment Change in resource distribution to women Effects of workload on women Investment made by women and girls	HH s FGD with men and women SSI with IPIPs and Key informants (CR, ARD, Ministère de la Femme, de l'Enfant et de l'Entreprenariat féminin) Secondary data (other WFP evaluations)	HHs Step 8 FGD with men and women question no 6 SSI with IPIPs question no 4	Comparative between TV beneficiaries and non-beneficiaries in TV and non- beneficiaries in CV

	Women's role in the local "Comité de gestion"			
Q2.8 To what extent did FFA activities or the assets that were built through FFA affect the resilience of households or communities in terms of diversifying livelihoods and withstanding subsequent shocks?	Community and Household asset score or equivalent. Level of effects of subsequent shock.Shock analysis Scope of the assets	HHs and FGD with men and women SSI with IPs, Conseil Rural (Communes), ARD, local and regional Authorities Secondary data analysis (literature review of typical impact of those type of Assets, surveys, and WFP Evaluations)	HHs step 8 FGD with men and women question no 8 with questions no SSI with IPIPs and Key informants question no 8	Comparative between TV beneficiaries and non-beneficiaries in TV and non-beneficiaries in CV Comparison with others standards Assets and secondary data
Q2.9 To what extent did the FFA interventions have an impact on other, non-participant households and communities (spillover effects)?	Number, type and location of assets reported to have been transferred outside of treatment areas. Changes in condition of non-participants within the same community	HHs and FGD in Comparison villages Village Profile SSI with Key informants and IPs	HHs step 8 FGD with men and women question no 10 SSI with Key informants and IPs question no 8	Comparative between TV beneficiaries and non-beneficiaries in TV and non- beneficiaries in CV Triangulation with village profile and others informants
Q2.10 What were the main costs related with the asset development, including opportunity costs and maintenance costs? Was the asset designed and sited appropriately in order to minimize maintenance costs? Is maintenance undertaken as needed to maintain effectiveness of the asset? What maintenance is being done by whom and	Asset maintained to adequate level to ensure functionality Actual maintenance costs compared with expected cost Cost of maintenance (monetary and time undertaken) borne by which members of community or government. Total cost of Assets (extrapolation of average in US$ by MT for a particular project) Opportunity costs if feasible	Technical appraisal/Asset assessment; site visits FGD SSI with IPs Interview with technical services	AA FGD with men and women question no 1 SSI with IPs question no 9	At the level of beneficiary households within the TV Comparison with others projects and standards Assets

what are the costs in both financial and time investments?	% of local purchase	Secondary data analysis form WWP Partners (PAPIL, PROGEDE, DEF, WV,CRS and other relevant projects), PRODOCs and WFP Financial services		
	Comparison with Assets built without FFA	Data from other projects of Reforestation, and Dike construction Data from WFP		Comparison with WWF and others projects
Q3. What factors were critical in affecting outcomes and impact?				
Q3.1 Planning processes: technical appropriateness and quality, modality, programme category, targeting, participation of women in priority setting, community leadership; appropriateness of assets for disasters faced by beneficiaries.	Analysis of Selection Process for Assets type Analysis of the selection process for beneficiaries villages Comparison of asset quality, output/outcome results and process findings between different types of project categories Community perceptions Conformity with the Local Development Plan Rating of conformance of asset construction to technical guidelines/international good practice.	HHs and FGD with women and men Technical appraisal, A, site visits Analysis of Selection Process for Assets type and of the selection process for beneficiaries villages with WFP and Partners, and documents and reports Local Development Plans to be checked SSI with Key informants, IPs, donors and others projects Stakeholders analysis	HHs Step 7 FGD with women and leader question no 11 AA section 2 SSI with Key informants and IPs questions no 1,3, 6, 9,	Consolidation of various methods and tools Triangulation with different informants
Q3.2 Contextual factors: socio-economic, political, security, seasonal migration, property-rights, market-related, coherence with government and local priorities	Degree of coherence with national, regional, and local plans and priorities	HHs and FGD with men and women	HHs Step 7	Consolidation of the various methods, tools, informants and secondary

and plans, presence/absence of complementary activities/institutions, range and frequency of disasters and shocks affecting communities, conflict in Casamance	Analysis of market and other factors and their likely effect on FFA in the country context. Type and location of complementary activities and institutions Distance from the market	Village profile SSI with IPs and Sub Regional (West Africa), National (Agriculture and Environment), Regional (ARD), Local authorities (Conseil de Village) and others projects/donors National, Regional, Local Development Plans analysis Secondary data for context analysis including demographic, socio economic, land tenure, decentralization Shocks analysis with secondary data on agricultural production, rainfall, reforestation rate, land degradation assessment National and WFP Policies and Program review SSI with UNDSS, UNICEF, CRS for security in Casamance	FGD with men and women questions no10 Village profile SSI with IPs and Key informants question 8 Institutional analysis	data
Q3.3 Implementation issues: food assistance issues including amount of food assistance, duration, timing sharing, and provision of appropriate non-food items and participation	Ration size compared to recommended Timing of delivery compared to seasonal calendars. Reported degree of sharing of food. Duration in weeks, months or years by overall project and by participant within the project.	HHs and FGD with men and women Document review (WFP report and Evaluation) SSI and interviews with COSEN, Implementing Partners WFP Technical Guidelines on Assets	HHS Step 5 FGD with men and women questions no 1,6 SSI with IPs questions no 2, 3, 11, 12	Consolidation of the various methods, matrix of the result

	Reports of adequacy of non-food items % of local purchases Participatory process analysis			
Q3.4 Capacity and support: provision of adequate technical support from WFP or partners, contribution of food for training, training in livelihoods resilience related topics and Monitoring and Evaluation	Opinions of communities and other stakeholders. Analysis of asset quality for obvious technical problems Training records and community and partner opinions regarding training. Analysis of Monitoring and Evaluation process and participatory process	HHs and FGD with men and women Secondary data SSI with IPs WFP and Partners training reports Interviews with COSEN Technical and M&E Staff	HHs Step 8 FGD with men and women question no 11 SSI with IPs question no 2, 3	Consolidation of mixed methods, tools using analysis matrix developed in this IR
Q4. How could the FFA activities be improved to address findings emerging from the analysis in Key Questions 1 and 2?				
Q4.1 What kind of improvement is needed (beneficiaries targeting process, Assets selection, technical, partnership, monitoring and evaluation, and others…)?	Recommendation from beneficiaries Recommendations from Partners Recommendations from Donors and Government Institution Lessons already learned by WFP	HHs and FGD Secondary data from WFP and others donors new projects (2011 to current) and new trends SSI with Implementing Partners, donors, technical services, and Gov	HHs Step 10 FGD with men and women question no 11 SSI with IPs question 15	Consolidation with forward looking strategy, new projects and trends

Annex 4. Evaluation findings, Conclusions and Recommendations

The findings and conclusions of the evaluation aligned themselves generally with the Logic Model/Theory of Change, as illustrated in the framework below. The expected impact related to the reduction of shocks is confirmed.

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
Assets built with FFA are relevant and appropriate means to improve the long-term resilience of vulnerable populations.	Employment and food or cash meet immediate food deficits and increase the sense of confidence and independence of the most needy during periods of stress.	Assets built with FFA were relevant and improved resilience in the long term. Most villages had little understanding of the FFA program and its implementation. WFP as a donor was little known to beneficiaries except in Casamance. Having the right partners for the higher tech assets was another issue especially in the high tech areas. Data was unavailable to conduct a cost benefit analysis but partners such as PAPIL and the Great Green Wall have provided some idea of the monetary value	18 out of 19 villages surveyed had assets. 95% survival rate Overall average maintenance score was 3.7/5 for all types of assets, deemed acceptable and positive.	The positive impacts of assets are caused by the cumulative factors such as the other projects which bring about a complete package of technical and material assistance. For example, rice seedlings and machines which to do the heavy work of building dykes, boreholes for gardens, etc. are not part of the assets. Hence it is difficult to fully attribute impact solely to FFA. Further, the absence of monitoring and communication strategies contributed to negative impacts.	A more concentrated and long term FFA approach would allow rural people to further develop their communities by making their own choices and investments into their own development through Local Development Plans. The team concludes and supported by secondary data and partners reports, that the assets in general were reasonably well chosen and relevant to the situations allowing for positive results. At the field level, certain assets were observed as being less performing such as reforestation, nurseries, ANR. How to proceed with respect to these assets merits additional reflection and further evaluation.	**Rec. 1 [CO]– The CO should develop a focused multi-year FFA-based resilience approach, linked to the Government's policies, strategies and decentralisation processes ensuring that Local Development Plans are used along with corporate FFA guidance based on lessons learnt and best practices as well as lessons from the evaluation, and supported by a funding strategy with adequate monitoring systems in place.**
	Assets are maintained by Management Committee-Village and/or	There was a substantial and significant relationship between the state of a village's asset and of perceptions of biophysical outcomes to suggest that the	Overall, the maintenance level of assets assessed is considered passable. Ten (10) treatment villages out of 19 have maintenance		A population's involvement in the construction of the asset and the existence of a maintenance committee were statistically and	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
	Rural Commune	existence and the quality of an asset did in fact contribute to positive biophysical impacts	committees. 52% of treatment villages noted there was a maintenance committee for the asset.		substantially significant, and resulted in better reported asset outcomes. Sustainability of assets fell short by virtue of the short-term nature of FFA interventions and lack of extension and monitoring.	**Rec. 2 [CO, with HQ and RB support] – The CO should actively implement WFP's DRR policy and corporate guidance within its FFA programming through: ensuring that WFP field staff is appropriately trained to apply corporate guidelines and provide technical assistance to partners and communities; sharing/providing in French WFP guidance and best practices with relevant partners; and provide adapted versions for different audiences (partners and communities)**
	Assets are appropriately selected, designed and implemented and in line with village and government priorities and policies.	Asset assessments and HHS confirmed selection of FFA was generally appropriate and in keeping with the government's policies In some cases, beneficiaries noted that if consulted, they would have selected other assets. Assets were not integrated into LDPs but these should play an important role in development and resilience building. Asset building occurs in a context where decentralization has taken on an important role; Rural Communes are called to prepare their Local Development Plans which must include food security Few villages (4 out of 19) had Local Development Plans and two of these were obsolete.	SPR reported many types of Assets (Annexes 9 and 11)	During the period under review, decentralization took on an important role and LDPs were developed as consolidating instruments for the federation at the level of communes and villages.	Anti-salinization dykes, firewalls, and the regeneration of mangroves were adaptation strategies of the NAPC (2006). Additional staff, expertise and longer term funding are needed for an integrated FFA/CCA/DRR to alleviate shocks. The next steps will require a funding approach for FFA integrated into the GOS Resilience Building Strategy with a proven range of assets to offer a social safety net to rural people.	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
		FFA addressed seasonal food needs during the lean period, reducing migration reduction and enabling people to work in their fields and build the asset with both contributing to resilience building in the long term. Whether FFA constraints were linked to funding issues which translated into problems at the field level, or whether it was the unpredictability of the very nature of WFP programs, the final provision of lesser food entitlements, or delays in distribution were constants mentioned by at least half of the partners.			Hindering factors included weaknesses in partner contracts, WFP funding constraints, WFP and partner inability to deliver FFA on time, and technical and extension and monitoring issues. The efficiency of implementation was variable due to the numerous delays of food distributions that compromised partners and limited the benefits of FFA. Delays in receiving food inputs compromised either the asset or the ability of people to work on the asset.	**that include visual aids.** **Rec. 3 [CO] – To enhance accountability and transparency, the CO should adopt a two-step systematic process for FFA implementation: (a) at partners' level through more comprehensive and mutually accountable annual programmatic agreements; (b) at community-level, by ensuring that community-based participatory plans include action plans setting clear objectives, activities, expected outputs,**
	The targeting of Zones At Risk (ZARS) and vulnerable populations is adequate.	Targeting ZARS is an adequate strategy but does not effectively target at the village level; other criteria are needed to appropriately target beneficiaries for FFA and the level of effort required.	SPR established that 84,689 ha of combined land recovered for agriculture by lowland, land clearing and development of rice paddies (often recorded as dykes and/or small dykes/micro-ridged plots).			
	Technical assistance and support and WFP non-food items was adequate	Technical assistance and WFP's provision of ODOC for performing partners were generally adequate but could be improved with better monitoring. Some asset site locations were less relevant.		Several partners work in villages and could complete WFP assets with TA and additional support.	Providing TA and ODOC for partners especially local ones was one way of generating capacity.	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
	FFA provided an added benefit to the construction of assets.	Partners' performance levels varied based on a wide range of factors which made it difficult to provide an overall conclusion that applied to all asset assessments and villages. (WFP is now conducting evaluations since 2011). Assets which were more successful such as anti-salt dykes contributed to land recovery, rice culture, and micro-ridged plots; mangrove regeneration contributed to regenerated biodiversity and aquaculture potential, and home gardens provided food diversity.	HHS confirmed unintended impacts such as village solidarity which motivated villagers toward other development activities and benefits that spillover to nearby villages.		Many dykes remained unfinished. When FFA stopped, so did the building or extension or maintenance of the asset These assets should now be the primary asset concentrations because these generally work. But, FFA must remain a simple workable tool for village populations who see fairly immediate results from the construction of assets and their sustained maintenance.	**roles and responsibilities between WFP, technical partners and community members.** **Rec. 4 [CO] The CO should develop an FFA Education and Communication Strategy for**

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
Built FFA assets have a positive impact on the rehabilitation of the **biophysical environment**	Asset anticipate geophysical/biophysical impact (e.g. increased water availability, reduced erosion, improved soil condition, reduced run off, reduced flood level or improved flood course etc.)	In remote treatment villages located less than one kilometer from the comparison village, the positive impact was significant in that comparison villages were copying reforestation and low-land rehabilitation assets (whether it is ANR, reforestation, or a dyke) and supported by SPR and partner reports. These outcomes and impacts related to increased forest cover, soil stability, minimized flooding, increased levels in the water table, improved water availability and desalinization of well-water in regions where sea level rise had caused salt water	In treatment villages, 82% of respondents in TV perceived biophysical impacts compared to 18% in CV PAPIL (2008) reported a great variability in tree survival rate (ranging from 4 to 51%), with possible non-negligible consequences on medium and long-term impacts of reforestation initiatives. Within the Great Green Wall (GGW), the survival rate reported in 2008 was between 60 to 80% which is considered successful[7]. World Vision promoted ANR as a technique which	Biophysical impacts created allowed for improved incomes, improved agricultural, aquaculture and livestock production. Despite the above, salinization processes, the disappearance of mangroves and the loss of agricultural productivity continue to persist in the country.	Positive impacts included an improved vegetative cover, mastery of water as in irrigation for rice irrigation, erosion reduction, flood protection, restoration of biodiversity, and recovery of salinized soils. Technical of partners such as PAPIL and OCEANIUM recovered lowlands and mangroves respectively (with significantly higher yields) with the following biophysical impacts: better access to water, desalinized soils,	**community mobilisation and enhanced transparency on FFA activity implementation.** **Rec. 5 [CO] – In the longer-term, the CO should, under the leadership of the M&E Unit and with**

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
		intrusion. **Nurseries/Reforestation** - Eucalyptus plantations allowed the restoration of salinized soils. Nursery assets were able to repatriate species that had been lost to the area. **ANR** – Although two ANR assets reviewed were not in the best of states, ANR can contributed visibly to an improvement of vegetative cover in Kaffrine. Benefits included a greater availability of organic manure from foliage of reforested or maintained plants, improved availability of firewood, minimization of wind erosion, soil restoration and prevention against salinization as well as loss of arable land, **Mangrove regeneration** impacts related directly to an increased coastal protection and minimization of coastal erosion. Based on the observations of actual	was popularized by DGEF with 85% success rate where FFW was mentioned as factor of success. SPR indicated a wide range of assets were found (dams, dykes, sea walls, anti-salt earthen dikes, flood protection dykes) with as many indicators: number of dykes, length of dykes(km), number of ha protected and developed for both rice and banana cultivation, as well as measured in kg of rice Community gardens measured in hectares were reported to have resulted in 1,826 ha of gardens with agroforestry models that introduced trees into gardens but this does not include the total surface area of supported community gardens. Mangrove regeneration was measured by number of plants but in 2008 the activity was also measured in number of seedlings		improved vegetation, and an overall reduction of the degradation spiral of agricultural lands from the sea-level rise[8] along the many deltas of Senegal. It was impossible to measure quantifiable results throughout the IE but there were several indications of biophysical impacts supported by secondary data. Overall, ANR's success rate was somewhat mixed. The recovery of salinized soil was the greatest positive biophysical impact as perceived by beneficiaries resulting in the restoration of cultivable irrigated rice and dry land gardens[9]. Other biophysical impacts included: desalinization of water in wells, improvement of the vegetative cover, reduction of gully erosion, and enrichment of organic	**partners, actively support the establishment of a Government-led comprehensive FFA M&E Framework, that: integrates interventions to national and local development plans; supports monitoring of results (including establishment of baselines and relevant indicators), and involves all stakeholders (government, partners, communities).**

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Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
		FFA projects by the evaluators in the region of Ziguinchor, a major restoration of the marine ecosystem is underway and highly visible by air. **Anti-salt dykes and micro-ridged plots -** Allowed recovery of salinized soils and biodiversity found in the three programs. The recovery of salinized soil seems to have been the greatest positive biophysical impact as perceived by beneficiaries resulting in the restoration of cultivable irrigated rice and dry land gardens. Other biophysical impacts included: desalinization of wells, improvement of the vegetative cover, reduction of gully erosion, and enrichment of organic matter. Beneficiaries also learned to master water management through the creation of dykes and micro-ridged plots. The ADB who funds PAPIL underlined the importance of building simple, appropriate and high demand assets such as anti-salt dykes which allow recovery of salinized soils along the many deltas of Senegal. **Community gardens/associated**	making it difficult to assess impact but beneficiaries informed of biodiversity, aquaculture potential and beekeeping as a result.		matter. Beneficiaries also learned to master water management through the creation of dykes and micro-ridged plots. The wide range of indicators made it difficult to measure the impacts of these assets Certain garden assets built in the more arid zones became islands of biodiversity.	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
		nurseries - included an improved vegetative cover, improving the micro-climate and by association also providing a milieu for improved water access. These became small islands of biodiversity. Arid zones such as Kaolack were improved				

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
FFA contribute toward improving the **productive agricultural capacity** in the long term	Geophysical changes have positive impacts on productivity (e.g. increased output per hectare, increased hectares under production, increased hectares irrigated, diversification to higher value crops, increased agricultural and forest biodiversity etc.)	Within treatment villages, there was a positive association with a high-quality asset and improvements in agricultural productivity. HHS signaled an improved agricultural productivity which was not easily quantified. **Reforestation assets** With regard to nurseries, fruit trees were propagated in villages through this asset providing agricultural produce. *Prosopis Africana* (used as animal forage) et *Eucalyptus sp* served as firewood, fences, windbreaks and traditional medicine. Plantations and ANR provided better maintenance of and a diversified diet for livestock. Leaves are used as forage, and plants for medicinal use. ANR allowed for a better protection against drought providing firewood and other products which could be sold in the event of a crisis.	ANCAR reported a technical assistance package with improved seeds and extension increased yields by a 50% in village gardens and in lowland rehabilitation rice culture. Reviews are mixed (50-50)[10] with regard to improved livelihoods. SPR results in 2006, 219 dykes built resulting in 78142 tons of rice; in 2007, 112 small dykes built for total length of 192 km. SPR established that 84,689 ha of land were reclaimed for agriculture by lowland, land clearing and development of rice paddies (Reports revealed measured outputs such as 800KG/ha to 3.5 Tons of rice (PAPIL) and increases of 2 to 3 crops a year resulting from FFA,TA and certified seeds. A total of 1,576 ha of mangroves were planted from 2005 to 2009.	Apart from rice culture and gardening with targeted agroforestry and village gardens, ANR can provide food; reforestation encourages the production of honey, the selling of produce such as cashew nuts and mangoes. The mangrove has also facilitated the regeneration of aquatic ecosystems and people are noting the return of fishing.	Agricultural productivity impacts were significant but difficult to measure as there were no supportive data available. The creation of village gardens and associated nurseries proved to be most beneficial especially for women's incomes and nutritional habits for both short-term and long-term impacts. Many gardens were still operational providing fruit and vegetables to beneficiaries. Improved pastures resulting from ANR and reforestation resulted in better maintenance of and a diversified diet for livestock where leaves are used as forage, and plants for medicinal use. Rice yields improved from two to three crops a year in some cases where FFA dykes in lowland rehabilitation contributed to land recovery largely dedicated to rice culture and dryland gardens. The return of the fishery in certain zones was seen to have benefitted from the regeneration of mangroves.	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
		Anti-salt dykes and micro-ridged plots Water retention from dykes provided a permanent supply of water replenishing groundwater, and for wells required for rice production, and of fish farming thereby contributing to agricultural soil recovery and agricultural productivity where anti-salt dykes were reported to properly desalinize a plot over a three year period[11]. **Community gardens and associated nurseries** Village gardens also produce a diversified range of fruit and vegetables where these did not exist before FFA.				

[11]SSI, COSEN, PAPIL Evaluation

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
Vulnerable populations are better able to **withstand shocks resilience** (disasters, drought, sea level rise, salinization of soils, effects of climate change)	Biophysical impacts/ changes reduced environmental vulnerability (e.g. increased access to water, reduced flood risk, reduced drought occurrence etc.) FFA operations were targeting the most vulnerable able-bodied populations.	Certain assets such as dykes have not fully attained their resilience potential. FG respondents believed assets did not have an impact on resilience but they also unanimously believed the asset could improve resilience which may demonstrate that assets are not yet really achieving their full potential or benefits. Food distributions had a positive impact on lessening temporary migrations and augmented participation in building the asset. FFA benefits for the community were also plentiful in that it allowed the father and sometimes the mother to remain at home during the lean season, avoiding further outmigration.	32 % of men vs. 26% of women in TV felt more resilient. HHS confirmed that people thought they were better equipped in general to deal with shocks. This is why assets are maintained as they understand the value of these and their links to prevention of shocks. Women shared this thinking and admitted to being more independent financially. Men felt more resilient than women as they also did in food security and livelihoods in both treatment and comparison villages, with a greater gap in the latter. Some 58% of men reported positively of their village's ability to cope with adversity as compared to only 32% of women. Capacity to recover from shocks was much higher with males (95%) who as opposed to 32% of women in comparison villages	Shocks were felt at the level of villages where bush fires burnt crops and houses, drought and pests killed potential crops. At the national level, the shocks are different that food prices are affected by the drought. However in these two cases, assets built can bring about and facilitate long term solutions. Asset building occurs in a context where decentralization takes on an important role; Rural Communes are called to prepare their Local Development Plans which must include food security Few villages (4 out of 19) have Local Development Plans and two of these are obsolete. With population increases so comes the increased need for food. Price hikes continue and Senegal still imports nearly 50% of its food. The analysis did not allow for correlation with other types of WFP programs.	Employment and improvement in livelihoods options improved the independence of vulnerable people and increased their influence. There were definite impacts on income generation directly related to asset creation which contributed to overall improved livelihoods. The positive economic repercussions from the asset creation also served as motivating factors not only in the beneficiary community among beneficiaries and non-beneficiaries but also in the spillover effects seen in non-beneficiary comparison and other surrounding communities. Livelihoods were improved especially with lowland rehabilitation and village gardens where surplus food, forage and secondary forest products could be sold.	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
					Shocks redirected FFA to serve the food crisis for a good part of the evaluated period. Other negative and unintended impacts of FFA included a welfare mentality which created a level of expectations as well as perceived inequities between neighbouring villages who did not receive FFA. The short-term resilience impact was the immediate alleviation of hunger following food distributions. Long-term impacts included: 1) A reduction of vulnerability for beneficiaries and non-beneficiaries of the treatment village experienced through improved access to food from the FFA activities generated by agricultural productivity; 2) food for the handicapped, widowed and invalid[12]; 3) asset creation allowed for development of other community-based initiatives generating more development initiatives;	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
					and 4) long term capacity building. Communities saw an improved ability to feed their families and diversify their diets. Enhanced coping strategies were afforded by these assets as beneficiaries and non-beneficiaries were exposed to ways of improving their food security, recovering their land and in some cases, engaging in planning for enhanced livelihoods in their communities. Benefits attributed to FFA on social cohesion were clearly recognized by beneficiaries, executing partners and decentralized agencies. FFA did mobilize the community to work together and promoted solidarity in the village[13]. In the case of women, decision making ability improved as a result of FFA. Social cohesion[14] was enhanced as assets were able to mobilize a significant number of the population	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
					to participate in their creation because: 1) Food motivated people factor for collective action; 2) Community participation in construction of assets contributed to community-building and generated generating capacity in the village; 3) Positive economic repercussions from asset creation served to motivate beneficiaries and non-beneficiaries in TV but also non-beneficiaries in comparison and other surrounding communities; and 4) Emergence of community leaders, especially in rice cultivation areas, where a permanent social dialogue facilitated and as well as other income generation in the community.	
Food insecurity among vulnerable populations susceptible to shocks is reduced.	Increase in household production and consumption, livelihoods diversification, labor demand and asset accumulation and empowerment of the most vulnerable Reduction in food insecurity among	Although FFA does not directly deal with the most vulnerable, assets were located in the ZARs where the majority of people are the poorest. There were different systems of village solidarity which contributed to a type of redistribution (i.e.: inclusion of mine victims in Casamance). Coping strategies such as temporary migration of heads of HH were reduced		To date, there is no standard method for targeting the most vulnerable through FFA. It would be helpful to provide certain indicators to targeted populations who could then use their own criteria to target those most in need. Food security constraints continue such as the climate, poor access to inputs and technical	The impacts on food security in the short-term were an immediate alleviation of hunger during the lean season. This immediate effect generated a widespread interest in FFA on the part of the beneficiary families who received food in exchange for building assets. Participating families experienced not only an immediate impact from the food transfer,	

Expected Result (Impact)	ToC Assumptions	Qualitative findings	Quantitative Findings	Contextual factors	Conclusions	Recommendations
	the food insecure Reduction in negative coping strategies during times of shock and stress Reduction in negative impacts of subsequent disasters	during the years of food distribution from FFA.		assistance/extension services, as well as weak opportunities for accessing markets. But, villages which did build assets were able to restore their means livelihoods such as the fishery, pastures, and food agriculture.	they also benefitted on a longer-term basis from nutritional (diet) diversity through improved agricultural productivity from gardens and rice culture (a preferred staple food). Overall, the positive impact on food security contributed to improved nutrition of the family with vegetables and fruit products especially in gardens and in lowland rehabilitation where rice cultivation became possible again.	

Annex 5. FFA context in Senegal past and current[15]

The population of Senegal was estimated at 13.6 million[16] in 2012. The country is made up of over twenty ethnic groups, the largest being the Wolofs/Lebous (40.8%) followed by the Pulars (27.6%). At independence in 1960 Senegal maintained the main administrative structures. In 1982, Senegal joined the Gambia to form the short-lived confederation of the Senegambia, dissolved in 1989. This initiated a conflict that continues to affect the Casamance to this day. Since the 2008 reorganization of boundaries, Senegal is divided into 14 regions, 113 municipalities, 370 rural communities and 14,400 villages[17].

Annex 5A. Past FFA implementation context in Senegal (2005-2010)

Families are affected by high food insecurity prevalence in five out of fourteen regions, namely Kaolack, Kolda, Sedhiou, Kedougou and Ziguinchor, particularly so in the most isolated areas[18]. The average prevalence of stunting in rural areas is 20 percent, and is highest in the department of Koumpentoum (34 percent) of the Tambacounda region, and the regions of Kédougou (32 percent) and Kaffrine (26 percent)[19]. The December 2011 SMART survey, conducted by the Government with the support of UNICEF, WFP and FAO in eight regions of the country, confirmed either escalating trends or persistently high levels of malnutrition.

Global Acute Malnutrition rates in Matam (14.1 percent) and Diourbel (10.3 percent) are particularly worrisome, as they remain high even after the harvest. Furthermore, chronic malnutrition remains at over 32 percent in Kedougou and over 26 percent in Kolda. According to preliminary results of the 2010/2011 Demographic and Health Survey (DHS/MICS), stunting levels over 40 percent in two regions of the Casamance Naturelle. Micronutrient deficiencies are prevalent throughout the country, affecting three out of four children and 50 percent of pregnant and lactating women[20].

The December 2011 issue of SMART survey, conducted by the Government with the support of UNICEF, WFP and FAO in eight regions, confirmed either trends of increasing or persistent levels of malnutrition. The rate of global acute malnutrition in Matam (14.1%) and Diourbel (10.3%) are of particular concern because they remained high even after harvest. In addition, chronic malnutrition is at over 32% in Kédougou and more than 26% in Kolda. The preliminary results of the survey (DHS/MICS) 2010/2011 Demographic and Health, revealed that stunting is at more than 40% in both regions of Casamance. In addition, micronutrient deficiencies are widespread throughout the country affecting three quarters of the children and 50% of pregnant and lactating women. The rural poor's isolation is exacerbated especially during the rainy season from June to September when damaged roads and flooded areas and half of rural villages are cut off. About two-thirds of rural households have physical problems accessing markets during this period[21].

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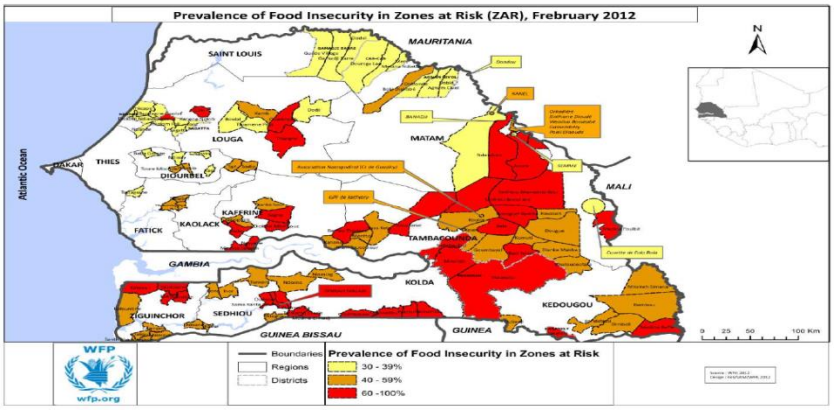
[15] Annex 5 B on current 2013 FFA context & 5 C on livelihood zones are found in Volume II of the Annexes
[16] WB, 2012
[17] World Bank Country Partnership Strategy (FY2012-2017), 2013
[18] PRRO 10612.0, SPR 2011
[19] Annex 4 of the TOR, page 2
[20] PRRO 10612.0, SPR 2011
[21] CFSVA, 2011

Figure 1 shows Senegal's Zones at Risk (ZARS) illustrating the growing food crisis over the past decade.

Figure 5A.1. Prevalence of Food Insecurity in Zones at Risk, February 2012[22]



Political Environment

As Millennium Development Goals (MDGs) for malnutrition, gender equity in primary and secondary schooling, improved water source, and under-5 mortality rates are on track. The primary education gender equity goals have been met by targeting specific regions; in 2011, the ratio of girls to boys in primary enrollment was 106 compared to 86 in 2000[23].

Table 1 encapsulates the global and national political, economic, social, environmental/climate change and agricultural cumulative shocks that have had an impact on food security.

Table 5A.1. Cumulative Shocks on Food Security in Senegal[24]

Recent Shocks	Description and Repercussions
A series of **domestic and external shock**s in 2006-2012 stalled per capita GDP growth at 0.7 percent.	Poor rains in 2006-2007 led to a fall in agricultural output by about 15 percent in each year, followed by a spike in food and fuel prices in 2008, these with major impact on the cost of living as Senegal imports 80 percent of its rice and 100 percent of its wheat and fuel oil. Overall Senegal imports 60% of its national cereal requirements delaying progress towards a market-oriented, diversified and competitive agricultural sector.
The **global financial crisis** of 2008-09 revealed Senegal's significant exposure to the global recession.	Impacts included declines in export demand and prices, tourism, remittances and FDI. Although this crisis produced a temporary fall in food and fuel prices, the fall was short-lived and in 2010-11 prices rose sharply again. The world slowdown in 2012 has done little to moderate prices.
Floods and droughts in 2009 and 2012 threatened livelihoods. The floods affected some 475,000	Recent floods have taken a heavy human and economic toll and affected every part of society. The cost of the 2009 flooding in Senegal is estimated at US$103 million, including almost US$56 million for damages and US$47 million for losses; droughts in 2011 resulted in a 20 percent reduction in agricultural

[22] WFP. February 2012. Food Security Assessment in Zones at Risk - Harvest 2011-2012. 26 pages. (in collaboration with Oxfam, World Vision and Government of Senegal)
[23] CPS, 2013
[24] Informed by the CPS, World Bank, 2013

Recent Shocks	Description and Repercussions
people in 2009 and 300,000 in 2012, mainly in the Dakar area	output.
Governance weak institutions which exacerbated the impact of external shocks (2001-2013)	Frequent changes in the composition of the government (6 Prime Ministers in 12 years and more frequent changes at Ministerial levels) weakened the implementation of public policies and strategies.
Political instability in the run up to the 2012 elections and in neighboring countries contributed to instability.	The decision of President Wade to seek a third term (February 26, 2012), combined with dissatisfaction over rising prices, power outages, and unemployment, led to occasional riots, uncertainty among investors, and a weakening of the reform effort. Just as the presidential elections were resolving matters peacefully, two coups d'états occurred in neighboring Mali (March 21, 2012) and Guinea Bissau (April 12 2012). The former is particularly important economically as Senegal's largest trading partner and transit destination, while Guinea Bissau's instability hampers the resolution of the Casamance crisis.
Agricultural productivity has seriously been hampered by a range of factors.	Obstacles to improving agriculture are impeded by erratic weather, deficiencies in water management, poor use of inputs, inadequate access to markets, the low value of agricultural products and soil degradation compounded by poor agricultural extension services. The quality of water resources is gradually being altered by agriculture-related chemical pollution, the proliferation of aquatic plants, the salinization of the water table and the over-tapping of ground water. Agronomic potential has been seriously altered by population dynamics, the expansion and practice of extensive farming with slash burning, drought, bush fires and the disappearance of vegetative cover. Forest resources suffer from all sorts of pastoral pressures. The degradation of forests has also had a direct effect on wildlife.
Climate change and environmental impacts which have seriously exacerbated the agricultural production.	All of these threats have exacerbated the effects of climate change manifested by the more severe droughts, especially in the South, the salinization of surface and groundwater; the increase in coastal erosion; and the modification of fish populations. The impact of climate change on FNS has jeopardized both the maintenance of current levels of production and the chances of reaching food self-sufficiency. Senegal is confronted by various threats on its environment. Climate change has contributed to the country's food insecurity as most rural households engage in subsistence agriculture, livestock husbandry and fishing, and yet agricultural production covers only half of the food demand[25].

Policy Context

Food security is a priority for the GOS as articulated in several policy documents:

- Accelerated Growth Strategy (*Stratégie de Croissance Accélérée* (SCA *2008*)
- National Strategy for Economic and Social Development (*Stratégie Nationale de Développement Économique et Social 2013-2017)*
- National Plan for Investment in Agriculture *(Plan National d'Investissement en Agriculture (PNIA, 2011).*

During the period under review, several rural sector policies were developed such as the Law on Agriculture, Forestry and Livestock Production (LOASP) (2004) (implementing regulations are still not available), the Great Agricultural Offensive for Food and Abundance (GOANA), National Plan for Return to Agriculture (2007) (*Plan de Retour vers l'Agriculture*) (REVA (2007), and the National Plan for Rice Self–Sufficiency *(Plan National pour l'Auto-suffisance en Riz)* (PNAR)[26].

[25] Annex 4 of the TOR,

[26]The National Rice Self-Sufficiency Plan/Plan National d'Auto-Suffisance en Riz (PNAR) (2009) with the objective of producing de 1,000 000 Tonnes of competitive white rice able to respond to the tastes and needs of consumers and able to cover the rice needs for the Senegal, remains a major economic and nutritional challenges. The country is far from being self-

The *Senegal National Resilience Building Strategy* was launched in May 2013 to address the underlying causes of vulnerability requesting the assistance of WFP and other partners to concretely address:

- Gaps and areas of improvement in terms of resilience to be identified in national policies and strategies;
- Regional and national resilience to take into account to the national resilience building strategy ;
- Agreement on Mapping of vulnerability and its main factors;
- Recommendations to reinforce the social protection component of the national resilience strategy;
- A multi-sector coordination system for implementation, monitoring and evaluation and communication; and
- A national roadmap that includes the priority actions and indicators.

Donor ability to align funding with rural sector priorities has had limited success[27]. Progress in establishing a micro-finance framework as a poverty alleviation tool was made through the design of a national framework of indicators to monitor the sector, and support to micro-finance institutions. However, this was more advantageous for the urban rather than the rural agricultural sector. During this same period, new actors in the food and nutrition security (FNS) sector emerged in decentralized institutions such as the Regional Agencies for Development (*Agence de Développement Rural* – ARD) which assist rural communes and regional councils in drafting Local and Regional Integrated Development Plans (*Plans locaux/régionaux de développement intégrés* - PRDI). Professional agricultural organizations are also better structured now, united as a federation through the *Cadre National de Concertation des Ruraux* and its regional branches at the West African sub-regional level.

Senegal's Strategy for Social Protection and the World Bank's involvement in social safety-net protection projects demonstrate a commitment toward ensuring greater social protection. The Poverty Reduction Strategy Paper (PRSP II 2006-2010) encompassed all social safety-net strategies and policies including the Social Protection, Prevention and Management of Risks and Catastrophes. This PRSP identified four main climate-related natural hazards and disasters with negative effects on living conditions: droughts, floods, locust plagues and off-season rains[28]. These have slowed growth and increased the vulnerability of the whole economy.

The United Nations Development Assistance Framework's (UNDAF) main objective is the creation of opportunities for rural economic development[29]. In this vein, FFA, which motivates people to work in exchange for food, contributes through the creation of temporary employment for rural people and the provision of a seasonal social safety net. WFP's recent programs are also in-line with the 2011 WFP policy

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sufficient in rice, both in dryland and irrigated varieties but it does possess the possibility of two harvests a year: one in winter and another in the warmer season according to Senegal Agricultural Research Institute (ISRA). In 2012, only 100,000 ha were planted when 240,000 could be planted. As 80% of the agricultural production is at a very small farmer level, rice production should be occurring at this level in order to satisfy national requirements.
(http://www.leral.net/Competitivite-dans-la-culture-du-riz-Le-Senegal-plus-performant-que-la-Thailande_a49342.html)

[27] As evidenced by the Minutes of Meetings of Donors.

[28] WEDO, 2008

[29] 'Création d'opportunités pour le développement économique du monde rural' as expressed in the UNDAF goal.

on *Disaster Risk Reduction and Management: Building Food Security and Resilience*, and current FFA into other interventions (see Annex 5B).

Although Senegal's progress on the Millennium Development Goals (MDGs) improved from 2010 to 2013 [with an overall rating of 3 to 4[30]], the MDGs will be difficult to achieve, given the successive external and domestic crises which have undermined growth and delayed progress in poverty reduction (MDG 1) over the past decade. Regional and urban/rural disparities in access and overall low quality of basic social services remain a serious concern.

Recent events— including the 2011/2012 food security crisis in the Sahel, the impact of climate-related and economic shocks on access to and availability of food, have further negatively affected welfare and contributed to popular discontent. Cumulatively, a series of global and national political, economic, social, environmental/climate change and agricultural successive shocks negatively affected food security in Senegal. Most rural households engage in subsistence agriculture, livestock husbandry and fishing. Yet, agricultural production covers only half of the country's food demand[31], and considerable change and national resolve will be required to address self-sufficiency (See Annex 5A country context).

Climate change

Obstacles to improving agriculture are impeded by erratic weather, deficiencies in water management, poor use of inputs, inadequate access to markets, the low value of agricultural products and soil degradation compounded by poor agricultural extension services. The quality of water resources is gradually being altered by agriculture-related chemical pollution, the proliferation of aquatic plants, salinization of the water table and over-tapping of ground water. Agronomic potential has been seriously altered by population dynamics, the expansion and practice of extensive farming with slash burning, drought, bush fires and the disappearance of vegetative cover. Forest resources suffer from all sorts of pastoral pressures. The degradation of forests has also had a direct effect on wildlife. All these threats have aggravated climate change manifested by the most severe droughts, especially in the South; the salinization of surface and ground water; the increase in coastal erosion; and the modification of fish populations.

Senegal has a Sudanic and Sahelian climate dominated by two very distinct seasons: a dry season from November to June and a rainy season from July to October. The late arrival of rains, an irregular spatial distribution and an early end to the rainy season have seriously affected the flood zones and the intra-dune basins where over 90 percent of agriculture depends on precipitation that varies from year to year[32] . Precipitation can vary in the South up to 1000 mm per year whereas in the North, it is subject to less than 300 mm per year. This has resulted in negative impacts such as the flooding of traditional rice plots situated along Senegal's large branched out deltas in the regions of Fatick, Ziguinchor, Kaolack and Kolda where decreasing rainfall and sea level rise in Sine Saloum and Casamance River deltas have caused a significant loss of farmlands and arable soil.

[30] 2013 Millennium Development Goal Progress Index – downloaded from Poverty Matters Blog.
[31] Annex 4 of the TOR
[32] WEDO, 2008

The climate is also governed by the dynamics of strong winds. The duration of the rainy season and the intensity of seasonal distribution of precipitations vary from North to South, where precipitations are unstable and irregular from one year to another, and very random in the northern part of the country. According to the 2010 State of the Environment Report[33], a 30 to 35%[34] decrease in average rainfall from 1950 to 2005 combined with a decrease in its duration and frequency of rainy days as well as an increase of 1.6 C in temperatures during this same period were recorded. There are variations of 5 and 9 months in the dry season depending whether it is in the South or the North of the country.

By 2100, ground water levels are expected to decrease between 5 to 10 meters based on average and high climate sensitivity baseline scenarios[35]. In general, there is climate insecurity characterized by recurrent droughts. The most devastating one that affected Senegal occurred between 1968 and 1972. It was during that period of great drought that the term desertification was coined to explain the desolation and "dramatic consequences on the ecological equilibrium and all human activities undertaken. Drought affects mainly arid and semi-arid Sahelian areas in the northern part of Senegal. The degradation of soil quality and other factors contribute also to the occurrence of droughts. These droughts have caused a considerable decline in crop yields with losses of about 17.4 to 68.4 billion FCFA for peanuts and 12 to 30 billion FCFA of revenue for the millet/sorghum[36].

To address these phenomena, the Government adopted

- a 2001 *Environment Code* followed by
- the 2003 *National Climate Change Committee* (COMNACC) in 2003,
- the Environment and Living Surroundings Action Plan in 2005,
- *the National Adaptation Programme of Action* (NAPA[37]/NAPC) (2006),
- the *National Climate Change Adaptation Strategy* in February 2010[38] and more recently
- the *Vulnerability, Risk Reduction and Adaptation to Climate Change* (2011)[39].

The NAPA/NAPC detailed the country's adaptation measures which include: reforestation, restoration of mangroves, stabilization of sand dunes, physical protection against beach erosion and saline intrusion (using ditches, barriers (dykes) and other protection means, restoration of soil fertility, water conservation methods, use of alternative crops, and improved education on adaptation measures). Those all fit within the context of FFA assets built from 2005-2010.

The latest Vulnerability Analysis in Senegal[40], a nation-wide study examined the Food Consumption Score, the Wealth Index, the Coping Strategy Index as well as per

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[33] CSE, 2010
[34] COSEN TOR Food for Asset for Resilience Building, Draft TDY Mission Report, November 2012 November
[35] COSEN TOR Food for Asset for Resilience Building, Draft TDY Mission Report, November 2012 November
[36] TORs for DDY 2012
[37] Government's *National Adaptation Plan for Climate Change* (NAPC 2006)
[38] Case Study: Gender, Human Security and Climate Change in Senegal - This chapter is excerpted from WEDO's study, *Gender, Climate Change and Human Security*, commissioned by the Greek chairmanship (2007-2008) of the Human Security Network and ADB, Country Strategy Paper. 2010
[39] World Bank / GFDRR Climate Risk and Adaptation Country Profile (2011)
[40] Comprehensive Food Security and Vulnerability Analysis (CFSVA 2011)

capital monthly expenditures. CFSVA-2010 findings indicate that 85% of rural households are dependent on the markets and volatile prices especially since the global economic crisis in 2008. As much of the food supply is imported, three factors contribute to a food insecure household: (i) very low food availability, (ii) very low purchasing power and (iii) a general increase of main food staples prices. Low levels of household food stocks in all areas (food needs are covered for three weeks on average), as well as virtually nonexistent income sources due to poor production of cash crops (groundnuts and cotton in particular) brought people to the edge. This shortfall in agricultural production caused a low availability of local agricultural products in the markets, resulting in general rise of their prices compared to the same period last year[41]. And the cycle repeated itself in 2011, and 2012. This same study highlighted that the determinants of food insecurity are affected by both structural and cyclical factors and vary between areas of the country.

Table 5A.2. Determinants for Food Insecurity in Senegal and Coping Strategies Adopted[42] and Indices of Food Security

Factors which determine Food Insecurity	Coping Strategies[43]	Indicators of Food Security[44]
Poverty is the key determinant in food insecurity: the more a household is poor and the less purchasing power	Food consumption of the more accessible and less expensive foods (semolina, biscuits, bread, wild foods, forestry products, cassava)	Diversification of revenues offer greater capacity to generate or stabilize income and reduce vulnerabilities linked to agriculture Ownership of livestock where HHs with 3 or more livestock are more secure than others
The lack of education of household heads is also a determinant of food insecurity in both rural and urban environments	Household size is often determined by education of the mother.	On the other hand, the larger the HH (by Senegal standards) are more productive, generally, the more productive it is. (This does depend on the number of dependents in the HH on under 18 and over 65).
Dependence on the markets is widespread and the instability of prices affects the level of food self-sufficiency. Any drop in income during the lean period affects the household's food consumption	Small jobs, collection and sale of fodder Harvesting the remains of crops (sattu-Kissi-winnowing - and diériwatt) by women Selling of vegetable and condiments Loans from relatives/neighbors or the moneylender.	Small economic activities emerging at the village level where income can be generated sustainably.
The isolation of certain regions (Matam, Kédougou, Kolda) and the physical distance to markets contribute also contribute to food insecurity affecting both access to supply and access to markets for selling agricultural produce.	Physical access to markets allow easier access to selling or purchasing food Urban migration and provision of services (taxi-carts as means of income to buy food)	The larger the share of remittances in the household income, the better the food security. These remittances for rural people are often the most stable form of revenue although sample villages did not seem to depend on these.
Shocks, such as rising food prices or the loss of a household member can	Gardening of lettuce, onion, bitter eggplant, sweet eggplant,	Nutritional diversity

[41] WFP, 2012. Food Security Assessment in Zones at Risk - Harvest 2011-2012
[42] This Table is informed by the CFSVA, and various WFP Resilience participatory planning workshops held in April 2013 in villages in Senegal. The indicators were taken from CFSVA.
[43] WFP, 2012. Food Security Assessment in Zones at Risk - Harvest 2011-2012
[44] CFSVA food security indicators, 2010

Factors which determine Food Insecurity	Coping Strategies[43]	Indicators of Food Security[44]
significantly impact the food security and livelihoods of rural households	pepper, carrot, okra, pumpkin, cassava, tomato, cucumber) Purchasing food on credit more often Borrowing food Family solidarity and support	
Non-diversified sources of income, the sale of food stocks and the lack of savings are compensated by survival strategies such as a reduction in meals, and reduced food consumption Early sale of production for lower prices in order to meet family needs and repay agricultural loans	Consumption of less preferred foods, which are less expensive Reduced amounts of meals Limiting the number of meals Restricting food consumption, particularly by adults to enable the children to eat	Ability to provide 3 meals a day with a diversified diet.
Socio-cultural norms such as little breastfeeding, early introduction of solid foods instead of full early breastfeeding have contributed to acute malnutrition in children from 6 to 59 months, factors which have also contributed to infantile diseases and aggravated poverty.		Breastfeeding as long as possible prior to introduction of solid foods make children healthier
Chronic malnutrition and underweight in children from 6 to 59 months are also caused by poor nutritional diversity, poor health and lack of hygiene	Linked to the low levels of maternal education.	Clean households, improved children's diets from the nutritional diversity provide for overall healthier children

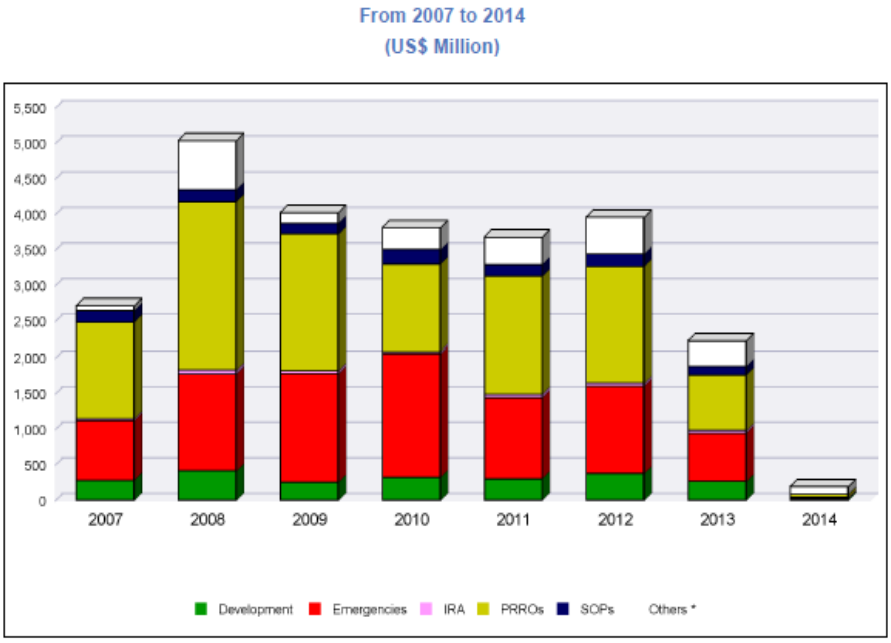
WFP Funding of operations

WFP fundraising occurs at the global level without a specific funding target for FFA. Global corporate funding allocations from 2007 to 2014 demonstrate that emergency programmes tend to be better funded than development ones 80% of total contributions went to emergency projects (PRRO, EMOP, SO), the large share of the lion, as can be seen in Figure 2 below.

WFP financial systems make it difficult to identify exact amounts of funding dedicated to FFA, and the evaluation had to rely on staff's historical knowledge of programme implementation. WFP financial systems do not identify amounts of funding dedicated specifically to FFA. Specifics inputs/finances to FFA are not provided in the SPR, nor were details regarding resources diverted from FFA toward the emergency responses. Furthermore, as the CP and PRRO were operationally merged, it made it difficult to assess or estimate what was directed to the original beneficiaries. Hence, the evaluation found it impossible to link resources invested to the results.

As reported by the WFP CO, allocations directed to FFA remained constant at a percentage rate of total budgets ranging from 6% for the period under review (2005-2010). From 2005-2010, the three FFA projects received a total of $127 million from multiple donors, three quarters of which fell under the PRROs (table 4 below). On this basis, is US$ 7.62 million is reported to have been allocated to FFA. It was difficult to use the same rationale for estimating caseloads (with the overlap between projects not being clear). The multiple nomenclatures used for the period under review and the various projects added to the complexity of assessing precisely the results obtained from FFA implemented activities.

Figure 5A.2. Global Contributions to WFP by Programme Category



	2007	2008	2009	2010	2011	2012	2013	2014
Development	277.4	410.0	250.4	320.1	298.1	374.8	261.8	15.4
Emergencies	837.4	1,359.6	1,524.1	1,730.7	1,139.6	1,227.4	678.0	10.6
IRA	27.0	59.5	44.0	32.6	50.7	44.5	39.0	14.1
PRROs	1,337.5	2,346.0	1,899.1	1,212.7	1,636.0	1,614.2	779.7	38.9
SOPs	162.7	168.9	151.0	207.1	163.5	177.4	119.1	4.9
Others *	73.2	695.5	156.1	310.5	395.4	524.3	348.2	111.2
TOTAL	2,715.1	5,039.5	4,024.7	3,813.8	3,683.3	3,962.6	2,225.8	195.1
Bilateral	40.7	161.9	86.6	72.0	80.0	38.5	1.6	-

* Others: contributions to Trust Funds, Special Accounts and General Fund.

Source: As of July 7, 2013,WFP website

In Senegal, global allocations matched the country allocations where funding for the PRROs was at 80% and the remainder of funding went to CP.

The Funding Environment for WFP in Senegal

WFP relies entirely on voluntary contributions to finance its humanitarian and development projects where donations are made in two ways: in-cash; or in kind (commodities), both on a full-cost recovery basis (to cover implementation costs, from transport to complementary items needed in FFA implementation such as agricultural tools. Donor contributions can further be linked to a specific project, an activity or left to the global or country office to decide on where it will be allocated.

The CO funding during this period relied on donor responses to emergencies which hindered planning for long term development projects.

Table 3 provides an overview of the timing of donor contributions to WFP COSEN projects[45] for the period under review. Donor support for WFP was stemming from a wide range of donors, with CIDA and the European Commission as the most important donors, and one can see in increase sources of funding in 2008, at the time of the crisis.

Table 5A.3. Years of Financial Contributions by Donor to WFP Senegal

Donor	2005	2006	2007	2008	2009	2010
Canada	x			x	x	x
European Commission					x	
Italy	x		x	x		
Saudi Arabia		x				
Luxembourg				x	x	x
Greece				x	x	
Spain		x				
Faroe Islands			x		x	
Czech Republic				x		
Slovenia				x		
Switzerland				x		
Senegal	x					
Private Donors		x				

(COSEN, 2013)

This is also illustrated in table 4by the funding trends of the projects over the years - at project closure, 55% of revised requirements had been covered demonstrating that throughout its implementation, the project suffered from sustained under-funding (illustrated by the 48% shortfall in 2008 for PRRO 10612.0 as an example). When contributions responded to the emergencies at hand, the PRRO fared better at resource mobilization.

Funding and resourcing strategy factors at the national level are important contextual factors as both WFP global and national are dependent on voluntary donor contributions for resources. Both in the past and currently, WFP's capacity to deliver is dependent on its ability to forecast deliveries. Partners could only deliver during the lean season as planned if food stocks were available in warehouses and WFP budgets were in hand to pay for FFA, tools, training and monitoring. Funding constraints affected the implementation of FFA and were mentioned by at least half of the partners

At project closure illustrated in Table 4, it appears that more than the three projects (original) requirements were covered, however with sustained under-funding in the early implementation period. When contributions rose to respond to emergencies, these WFP projects were able to mobilize additional resources but they still did not

[45] From Excel file provided by CO during evaluation mission.

manage to cover the overall revised requirements. Ultimately, during this period, WFP experienced shortfalls and the redirection of available resources to the emergency responses which caused a dilution in food entitlements for all beneficiaries with food distributions spread over a larger geographic area and additional beneficiaries.

Original versus final budgets proved to be misleading in that funding ultimately was plentiful when responding to the series of successive shocks that resulted in sharply increased food requirements. Funds intended for the original beneficiaries in Casamance were re-directed country-wide to respond to the food crisis. Figures taken from the financial SPR relating to all of the projects' allocations, did not distinguish which funds were specifically directed to FFA. Although original budgets were earmarked for Casamance focusing on recovery and stabilization, the emerging crisis of 2008 required WFP to reorient its response. Two major issues were noted: 1) WFP was not able to fully fund their original project requirements during the early stages of the evaluation period; and 2) at the height of the crisis, in 2008, the scarce resources available were then redirected to address greater needs throughout the whole of the country. Additional funds were requested and WFP was able to rally additional funds which were then used throughout the country for emergency needs rather than the originally targeted beneficiaries of the Casamance. Table 4 provides information on the three projects where the financial information is non-FFA specific.

Table 5A.4. Budgets (actual vs. planned) and Total Metric Tonnes (MT) distributed

Project	Original Approved Budget US$	Revised approved budget	Total Received	% funded	Total metric tonnes (MT) planned	Actual Total MT distributed	% Actual vs Planned (MT)
CP 10451 2007-2011	19,998,332	31,148,841	14,347,308	46%	31,497	17,311	55%
PRRO 10188.1 Post-conflict Relief and Rehabilitation in Casamance 2005-2008	18,633,292	18,639,619	9,730,391	52%	36,978	15,641	42%
PRRO 10612.0 Post-conflict Rehabilitation in the Casamance Naturelle 2008-2011	11,927,632	77,443,946	45,798,997	59%	70,254	40,379	57%
TOTAL	**50,559,256**	**127,232,406**	**69,876,696**		**138,729**	**73,331**	

Source: Project documents, SPR

Annex 6. Supporting Data information from field data collection

Table of Contents (Annex 6)

Annex 6.1 Difficulties Understanding and Measuring FFA

Table 1 provides an overview of the issues related to nomenclature for the period under review which explains why it was difficult to measure results where measurement of FFA asset outputs and recording proved extremely problematic.

Table 6.1: Reported FFA Activities and Tonnage attributed to the Programs Under Review

SPR Reports Years	CP 10451.0 (2007-2011)	PRRO 10188.1 (2005 – 2008)	PRRO 10612.0 (2008-2011)
Approved Commodities at start[46] for all activities	28,245 MT[47]	29,222 MT	35,124 MT
SPR 2005[48]		No information provided on MT related to FFW	
SPR 2006[49]		No information provided on MT related to FFW	
SPR 2007	899 MT[50]	No information provided on MT related to FFW [51]	
SPR 2008[52]	962 MT[53]	There is no reference to FFW/FFT/FFE/FFA	Approx. 4,400 MT[54]
SPR 2009[55]	53 MT[56]		There was no specific MT for FFW/FFA etc.
SPR 2010[57]	635 MT[58]		In 2010 approved commodities are 50,351MT [59]
SPR 2011	324 MT[60]		

Source: (Various SPR Reports)

FFA in Senegal implemented during the evaluation were mostly in the low-tech, low-risk interventions. The nature of assets built were in fact are often determined by the partners selected for implementation. More capable partners, some with required expertise, those with access to other donors and funds were selected for the more complex assets. These included PAPIL who built build dykes or the government's SDDR[61] with hydrological engineering works expertise, as well as that of the Great Green Wall initiative, and OCEANIUM.

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[46] In this case, there was no FFA reference made but what did fit the NRM context was FFW.
[47] From SPR 2007: The results of FFW activities are increasingly difficult to measure, partly because of poor reporting and the limited capacity of partners (SPR 2007). Only FFW, no FFA
[48] No FFA found but FFW is found although no specific MT is provided in SPR 2005
[49] FFW is discussed
[50] Under DRR
[51] Three FFW, FFT, Food for Education (FFE) are specified in this SPR
[52] From SPR 2008, the results of FFW activities are increasingly difficult to measure, partly because of poor reporting and the limited capacity of partners. FFW activities in 2008 have therefore focused on a limited number of sustainable activities. The implementation of a monitoring and evaluation system specifically designed to measure the impact of food crisis prevention has started in 2008 and the harmonisation of tools as well as capacity building will take place in 2009. Only FFW, no FFA
[53] Under DRR (no specific mention of FFA, FFT or FFW)
[54] SPR 2008: Food-for-work (FFW) activities in Casamance counted for half of the distributed food and over half of the PRRO beneficiaries but there were no specific descriptions in the SPR as to the type of activity. These figures are extrapolated from total MT allocated to beneficiaries in 2008. No mention of FFA, only FFW.
[55] FFA/FFW nomenclature is used under DRR
[56] Under DRR
[57] Now FFA is the accepted nomenclature
[58] Specified under DRR
[59] FFA is mentioned but not FFW.
[60] SPR 2011, under Disaster Mitigation
[61] *Service Départemental du Développement Rural*/Department Service for Rural Development

During the evaluation process, using available partners reports (PAPIL, PERACOD, SDEF, CRS), the evaluation reconstructed an exhaustive list of FFA reporting more than 700 assets (See Annex 9) which benefited from WFP FFA support. Maps found in the sub-office of Ziguinchor revealed locations of these assets for the period under review[62] (See Annex 11). Another list of Assets was also recorded by the evaluation, assets which were not necessarily identified in the inception preparation phase of this evaluation, is provided in Annex 11. The variability of recorded FFA assets as shown by these annexes was a reflection of the monitoring system's inability to record adequately its FFA interventions, let alone measure long term impacts of FFA as the information was not retrievable through the M&E system. Norms were unwritten for the period under review.

Lack of standard reporting formats to record FFA related inputs, implementation and achievement, and the use of multiple labels, nomenclatures and varying indicators of results made it difficult for the evaluation to identify measurable results. It was impossible to monitor against clear labels and indicators.

COSEN FFA nomenclature for the period under review included Food for Work (FFW), Food for Training (FFT), Food for Recovery (FFR), Food for Sustainable Asset Creation (FSAC)[63], and recent additions of Food for Asset for Resilience Building[64] (AAA) and the Rural Resilience Initiative (R4) could potentially add to the difficulty of assessing future results. The varied and inconsistent nature of measurement indicators and nomenclature as illustrated in SPR FFA records[65], (some which also lacked relevance[66]), demonstrate a failure in monitoring systems.

Identification of sites, identification of the nature of assets built, absence of monitoring [during implementation] or evaluation [after implementation] information on interventions, each represented a difficulty encountered in the conduct of the evaluation. As this proved to be the largest obstacle of the evaluation, it is important to recognize that many of these issues still persist and will require consistent and budgeted attention despite COSEN having established a Monitoring and Evaluation Unit in 2012[67].

Monitoring measures and indicators differed with each partner - hence reporting approaches ultimately affected amounts of food distributed, or finding project beneficiaries and or ultimately identifying assets as found sample identification for the evaluation. Integrated strategies for maintenance to ensure sustained resilience were not in place. For example, nearly 95% of the dykes assessed by the evaluation remain unfinished reducing the overall impact of the recovery of arable land and the development income diversifying activities that could occur through fish farming projects.

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[63] From the SPRs from 2005 to 2010

[64] See Annex 6

[65] See Annex 11.FFA in Programs under review (2005 -2010)

[66] As an example as reported in SPR 2005 through to 2010, reforested lands are also mentioned but there is no mention of survival rate which could provide a measure of the positive impact on the land

[67] Current progress is being made and a measurement framework to measure results, the development of detailed monitoring forms, and the future involvement of ARD throughout the country to conduct M&E are underway. However, there is still no plan for post- intervention assessment of these assets.

With the additional nomenclatures added within current FFA in new COSEN programs[68] – see Annex 5B, further clarification and detailing of templates at the M&E Unit will be needed and underlines the need for a more prominent role for the M&E Unit. To ensure sustainability of assets after implementation, monitoring/maintenance arrangement have to be planned with adequate budgets allocated to support this oversight.

Annex 6.2 Beneficiaries of FFA and Respondents of the Evaluation's HHS

The overall sample size of household surveys conducted by gender is shown in Table 2. Some 52.75% of respondents were from treatment villages (TV), and beneficiary households (participants to FFA) represented 29.45% of the overall sample.

Table 6.2a. Sample Breakdown by Beneficiary and Non-Beneficiary Respondents

	Treatment Villages			Comparison Villages			Total
	Male	Female	Total	Male	Female	Total	
Beneficiary	238	232	470	0	0	0	0
Non-Beneficiary	218	138	356	444	326	770	1126
Total HH respondents	**456**	**370**	**826**	**444**	**326**	**770**	**1596**

(HHS, 2013)

33. Lack of education, household size, and the gender of the head of the household are major correlates of poverty and food insecurity in Senegal[69]. A comparison of 3 poverty/food insecurity related indicators: HH size, education level, and gender of head of HH indicate there were no statistically significant differences between key indicators between TV and CV. See Table 2b.

Table 6.2b. Key Respondent Variables (Treatment vs. Comparison Villages)

	Treatment Villages versus Comparison Villages
Gender	-.0245653 (-0.9886)
Education Level	.0174609 (0.2048)
Household Size	.1365397 (0.7413)

(Source: HHS, 2013) (t-statistic in parentheses)

Sampled treatment villages and comparison villages are listed by agro-ecological and livelihood zones Annex 2, Table 2 and by gender See Annex 6.2 Table 2c.

Men represented the majority of respondents at 56.39% with women at 43.61% - with discrepancies in livelihoods zones. In the Sylvopastoral Zone male respondents reached almost 90%[70].

[68] R4, 3A
[69] CFSVA, 2011. Data from 2010
[70] This may be indicative of the role of women in this predominantly male culture where women do not have public roles.

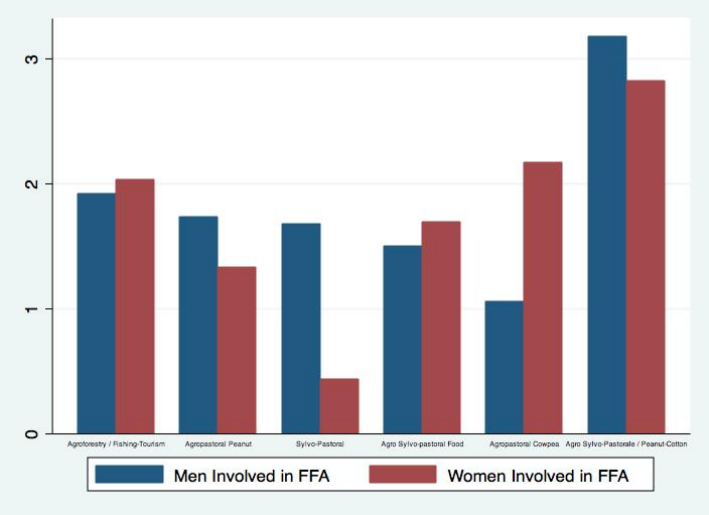
Table 6.2c. Respondents by Gender and Livelihood Zone

Livelihood Zone	Male	Female	Total
Agroforestry / Fishing Tourism	54.11	45.89	100.00
Agropastoral Peanut	52.80	47.20	100.00
Sylvo Pastoral	89.19	10.81	100.00
Agro-Sylvopastoral / Food	58.01	41.99	100.00
Agropastoral Cowpea	46.34	53.66	100.00
Agro Sylvo-Pastoral / Peanut-Cotton	63.79	36.21	100.00
Total	**56.39**	**43.61**	**100.00**

(HHS, 2013)

Figure 1 shows the average number of participants per household[71] in the FFA programs in treatment villages, per livelihood zone.

Figure 6.2.1. Participation in FFA programs by mean values



HHS, 2013

Of the respondents, educational levels between males and females varied. Surprisingly, 31% of females had finished primary school against 25% of males in TV. But finally, the differences between TV and CV are very small which would validate TV/CV comparability. The big difference is that comparison villages reported *'Alphabetisation'* which translates into adult literacy while no respondent in a treatment village did. See Table 2d.

[71] These numbers are the average number of men and women per household who are involved in FFA programs. It is based on the question in the HHS that asks who is involved in the FFA program per HH - not simply HHS respondents.

Table 6.2d. Reported Education Level of Respondents by Gender by Percentage

Gender	Primary	Secondary	Upper	Koranic School	Adult Literacy	Total
Treatment Villages						
Male	23.82	16.18	5.59	54.41	0.00	100.00
Female	30.09	12.04	2.78	55.09	0.00	100.00
Total	**26.26**	**14.57**	**4.50**	**54.68**	**0.00**	**100.00**
Comparison Villages						
Male	27.19	18.12	3.12	44.69	6.88	100.00
Female	32.20	9.60	1.69	43.50	12.99	100.00
Total	**28.97**	**15.09**	**2.62**	**44.27**	**9.05**	**100.00**
Total	27.54	14.81	3.61	49.76	5.85	100.00

(HHS, 2013)

With respect to education by livelihood zones, a significantly higher number of respondents in TV had finished primary school in the Casamance in the Agroforestry/Fishing/Tourism Zone. In the Sylvopastoral Zone, 82.6% had the highest proportion of educated respondents where education was obtained at a Koranic School in a majority of male respondents. This zone also reported the highest rate of adult respondent literacy at 17%. See Table 2e.

Table 6.2e. Reported Education Level of Respondents by Livelihood Zone by Percentage

Livelihood Zone	Primary	Secondary	Upper	Koranic School	Adult Literacy	Total
Agroforestry / Fishing Tourism	42.52	31.56	7.64	16.28	1.99	100.00
Agropastoral Peanut	16.21	3.02	1.10	72.80	6.87	100.00
Sylvo Pastoral	0.00	0.00	0.00	82.61	17.39	100.00
Agro-Sylvopastoral / Food	29.62	14.29	2.79	50.17	3.14	100.00
Agropastoral Cowpea	16.22	2.70	0.00	78.38	2.70	100.00
Agro Sylvo-Pastoral / Peanut-Cotton	29.27	19.51	7.32	43.90	0.00	100.00
Total	**27.54**	**14.81**	**3.61**	**49.76**	**4.27**	**100.00**

(HHS, 2013)

Annex 6.3 Land tenure and asset data

Land tenure status among beneficiaries and non-beneficiaries in both treatment and comparison villages by livelihood zones is illustrated in Table 3a.

Table 6.3a. Land Tenure Information (Treatment vs. Comparison Villages, percentages), source HHS

	Owner	Leased Land	Lent Land	Other	Total
Treatment	77.50	5.94	15.42	1.14	100.00
Comparison	71.78	11.37	16.44	0.41	100.00
Total	74.75	8.55	15.91	0.79	100.00

(HHS, 2013)

Ownership status between treatment and comparison villages varied by 5.72% indicating that the difference between comparison and treatment villages on ownership is quite s mall but statistically significant (MD = -0.06; t = -2.72; p = 0.006). This suggests that respondents in comparison villages are slightly less likely to be land owners than their treatment village counterparts. See Table 3b.

Table 6.3b. Land Tenure Information, aggregated by percentage

		Owner	Leased Land	Lent Land[72]	Other[73]	Total
Livelihood Zones	Agroforestry/Fishing /Tourism	83.16	3.62	13.01	0.21	100.00
	Agropastoral Peanut	66.74	18.97	14.06	0.22	100.00
	Sylvopastoral	98.44	0.00	1.56	0.00	100.00
	Agro-SylvoPastoral/ Food	66.91	6.00	24.70	2.40	100.00
	Agropastoral Cowpea	95.59	0.00	4.41	0.00	100.00
	Agro Sylvopastoral / Peanut-Cotton	74.55	5.45	20.00	0.00	100.00
	Total	**74.75**	**8.55**	**15.91**	**0.79**	**100.00**
Treatment Villages	Beneficiaries	78.70	5.22	15.65	0.43	100.00
	Non-Beneficiaries	75.83	6.95	15.11	2.11	100.00
	Sub-Total [TV respondents]	**77.50**	**5.94**	**15.42**	**1.14**	**100.00**
Comparison Villages	Beneficiaries	n/a	n/a	n/a	n/a	n/a
	Non-Beneficiaries	71.78	11.37	16.44	0.41	100.00
	Sub-Total [CV respondents]	**71.78**	**11.37**	**16.44**	**0.41**	**100.00**
Gender	Male respondents	74.89	7.34	16.40	1.38	100.00
	Female respondents	74.58	10.17	15.25	0.00	100.00
	Total	**74.75**	**8.55**	**15.91**	**0.79**	**100.00**

(HHS, 2013) – n/a: non applicable

Table 6.3c. Land Tenure Information Comparisons, source HHS

	Beneficiary vs. Non-Beneficiary (within treatment villages)	Treatment Villages vs. Comparison Villages
Owner	0.065** (2.123)	0.742*** (2.721)
Leased Land	-0.051 (-0.831)	-0.051*** (-3.728)
Lent Land	0.0127 (0.609)	-0.008 (-0.4531)
Other	-0.015** (-2.115)	0.006 (1.6179)

Mean differences reported, t-statistic in parentheses
** p = 0.95, *** p = 0.99 (HHS, 2013)

[72] *Lent land* is borrowed land for which the tenant pays no compensation

[73] *Other* includes HH-owned land or state-owned land located in a park or in another setting for which the farmer has no agreement or is not the legal title holder and does not pay compensation.

Assets background tables

Table 6.3d. Type of Asset by category

#	Village and Reforestation Asset includes nurseries, ANR, mangrove regeneration	#	Village and anti-salt dyke asset	#	Village and Community Garden Asset and nurseries	
1	MISSIRAH MOURIDE Reforestation /Nurseries	4	MANKAKOUNDA RIP Anti-salt dyke/ Reforestation	7	KEUR BABOU DIOUF Community garden	
2	MABO1 Assisted Natural Regeneration (ANR)	13	GOULOUMBOU Anti-Salt Dyke Micro-Ridged Plots	9	LABGAR WOLOF Nursery[74]/community garden for women	
3	SAM THIALENE Assisted Natural Regeneration (ANR)	14	BODÉ Anti-salt dyke	12	TAÏBATOU Community garden	
5	KOHEL[75] Reforestation	16	THIOBON Anti-salt dyke	8	LOUGUERE FAFABE Agroforestry nursery /Community garden for women	
6	TELLAYARGOUYE Agroforestry /nursery	17	KAYLOU Anti-salt dyke	11	KHOSSANTO Community garden	
10	SYER 1 Agroforestry nursery	18	ÉDIOUNGOU Anti-salt dyke			
15	TOBOR Regeneration of Mangrove	19	HAMADALLAYE Anti-salt dyke			
TOTAL	**7**		**7**		**5**	**19**

A&B Report and AA, 2013

Table 6.3e: Asset location based on landscape and population needs (score: 1 to 5)

Livelihood Zone	Number of Observations	Mean Value	Standard Deviation
Agroforestry / Fishing-Tourism	5	5	0
Agropastoral Peanut	5	4.6	.547
Sylvo-Pastoral	1	5	.
Agro Sylvo-pastoral Food	3	5	0
Agropastoral Cowpea	2	4	1.41
Agro Sylvo-Pastoral / Peanut-Cotton	1	5	.
Total	17	4.76	0.562

AA, A&B Report 2013.

[74] Where a nursery is attached to a community garden, these are combined together as one asset.
[75] This asset no longer existed

Table 6.3f. General State of Repair/Maintenance of the Asset

Livelihood Zone	Number of Observations	Mean Value	Standard Deviation
Agroforestry / Fishing-Tourism	5	4	0.707
Agropastoral Peanut	5	2.8	1.095
Sylvo-Pastoral	1	4	.
Agro Sylvo-pastoral Food	3	3.67	0.577
Agropastoral Cowpea	2	4.5	0.707
Agro Sylvo-Pastoral / Peanut-Cotton	1	2	.
Total	17	3.53	1.007

(AA, 2013)

Annex 6.4 Biophysical Impacts

Table 6.4a. Asset State and Impact on Biophysical Outcomes, controlling for Livelihood Zones

Impact on Biophysical Outcomes	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	
Asset State	.5591412	.1800352	3.11	0.004	.1928568	.9254255
LZ_1 (Dummy)	.3636106	.1953892	1.86	0.072	-.0339117	.761133
LZ_2 (Dummy)	.2999267	.1906918	1.57	0.125	-.0880386	.6878921
LZ_3 (Base)	-	-	-	-	-	-
LZ_4 (Dummy)	.3728695	.2012788	1.85	0.073	-.0366353	.7823744
LZ_5 (Dummy)	-.293156	.2279835	-1.29	0.207	-.756992	.17068
LZ_6 (Dummy)	.3392469	.2834682	1.20	0.240	-.2374735	.9159673
_cons	-1.01667	.5141721	-1.98	0.056	-2.062761	.0294207
Observations:		40				
R-Squared		0.5100				
Adjusted r-squared		0.4209				

(Source: FG, 2013)

Under biophysical impacts

Soil and water conservation works -The evaluation sample did not have any soil and conservation assets. However, SPR mentioned soil and conservation works in PRROs 10088.1 and 10612, and CP 10451 in 2007, 2008, 2009, 2010 (See Annex 11).). Usual impacts of these assets included recovery of arable land measured by hectare. Other impacts included water retention, replenishment of the water table, improved soil fertility as it allows for the retention of organic matter. These impacts were difficult to measure as scientific measurement tools are required which were not within the scope of this evaluation nor of WFP capacity[76].

According to the SPR, several assets ranging from biological consolidation and mechanized dykes (bio-consolidation and pebbledash), riverbank protection (bio-consolidation of banks, and barrages correction (check dams and gully plugs), stone bunds, ridged micro-plots, hedgerows (stone belts, parceling, fences), to the planting of *Jatropha curcas* are also implemented. In the SPR, measurements of these assets were in km or in ha protected but impacts were not measured. PAPIL, one of WFP's main implementing partners was able through the bio-consolidation in micro-ridged plots allowed of recovered cultivable soils, obtaining improved yields at harvest time[77]. Another major partner, the DGEF, reported 'high rates of success' in Koupentoum in Soil and Conservation Technologies but these results were not documented.

Annex 6.5 Agricultural productivity Outcomes and Impacts

Table 6.5a. Regression controlling for livelihood zones demonstrating the relationship between the perceived asset state and improved agricultural productivity

	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
asset_state	.5163288	.2240124	2.30	0.028	.0594525	.973205
LZ_2	.1323362	.2019536	0.66	0.517	-.2795508	.5442233
LZ_3	-.5288749	.3174835	-1.67	0.106	-1.176387	.118637
LZ_4	.30855	.1890639	1.63	0.113	-.0770483	.6941482
LZ_5	-.3639053	.2386993	-1.52	0.138	-.8507358	.1229252
LZ_6	.2775018	.3088348	0.90	0.376	-.352371	.9073746
_cons	-.8264881	.6741589	-1.23	0.229	-2.201444	.5484681
Number of Observations	38					
R-Squared	0.4244					

Annex 6.6 Food Security Tables

Beneficiaries and Food Security

All data on number of meals eaten (adults, youth and children) was collected in the household surveys and is reported below.

[77] PAPIL/CSE, Environmental Monitoring Report/*Rapport sur le suivi environnemental (2008)*

Table 6.6a: Number of Meals Eaten Per Day by percentage

	0	1	2	3	4	[1]5	6	7	8	9	Total
Treatment Villages Non-Beneficiaries											
Adults (> 18 years)	0	0	7.04	92.11	0.56	0.28	0	0	0	0	100.00
Youth (6 - 18 years)	0.85	0	3.95	91.53	3.39	0.28	0	0	0	0	100.00
Children (6 months - 5 years)	1.43	0	1.43	66.29	27.21	3.14	0	0	0	0	100.00
Treatment Villages Beneficiaries											
Adults (> 18 years)	0	0.21	19.19	80.17	0.43	0	0	0	0	0	100.00
Youth (6 - 18 years)	0	0	0	8.66	87.01	3.46	0.43	0.13	0	0	100.00
Children (6 months - 5 years)	0	0	5.13	56.88	31.24	6.06	0	0.7	0	0	100.00
Comparison Villages Non-Beneficiaries											
Adults (> 18 years)	0	3.25	20.78	75.84	0.13	0	0	0	0	0	100.00
Youth (6 - 18 years)	0.26	1.31	12.19	82.44	3.54	0.13	0	0	0	0.13	100.00
Children (6 months - 5 years)	1.24	0.28	8.23	62.9	21.38	5.1	0.41	0.28	0	0.14	100.00

(HHS, 2013)

Table 6.6b. Number of Meals Eaten by Adults per day

Number of Meals Eaten Per Day (Adults)			
	Treatment Villages		Comparison Villages
	Non-Beneficiaries	Beneficiaries	Non-Beneficiaries
1	0	0.21	3.25
2	7.04	19.19	20.78
3	92.11	80.17	75.84
4	0.56	0.43	0.13
5	0.28	0	0
Total	**100**	**100**	**100**

There is a significant difference between non-beneficiaries and beneficiaries within treatment villages, with beneficiary adults eating fewer meals each day than non-beneficiaries ($t = 5.193$, $p = 0.00$). While this seems counter-intuitive, it may be the case that adults are eating fewer meals of better quality (see analysis below).

Table 6.6c. Number of Meals Eaten by Youth per day

Number of Meals Eaten Per Day (Youth)			
	Treatment Villages		Comparison Villages
	Non-Beneficiaries	Beneficiaries	Non-Beneficiaries
0	0.85	0	0.26
1	0	0	1.31
2	3.95	8.66	12.19
3	91.53	87.01	82.44
4	3.39	3.46	3.54
5	0.28	0.43	0.13
6	0	0	0
7	0	0.43	0
8	0	0	0
9	0	0	0.13
Total	**100**	**100**	**100**

Within treatment villages, there is no statistical difference between the number of meals eaten each day by youth (t = 0.018). However, the difference between treatment and comparison villages is significant, if small (t = 3.50, p = 0.00). Youth in treatment villages, on average, eat 0.1 more meals per day than their counterparts in the comparison villages.

Looking at the number of meals eaten by children each day, we see a strong effect of being a beneficiary on the number of meals eaten in Table 6d.

Table 6.6d. Number of Meals Eaten by Children per day

Number of Meals Eaten Per Day (Children)			
	Treatment Villages		Comparison Villages
	Non-Beneficiaries	Beneficiaries	Non-Beneficiaries
0	1.43	0	1.24
1	0	0	0.28
2	1.43	5.13	8.23
3	66.29	56.88	62.9
4	27.21	31.24	21.38
5	3.14	6.06	5.1
6	0	0	0.41
7	0	0.7	0.28
8	0	0	0
9	0	0	0.14
Total	**100**	**100**	**100**

Beneficiaries within treatment villages report that their children eat more meals than non-beneficiaries (mean difference = 0.127, t = 2.47, p = 0.014). A similar improvement is seen between comparison and treatment villages, with treatment

villages reporting that their children eat more meals than comparison respondents (mean difference = 0.131, t = 3.24, p = 0.001).

From the household survey, there are significant differences in food consumption patterns between non-beneficiary and beneficiaries, as well as between treatment and comparison villages, as seen in Table 6e below

Table 6.6e. Consumption Patterns between beneficiaries and non-beneficiaries and between TV and CV

	Beneficiaries vs. non-Beneficiaries	Treatment vs. Comparison
Cereals	-1.1773	0.217
Starches	-4.8098***	-3.2629***
Legumes (Pulses)	-8.2836***	-3.1707***
Leaves and green vegetables, cabbage and other vegetables	-4.0836***	0.4880
Fruits	12.0783***	0.4270
Meat, Fish, Eggs, etc.	1.9113**	3.1247***
Milk, curd, etc.	-4.4042***	-3.2259***
Sugar and other sugar products	-4.4573***	-0.2193
Oils, fats, butter, etc.	-2.8753***	1.1545
** p = 0.95, *** p = 0.99		

People in the treatment villages tend to eat starch less, with those who were direct beneficiaries eating less starch than the non-beneficiaries. The same pattern is true for legumes (pulses) and milk products with beneficiaries eating much less than the non-beneficiaries, and overall treatment villages consuming much less of these food products than comparison villages.

While there is no difference between treatment and comparison villages in terms of vegetable consumption, sugar consumption or fat consumption, within treatment villages, beneficiaries consumed these food items less often than non-beneficiaries.

The largest difference seen here is to do with fruit consumption, with beneficiaries eating fruit much more often than non-beneficiaries. There is no difference between treatment and comparison groups. Indeed, beneficiaries reported that they ate fruit an average of 5.67 times per week, versus the non-beneficiary average of 3.45 times. Comparison villages consumed fruit an average of 4.65 times per week.

There were also higher rates of meat consumption in treatment villages, and within the beneficiary group. The difference between the beneficiary and non-beneficiary groups was lower, however, with the benefit of higher meat consumption being distributed to the entire community.

In general, respondents to the household survey felt that FFA improved their food security when it was received, and there was no real difference between men and women in their perceptions. See Table 6f below.

Table 6.6f. FFA related improvement in food security

Did FFA improve your food security?	Gender		
	Male	Female	Total
No	16.81	12.93	14.89
Yes	83.19	87.07	85.11
Total	**100**	**100**	**100**

(Source: HHS, 2013)

While most reported that it improved their situations, more than half of the respondents to the household survey did not think that it was enough as seen in Table 6g.

Table 6.6g. Perceptions of lower vulnerability[78], TV (Women)

	Frequency	Percentage
No	9	50.00
Yes	9	50.00
Total	18	100.00

(Source FG 2013)

Table 6.6h. Village Cereal Banks in Sampled Villages

TREATMENT VILLAGES	VCB	COMPARISON VILLAGES	VCB
MISSIRAH MOURIDE	2010 WFP	MABO 2	2001 World Vision
MABO1	2013 World Vision	SAM NGUÈYÈNE	2010 WFP
SAM THIALENE	2010 WFP	DIANÉ	YES
		KEUR MALICK FADY	IN 1991 through a cereal project
Total VCBs in Treament villages	**3**	**Total VCBs in comparison villages**	**4**

Annex 6.7 Livelihoods

Table 6.7a. Perceived Improved Status in livelihood in past few years in both treatment and comparison villages (percentages)

	Treatment Village		Comparison Village	
	Yes	No	Yes	No
Beneficiary	58.72	41.28	0.00	0.00
Non-Beneficiary	43.47	56.53	39.43	60.57
Total	52.19	47.81	39.43	60.57

(HHS Survey, 2013)

[78] Including lower outmigration

Table 6.7b. Perception of Improved Livelihood Status by Livelihood Zones (by percentage)

Livelihood Zone	Yes	No	Total
Agroforestry / Fishing Tourism	41.86	58.14	100.00
Agropastoral Peanut	41.77	58.23	100.00
Sylvo-Pastoral	27.03	72.97	100.00
Agro Sylvo-pastoral Food	57.63	42.37	100.00
Agropastoral Cowpea	40.24	59.76	100.00
Agro Sylvo-Pastoral / Peanut Cotton	58.62	41.38	100.00
Total	**46.03**	**53.97**	**100.00**

Source: HHS, Question 8.6

Table 6.7c. Perception of Improved Livelihood Status comparisons by livelihood zones

Livelihood Zone	Beneficiaries vs. Non-Beneficiaries	Treatment Villages vs. Comparison Villages
Agroforestry/Fishing Tourism	-0.173 (-1.845)	0.272*** (6.168)
Agropastoral Peanut	0.308*** (4.402)	0.166*** (3.642)
Sylvo-Pastoral	0.342*** (2.885)	-0.203 (-1.728)
Agro Sylvo -pastoral Food	0.284*** (4.358)	0.081 (1.716)
Agropastoral Cowpea	-0.335** (-2.439)	-0.015 (-0.143)
Agro Sylvo-Pastoral / Peanut Cotton		0.028 (0.2170)
Overall	0.152*** (4.378)	.127*** (5.138)

(Means difference reported, t-statistic in parentheses ** p = 0.95, *** p = 0.99) (HHS, 2013)

Table 6.7d. Improvement in Livelihoods as an outcome/impact of FFA

		Significant	Some	Not at all	Total
Livelihood Zone	Agroforestry/Fishing Tourism	18.78	56.85	24.37	100.00
	Agropastoral Peanut	7.58	46.97	45.45	100.00
	Sylvo-Pastoral	5.00	65.00	30.00	100.00
	Agro Sylvo -pastoral Food	20.90	36.80	24.20	100.00
	Agropastoral Cowpea	0.00	65.62	34.38	100.00
	Agro Sylvo-Pastoral/ Peanut Cotton	8.82	73.53	17.65	100.00
Treatment Villages	Beneficiaries	**26.43**	**61.79**	11.79	100.00
	Non-Beneficiaries	5.88	42.48	51.63	100.00
	Total Treatment Villages	19.17	54.97	25.87	100.00
Comparison Villages	Total Comparison Villages	8.39	39.60	52.01	100.00
Total	**Total**	**14.77**	**48.70**	**36.53**	**100.00**

(HHS, 2013)

Table 6.7e. Perceived Improvements in the village by Livelihood Zones since WFP

	No	Yes	Total
Agroforestry / Fishing Tourism	50.00	50.00	100.00
Agropastoral Peanut	41.67	58.33	100.00
Sylvo Pastoral	100.00	0.00	100.00
Agro-Sylvopastoral / Food	0.00	100.00	100.00
Agropastoral Cowpea	50.00	50.00	100.00
Agro Sylvo-Pastoral / Peanut-Cotton	100.00	0.00	100.00
Total	**42.11**	**57.89**	**100.00**

(FG, 2013)

Annex 6.8 Social Cohesion

Budget Management in Surveyed Villages – Analysis of Gender Roles

Table 6.8a. Heads of Households by Gender, Livelihood Zones, Treatment and Comparison Villages

		Male Headed	Female Headed	Total
Livelihood Zone	Agroforestry / Fishing Tourism	60.73	39.27	100.00
	Agropastoral Peanut	82.43	17.57	100.00
	Sylvo Pastoral	95.52	4.48	100.00
	Agro-Sylvopastoral / Food	68.77	31.23	100.00
	Agropastoral Cowpea	87.18	12.82	100.00
	Agro Sylvo-Pastoral / Peanut-Cotton	69.39	30.61	100.00
	Total	**70.98**	**29.02**	**100.00**
Treatment Villages	Beneficiary	60.65	39.35	100.00
	Non-Beneficiary	82.10	17.90	100.00
	Total	**68.83**	**31.17**	**100.00**
Comparison Villages	Non-Beneficiary	73.37	26.63	100.00
	Total	**73.37**	**26.63**	**100.00**
Village Type	Treatment	68.63	31.17	100.00
	Comparison	73.37	26.63	100.00
	Total	**70.98**	**29.02**	**100.00**

(HHS 2013)

Table 6.8b. Who manages household food budget by percentage?

		The Wife	Both	The Husband	Other Members	Total
Livelihood Zone	Agroforestry / Fishing Tourism	59.49	16.67	20.68	3.16	100.00
	Agropastoral Peanut	15.52	6.90	72.84	4.74	100.00
	Sylvo Pastoral	8.11	6.76	79.73	5.41	100.00
	Agro-SylvoPastoral / Food	36.88	26.47	31.67	4.98	100.00
	Agropastoral Cowpea	15.85	13.41	68.29	2.44	100.00
	Agro Sylvo-Pastoral / Peanut-Cotton	72.41	15.52	12.07	0.00	100.00
Treatment Villages	Beneficiary	42.95	20.73	33.97	2.35	100.00
	Non-Beneficiary	28.93	8.99	56.46	5.62	100.00

		The Wife	Both	The Husband	Other Members	Total
	Total	36.89	15.66	43.69	3.76	100.00
Comparison Villages	Total	35.58	16.10	43.90	4.42	100.00
Total	**Total**	**36.26**	**15.87**	**43.79**	**4.08**	**100.00**

(HHS, 2013)

Table 6.8c.Who generates the money spent on food by Livelihood Zone by percentage?

		The Husband	The Wife	Both	Other Members	Total
Livelihood Zone	Agroforestry / Fishing Tourism	47.79	19.37	32.63	0.21	100.00
	Agropastoral Peanut	78.23	12.28	6.90	2.59	100.00
	Sylvopastoral	85.14	6.76	6.76	1.35	100.00
	Agro-Sylvopastoral / Food	49.10	11.31	38.24	1.36	100.00
	Agropastoral Cowpea	76.83	10.98	12.20	0.00	100.00
	Agro Sylvo-Pastoral /Peanut-Cotton	41.38	13.79	44.83	0.00	100.00
Treatment Villages	Beneficiary	54.57	15.32	30.21	0.00	100.00
	Non-Beneficiary	73.88	10.11	16.01	0.00	100.00
	Total	62.83	13.08	24.09	0.00	100.00
Comparison Villages	Total	56.96	14.69	25.75	2.60	100.00
Total	**Total**	**60.00**	**13.86**	**24.89**	**1.25**	**100.00**

(HHS, 2013)

Table 6.8d. Management of revenues of health and education by percentage

		N/A	The Husband	The Wife	Both	Other Members	Total
Livelihood Zone	Agroforestry / Fishing Tourism	0.00	29.89	25.26	44.63	0.21	100.00
	Agropastoral Peanut	0.22	73.71	13.36	10.56	2.16	100.00
	Sylvo Pastoral	0.00	89.19	2.70	6.76	1.35	100.00
	Agro-SylvoPastoral / Food	0.00	35.60	14.29	49.66	0.45	100.00
	Agropastoral Cowpea	0.00	76.83	6.10	17.07	0.00	100.00
	Agro Sylvo-Pastoral / Peanut-Cotton	0.00	22.41	15.52	62.07	0.00	100.00
Treatment Villages	Beneficiary	0.00	40.85	18.94	40.21	100.00	100.00
	Non-Beneficiary	0.00	64.04	11.52	24.44	100.00	100.00
	Total	0.00	50.85	15.74	33.41	100.00	100.00
Comparison Villages	Total	0.13	47.27	17.06	33.72	1.82	100.00
Total	**Total**	**0.06**	**49.12**	**16.37**	**33.56**	**0.88**	**100.00**

(HHS, 2013)

Amongst beneficiaries in treatment villages, most of the respondents felt that the impacts of FFA were distributed equitably between men and women. Again, the

variations were non-negligible variations between livelihood zones as seen in Table 8e.

Table 6.8e. Perception of FFA impacts as being the same for men as for women

	Yes	No	Total
Agroforestry / Fishing Tourism	95.40	4.60	100.00
Agropastoral Peanut	82.61	17.39	100.00
Sylvo Pastoral	66.67	33.33	100.00
Agro-Sylvopastoral / Food	86.32	13.68	100.00
Agropastoral Cowpea	72.22	27.78	100.00
Agro Sylvo-Pastoral / Peanut-Cotton	90.00	10.00	100.00
Total	**89.48**	**10.52**	**100.00**

(HHS 2013

Social and Institutional Analysis

Participation in FFA requires the development of working committees that receive and distribute the food, thereby encouraging village organizations to form and evolve. Such organizational benefits were positively perceived by respondents of both HHS and FG, and whose effects may have reinforced existing governance structures. The role of women in the village's organisation did not provide new evidence as all villages had women's groups except one comparison village. These women's organizations could not be directly linked to FFA interventions, as the question was not asked. Respondents to the HHS were asked how many members of the household participated in FFA programs (by gender). Results from compilations of the HHS suggest that 1021 men and 992 women participated in FFA at roughly the same rate[79].

An overview of village governance structures revealed an over-reporting of organizations by male focus groups especially in comparison villages (by 20%), compared to women's reporting. Other organizations involved in both treatment and comparison villages numbered 99[80]. Many interveners were NGOs and project partners of FFA. Others included local NGOs, a few micro-credit programs, multilateral organizations (FAO, PAM, UNICEF) who may have influenced the welfare and livelihoods in sampled villages. For a complete discussion on social and organizational impacts, see Tables 6.8f and 6.8g.

Decision Making Benefits Treatment Villages since FFA as perceived by women

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	10	55.56	10	55.56
Yes	8	44.44	18	100

(Female FG, 2013)

[79] The reason why the numbers are different are related to the question asked - How many people in the household were involved in FFA? – Hence, the number of persons affected exceeded the total number of surveys.
[80] from a compilation of aid-related organizations reported in HHS

Community Organizations

Table 6.8f. Community Organizations in Treatment Villages

N°	TREATMENT VILLAGES	Women's Groups	Local Development Committee
1	MISSIRAH MOURIDE	YES	NO
2	MABO1	YES	NO
3	SAM THIALENE	YES	NO
4	MANKACOUNDA RIP	YES	**since 2008**
5	KOHEL	YES	**since 2005**
6	TÉLLAYARGOUYE	YES	NO
7	KEUR BABOU DIOUF	YES	NO
8	LOUGUERE FAFABE	YES	NO
9	LABGAR WOLOF	YES	NO
10	SYER 1	YES	NO
11	TAÏBATOU	YES	NO
12	KHOSSANTO	YES	NO
13	GOULOUMBOU	YES	NO
14	BODÉ	YES	NO
15	TOBOR	YES	**since 2008**
16	THIOBON	YES	**since 2006**
17	KAYLOU	YES	NO
18	ÉDIOUNGOU	YES	NO
19	HAMADALLAYE	YES	NO

(HHS Survey 2013)

Table 6.8g. Community Organizations in Comparison Villages

N°	COMPARISON VILLAGES	Women's Groups	Local Development Committee
1	MISSIRAH PEULH	YES	NO
2	MABO 2	YES	NO
3	SAM NGUÈYÈNE	YES	NO
4	MAMBI WOLOF	YES	NO
5	PASSY RIP	YES	NO
6	DIANÉ	YES	NO
7	KEUR MALICK FADY	YES	NO
8	LOUGUÉRÉ DIALLOUBÉ 1	YES	NO
9	LOUMBEL KÉLÉLI	YES	NO
10	BINGUEL	YES	NO
11	GOUREL BARI	YES	NO
12	MAMA KONO	NO	NO
13	KOULARY	YES	NO
14	ELENA	YES	NO
15	GUÉRINA	YES	NO
16	DJIMANDE	YES	NO
17	EDIOUMA	YES	NO
18	NIAMBALANG	YES	NO
19	TÉMENTO SOCÉ	YES	NO

(HHS Survey 2013)

Table 6.8h. TV Maintenance Committees by Zones and Gender

Livelihood Zone	Female		Male	
	No	Yes	No	Yes
Agroforestry / Fishing-Tourism	1	4	0	5
Agropastoral Peanut	5	1	4	2
Sylvo-Pastoral	1	0	1	0
Agro Sylvo-pastoral Food	0	4	1	3
Agropastoral Cowpea	2	0	2	0
Agro Sylvo-Pastoral / Peanut-Cotton	1	0	0	1
Total	**10**	**9**	**8**	**11**

TV/FG, 2013

Such organizational benefits were positively perceived by respondents of both HHS and FG, as illustrated in Table 36 above. These FFA requirements may have reinforced existing governance structures. An overview of village governance structures is presented below in Table 6.8i.

Table 6.8i. Reported Existence of community organizations (number of groups)

	Treatment Villages		Comparison Villages	
	Female Focus Groups	Male Focus Groups	Female Focus Groups	Male Focus Groups
Farmers' Organizations	10	11	6	10
Women's Organizations	17	19	18	19
Youth Groups	18	17	11	16
Umbrella Organizations	4	6	5	5
Asset Maintenance Committees	9	11	n/a	n/a
Total Number of Organizations	58	64	40	50

(FG, 2013)

There appeared to be an over-reporting of organizations again by male focus groups especially in comparison villages (by 20%), compared to women's reporting. Female focus groups reported 9 maintenance committees for 19 village assets translating to a 47% rate of maintenance committees in FFA villages compared to 58% reported by men's FG). Half of these committees are reported to be located in the Agro-pastoral peanut zone.

The reported number of other organizations involved in both treatment and comparison villages numbered 99 from a compilation of aid-related organizations reported in HHS[81]. Many interveners are NGOs and project partners of FFA who organized FFA projects in these villages. Others included local NGOs, a few micro-credit programs, multilateral organizations (FAO, PAM, UNICEF) who may have influenced the welfare and livelihoods in sampled villages.

Amongst beneficiaries in treatment villages, most of the respondents felt that the impacts of FFA were distributed equitably between men and women. Again, the

[81] This finding only highlights the range of other donor interventions experienced in the sampled villages.

variations were non-negligible variations between livelihood zones as seen in Table 6.8j.

Table 6.8j. Perception of FFA impacts as being the same for men as for women

	Yes	No	Total
Agroforestry / Fishing Tourism	95.40	4.60	100.00
Agropastoral Peanut	82.61	17.39	100.00
Sylvo Pastoral	66.67	33.33	100.00
Agro-Sylvopastoral / Food	86.32	13.68	100.00
Agropastoral Cowpea	72.22	27.78	100.00
Agro Sylvo-Pastoral / Peanut-Cotton	90.00	10.00	100.00
Total	**89.48**	**10.52**	**100.00**

(HHS 2013

Annex 6.9 Resilience

Table 6.9a. Resilience Impacts in Treatment Villages (men and women)

Impact on Resilience	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	27	71.05	27	71.05
Yes	11	28.95	38	100

(FG, 2013)

Table 6.9b. Resilience Impacts in Treatment Villages as perceived (men)

Impact on Resilience	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	13	68.42	13	68.42
Yes	6	31.58	19	100

(Male FG, 2013)

Table 6.9c. Resilience Impacts in Treatment Villages as perceived (women)

Impact on Resilience	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	14	73.68	14	73.68
Yes	5	26.32	19	100

(Female FG, 2013)

Table 6.9d. Resilience Impacts in Comparison Villages (men and women)

Impact on Resilience	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	32	84.21	32	84.21
Yes	6	15.79	38	100

(All FG, 2013)

Table 6.9e. Resilience Impacts in Comparison Villages as perceived (men)

Impact on Resilience	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	15	78.95	15	78.95
Yes	4	21.05	19	100

(Male FG, 2013)

Table 6.9f. Resilience Impacts in Comparison Villages as perceived (women)

Impact on Resilience	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	17	89.47	17	89.47
Yes	2	10.53	19	100

(Female FG, 2013)

Table 6.9g. Impact on Resilience (frequencies)

Impact on Resilience	Treatment Villages			Comparison Villages		
	Female	Male	Total	Female	Male	Total
No	14	13	27	17	15	32
Yes	5	6	11	2	4	6
Total	19	19	38	19	19	38

(FG, 2013)

Annex 6.10 Spillover Effects

Table 6.10a. Spillover Effects in Treatment Villages perceived (men and women)

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	8	21.05	8	21.05
Yes	30	78.95	38	100

(All FG, 2013)

Table 6.10b. Spillover Effects in Treatment Villages as perceived (men)[82]

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	4	21.05	4	21.05
Yes	15	78.95	19	100

(Male FG, 2013)

[82] Note that the data revealed the same figures for men as for women – see Tables 7b and 7c

Table 6.10c. Spillover Effects in Treatment Villages as perceived (women)

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	4	21.05	4	21.05
Yes	15	78.95	19	100

(Female FG, 2013)

Table 6.10d. Spillover Effects in Comparison Villages (men and women)

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	23	60.53	23	60.53
Yes	15	39.47	38	100

(All FG, 2013)

Table 6.10e. Spillover Effects in Comparison Villages as perceived (men)

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	7	36.84	7	36.84
Yes	12	63.16	19	100

(Male FG, 2013)

Table 6.10f. Spillover Effects in Comparison Villages as perceived (women)

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	16	84.21	16	84.21
Yes	3	15.79	19	100

(Female FG, 2013)

Table 6.10g. Spillover effects (frequencies)

Spillover Effects	Treatment Villages			Comparison Villages		
	Female	Male	Total	Female	Male	Total
No	4	4	8	16	7	23
Yes	15	15	30	3	12	15
Total	19	19	38	19	19	38

(FG, 2013)

For the other social impact measures, see Table 10h, there was no statistically significant difference between groups.

Table 6.10h. Social Impacts in Treatment Villages

	Male vs. Female (within treatment villages)	Treatment Villages vs. Comparison Villages
Impact on Resilience	0.052 (0.3487)	0.131 (1.3754)
Recovery Capacity	.	.
Spillover Effects	0 (0.00)	0.395*** (3.772)
Better equipped to handle adversity	0.263 (1.646)	.

Mean differences reported, t-tests in parentheses
** p = 0.95, *** p = 0.99 (FG, 2013)

Annex 6.11 Outcomes and Impacts on Coping Strategies

Table 6.11a. Synthesis of Shocks and Disaster reported in Sampled Villages[83]

TREATMENT VILLAGE	SHOCKS	COMPARISON VILLAGE	SHOCKS
MISSIRAH MOURIDE	Violent winds and fire which destroyed both natural resources and homes during the last rainy season	**MISSIRAH PEULH**	Striga pest infestion of soils. Poor yields from the harvest. Both children and adults suffering from chronic malnutrition[84]
MABO1	Bush fires 2012	**MABO 2**	Bush fires2012
SAM THIALENE	Bush fires destroyed a few households during the last rainy season	**SAM NGUÈYÈNE**	Night fire which destroyed food and livestock 2012
MANKACOUNDA RIP	Salinization of soils has resulted in loss of cultivable land which is now being recovered through dykes.	**MAMBI WOLOF**	Annual striga infestation on agricultural lands with poor harvests over the past few years.
KOHEL	Gully erosion which has further isolated the village for more than 2 months during the rainy season.	**PASSY RIP**	Inaccessibility of the village during the rainy season. Difficult to leave the village due to the poor roads
TÉLLAYAR-GOUYE	Salinization des of lands resulted in loss of arable land.	**DIANÉ**	Floods in 2012, loss of crops
KEUR BABOU DIOUF	Salinization of lands resulted in loss of arable land.	**KEUR MALICK FADY**	Violent winds, loss of houses
LOUGUERE FAFABE	Birds attack the cultivated fields which results in loss of harvest. Water access issues.	**LOUGUÉRÉ DIALLOUBÉ 1**	Birds attack the cultivated fields which results in loss of harvest. ttaque des cultures par les oiseaux. Water access issues.
LABGAR WOLOF	Two months of isolation during the rainy season due to flooding. Intemperate weather in 2002 killed livestock.	**LOUMBEL KÉLÉLI**	Violent winds which caused the destruction of houses 2012. maisons, 2012
SYER 1	Bush fires which destroyed houses	**BINGUEL**	Bush fires
TAÏBATOU	Drought killed the crops	**GOUREL BARI**	Permanent pollution caused by wastewater for the past 3 years. Lack of rain caused a loss of crops.
KHOSSANTO	Farmers have abandoned	**MAMA KONO**	Conflict with other villages due

[83] A&B Report (HHS, FG), 2013
[84] Observed by the interviewers

TREATMENT VILLAGE	SHOCKS	COMPARISON VILLAGE	SHOCKS
	agriculture and gone to work at the gold mine. Very little cultivation as most food is purchased.		to the administrative reorganization of boundaries
GOULOUMBOU	Agricultural parcels are flooded in 2011.	**KOULARY**	Flood and destruction of houses in 2011.
BODÉ	Little rain and little harvest for three years.	**ELENA**	Salinization of soils, drought and no harvest.
TOBOR	Salinization of soils	**GUÉRINA**	Irregular rainfall over the past few years, no harvest.
THIOBON	Destruction of fish resources caused by overfishing by migrants	**DJIMANDE**	Harvests attacked by rebels in 2011-2012
KAYLOU	Recurrent attacks on crops, decrease in yields. Inaccessibility of certain fields due to rebels in the zone Difficulty of access to straw for house roofs.	**EDIOUMA**	Crops are attacked by rebels, loss of crop**.**
ÉDIOUNGOU	Salinization of lands. Insecurity relate to the conflict.	**NIAMBALANG**	Irregular rainfall and several years without any harvest.
HAMA-DALLAYE	Rebels attack the crops 2011-2012	**TÉMENTO SOCÉ**	An epidemic in 2013 caused the decimation of pork and cattle livestock.

Village Ability to Cope with Adversity

Table 6.11b. Village Ability to Cope with Adversity in Treatment Villages

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	21	55.26	21	55.26
Yes	17	44.74	38	100

(FG, 2013)

Table 6.11c. Village Ability to Cope with Adversity in Treatment Villages (men)

Is the village better equipped to handle adversity?	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	8	42.11	8	42.11
Yes	11	57.89	19	100

(Male FG, 2013)

Table 6.11d. Village Ability to Cope with Adversity in Treatment Villages as perceived by women

Is the village better equipped to handle adversity?	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	13	68.42	13	68.42
Yes	6	31.58	19	100

(Female FG, 2013)

Table 6.11e. Impact on ability to handle adversity, frequencies, source FG

Impact on ability to handle adversity?	Treatment Villages		
	Female	Male	Total
No	13	8	21
Yes	6	11	17
Total	19	19	38

(FG, 2013)

Table 6.11f. Coping Strategies[85] in Comparison Villages (men & women)

Recovery Capacity	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	14	36.84	14	36.84
Yes	24	63.16	38	100

(FG, 2013)

Table 6.11g. Coping Strategies in Comparison Villages as perceived (men)

Recovery Capacity	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	1	5.26	1	5.26
Yes	18	94.74	19	100

(Male FG, 2013)

Table 6.11h. Coping Strategies in Comparison Villages as perceived (women)

Recovery Capacity	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	13	68.42	13	68.42
Yes	6	31.58	19	100

(Female FG, 2013)

Table 6.11i. Migratory patterns by Livelihood Zones[86]

Agroecologial/ Livelihood Zones[87]	Migration patterns
Bassin arachidier/ Agrosylvopastoral-Peanut	For all villages in that zone : For both TV and CV, there is a stron gmigration toward the nearest urban centres, to Dakar and to Banjul, Gambia especially for border towns such MANCAKOUNDA RIP, PASSY RIP, MAMBY WOLOF where migrants are active in small businesses or for women and girls who work as domestics. This migration is especially

[85] Coping Strategies are the best reflection of a translation and attempted cohesion with WFP language and the concept does relate to ability to deal with adversity.
[86] From A&B Report
[87] The original analysis was made according to agroecological zones but when applied to livelihood zones, some were switched to other zones based on livelihood zones and location.

Agroecologial/ Livelihood Zones[87]	Migration patterns
	notable in the agro-ecological zone of the GroundNut Basin with the exception of MISSIRAH PEUL where migrants are migrating herders.
Sylvopastoral[88] and Agropastoral Cowpea	Villagers tend to migrate toward DARA DJOLOF and other urban centres. The majority of these migrations occur largely through migrant herders who travel with their herds. The Peuhls leave their dry zones toward the more humid zones seeking water and pastures for their animals. Another form of migration is that of travelling salesmen called "*bana-bana*" who are petty traders as well as animal traders called "*Téfankés*" who travel from one weekly market to another (for example, on Monday to LOUGUERE THIOLLY, Tuesday, LABGAR).
Senegal Oriental and Agrosylvopastoral Food	During the dry season, youth migrate toward TAMBACOUNDA and other urban centres to find work. However, during the harvesting season for groundnuts and corn, nearby villages to Tambacounda receive migrants from KOLDA and BOUNDA who come to work in the harvest.
Casamance and Agroforestry/Fishing-Tourism	Villages of Lower Casamance are subject to incessant migratory movements linked to attacks from rebels of the independence movement. As a result, the population of this reason fluctuates a great deal.

Implementation Factors

Annex 6.12 Food Basket

Table 6.12a. Adequacy of the food basket

Was the amount of food distributed adequate?	Gender		
	Male	Female	Total
No	56.44	48.65	52.57
Yes	43.56	51.35	47.43
Total	**100**	**100**	**100**

Source: (HHS, 2013)

While in the overall household survey dataset, there was no significant difference between men and women on the question of adequate food distribution, examining the differences by livelihood zone shows that the perception within specific zones is much different.

Table 6.12b. Level of Satisfaction with Rations/Food Entitlements by livelihood zone

Livelihood Zone	Men vs. Women
Agroforestry / Fishing-Tourism	0.123 (1.901)
Agropastoral Peanut	0.252** (2.085)
Sylvo-Pastoral	-
Agro Sylvo-pastoral Food	-0.265*** (-2.684)

[88] Both agro-ecological and livelihood zone at once

Livelihood Zone	Men vs. Women
Agropastoral Cowpea	0.417 (2.047)
Agro Sylvo-Pastoral/ Peanut-Cotton	0.267 (-1.742)
Means difference reported, t-test in parentheses ** p = 0.95, *** p = 0.99	

Importantly, in the Agropastoral Peanut zone, women report that there is adequate food delivered at a much higher rate than men do (mean difference = -0.252). The opposite trend is true in the Agro Sylvo-pastoral Food zone, where men reported that food distribution was adequate at a higher rate than women did (mean difference = 0. 265). Thus, while overall the numbers are quite similar (see previous table), there is great variation per livelihood zone and there is no explanation for this.

Table 6.12c. Perceptions on food basket

	Frequency	Mean
Low quantity of rations in relation to the number of beneficiaries involved in building the asset.	19	100%
Marginal Quantity of Ration (too low)	3	16%
Did not know the asset was built with FFA	3	16%
Believes there is inequity within FFA	18	95%
Thought the distribution was inequitable	16	84%
Did not conform to our food habits	18	95%
Did not know what to do with lentils - would have preferred niebe	13	68%
Did not know what to do with lentils - would have preferred rice	7	37%
Prefer rice instead of corn	19	100%

(FG 2013)

Annex 6.13 Beneficiary Participation in Assets – Choice, Design and Construction

Table 6.13a. Population's Participation in Construction of the Asset

Was the population involved in the construction of the asset?		Frequency	Percent
Total	No	10	26.32
	Yes	28	73.68
Male	No	4	21.05
	Yes	15	78.95
Female	No	6	31.58
	Yes	13	68.42

(FG, 2013)

Annex 6.14 Training

Table 6.14a. Training Received (Percentage)

	Comparison Villages	Treatment Villages	Total

	Comparison Villages	Treatment Villages	Total
No	65.79	45.95	56
Yes	34.21	54.05	44
Total	100	100	100

(Focus Group, 2013)

Table 6.14b. Training Received by women in treatment villages (frequency)

Training Type	Number of Focus Groups reporting training received
Construction	11
Hygiene	16
Nutrition	15

(FG, 2013)

Table 6.14c. Participation of villagers in asset selection, construction, maintenance and training

Current Asset State	
Population involved in choice of the asset?	.1377755 (.1739806)
Population involved in the construction of the asset?	.444616*** (.1146343)
Is there a maintenance committee?	.3427942*** (.1059605)
Was training received?	.0571165 .1166077

(it-statistic in parentheses) (HHS, 2013; Focus Group, 2013)

Annex 6.15 Partners as Implementers of FFA

Working through partners represented an efficient and effective strategy for implementation for WFP as it allows WFP to work more broadly across the country through a contract approach with partners. This strategy, however, meant that WFP had less visibility on the ground as partners were the food distributors of the food and the direct visible interface for FFA in the community. Partners were also communicators and trainers on how to build assets and on how to maintain these assets. WFP was little known to beneficiaries with the exception of those in Casamance.[89]

Partners were selected to implement FFA. WFP sub-offices selected the partners who are also trained by these sub-offices. This training is provided as a Training of Trainers (TOT) with the idea that partners will further train beneficiaries down the line. With new partners, training involved sessions on how to work with WFP in FFA implementation including work norms[90], the FFA strategy, its objectives and how to monitor it. (Despite numerous requests from the evaluation team to COSEN, the sub-offices and partners, few were able to provide an overview of training and capacity

[89] FG, 2013
[90] See Section 2.9 on Negative Impacts of FFA

building sessions provided to partners and through Training of Trainers for any time frame.)

Having partner as project executors also meant that the range of partnerships upon which WFP depends to implement and execute projects is numerous. With the number of partners, so grew the potential factors over which WFP did not have control. Some partners were more capable than others, especially those contracted for the higher technology assets such as anti-salt dykes and mangrove regeneration. But finding partners capable of building higher technology assets was ongoing set of problems. The ADB, a PAPIL donor, underlined the importance of building simple and appropriate assets which are in high demand such as the anti-salt dykes to allow recovery of salinized soils along the many deltas of Senegal. The WFP partnership PAPIL undertook with villages to build micro-ridged plots that improved their quality with FFA. This also highlighted the important fact that villages did not always have the capacity to be full counterparts in hydro-ecological constructions such as anti-salt dykes[91].

WFP FFA Contracts with Partners - The Field Level Agreement (FLA) corporate template signed with partners is the same used for all activities, including FFA. The agreement provides a legal framework that addresses logistical parameters; it does not provide program/asset information on the activity to be implemented[92]. FLAs signed with a partner provide figures on targeted beneficiaries, tonnage and budget. As the asset description is not included, one must review the partner project proposal or a project summary prepared by COSEN for information on actual assets to be built. FLA agreements reviewed by the evaluation included no project proposal summaries. Therefore without a description of assets to be built, and without related performance indicators or a baseline, it was impossible to provide for monitoring purposes by the partner or for evaluation of the success of assets or the partner's role.

Table 1 provides an overview of COSEN FFA implementing partners for 2005-2010[93]who represent a combination of partners encountered in sample villages that were part of the sample, partners' reports as well as through SSI and institutional analysis.

Table 6.15.1. Implementing Partners involved in FFA from 2005-2010[94]

PARTNERS	ZONES WHERE ASSETS ARE LOCATED	ASSETS BUILT
PAPIL	Fatick, Kaffrine, Tambacounda et Kédougou	Dykes Small dykes Reforestation Soil and Water Conservation Technologies Firewalls Community gardens Rice intensification Mangrove Regeneration

[91] ADB, SSI.
[92] At least the one used until 2010
[93] The evaluation team encountered the partners or their work during the field data collection.
[94] SSI, IA, AA, FG, HHS and partner reports

PARTNERS	ZONES WHERE ASSETS ARE LOCATED	ASSETS BUILT
Catholic Relief Service	Casamance, Kolda, Ziguinchor	Anti-Salt Dykes Lowland rehabilitation Rural roads
Caritas	Fatick	Village Gardens Dykes
World Vision	Casamance	Reforestation Assisted Natural Regeneration Village Cereal Banks (VCB)
ANCAR	Fatick Kaolack Kolda	Village Gardens Dykes
Grande Muraille Verte/Great Green Wall	Linguère, Diourbel, Matam	Reforestation
PROGEDE	Kolda, Sédhiou	Community Gardens Firewalls
PERACOD	Fatick	Reforestation Dykes Firewalls Nurseries
SDDR	Fatick, Kaolack, Tambacounda	Village gardens Dykes for rice production
Direction des Eaux, Forets, Chasse (IREF)	Fatick, Kaolack, Ziguinchor, Kaffrine	Reforestation Soil Conservation Works Mangrove regeneration
ASPRODEB-/ SAPCA-EGAS[95]	Tambacounda	Village Gardens Small dykes
Symbiose (local NGO)	Fatick, Kaolack	Reforestation
SDDR		Large dykes Community gardens
OCEANIUM	Ziguinchor	Mangrove Regeneration Nurseries for propagules
Other partners ADECORE,AGADAAJAC, AJAEDO, Amanary, ASDI, CACOPA, GRDR[96], ENDA,J&D,ODASC	Ziguinchor	Dykes Mangrove Regeneration

Partners participate in FFA and perceive FFA as a means of achieving their development ends as well as payment for work conducted by communities[97] who work together; rice distribution is seen as the motivation. WFP contributes to partners implementation capacity by providing either in-kind [food, equipment, support services] or budgetary [for logistics and operational implementation/monitoring/reporting] support to partners in the form of motorcycles, computers, printers, USBs, cameras – tools that can facilitate the monitoring expected of them. As well, WFP supplements this monitoring responsibility with additional fees paid to partners.

Annex 6.16 Implementation of FFA

Selecting Villages and Targeting Beneficiaries

[95] EGAS is an organization that was created as a result of a rift in the ASPRODEB organization. The new organization group became SAPCA-EGAS.

[96] The Research and Rural Community Development Project Group /Groupe de Recherches et de Réalisations pour le Développement rural (GRDR) has been engaged in the development of social, cultural and economic development of migrants in Sub-Saharan Africa in France and in their countries of origin since 1969.

[97] SSI from several partners

The evaluation understands WFP's global geographical targeting as a clear and transparent process where FFA activities are identified from Zones at Risk (ZARs) based on levels of vulnerability. However, village and household targeting were less standardised processes managed through implementing partners. For the period under review, it appears that a 'self-targeting' of beneficiaries attracted the able-bodied poor within a community as others judged the food compensation insufficient for them[98]. This approach represents certain challenges especially when demand for FFA support is greater than availability and/or when no complementary safety-nets are available for non-eligible to FFA vulnerable in a village.

FFA villages are selected at yearly meetings of the Regional Council organized through WFP sub-offices, based on (a) geographical targeting of vulnerable areas where FFA will be implemented[99], and (b) partners' initial proposals for projects for the upcoming year. Subsequent to initial identification of potential villages for FFA implementation, field visits are then organized to validate choice. Subsequently detailed proposals are submitted to the WFP COSEN for a final selection. At this point, training of partners on FFA norms is organized.

Annex 6.17 Sources of Revenue

Table 6.17a. Principal sources of revenue, treatment villages by livelihood Zones (by percentage)

	Agroforestry / Fishing-Tourism	Agropastoral Peanut	Sylvo-Pastoral	Agro Sylvo-pastoral Food	Agropastoral Cowpea	Agro Sylvo-Pastorale / Peanut-Cotton	Totals
Agriculture (cereals)	50.37	61.68	10.91	36.23	39.58	23.33	45.52
Agriculture (peanut)	1.47	22.43	0	13.53	0	0	9.69
Orchards (agroforestry)	4.78	4.67	0	0.97	0	16.67	3.63
Gardens	1.47	1.4	0	4.83	0	10	2.42
Fishery	11.76	0	0	0	0	16.67	4.48
Livestock	0.37	0.47	58.18	0.48	8.33	0	4.72
Fruit Picking	2.57	0	5.45	0	2.08	10	1.69
Small business	10.66	2.34	10.91	11.11	18.75	13.33	9.2
Employed with salary	8.09	2.8	1.82	11.59	8.33	3.33	7.02
Other activities	8.46	4.21	12.73	21.26	22.92	6.67	11.62
Total	100	100	100	100	100	100	100

[98] As malnourished people are not expected to engage in hard physical work – they should be included into other types of safety-nets at the community level such as a nutrition programme. Partners indicated it was difficult to mobilize the most vulnerable to work especially with assets that require a substantial energy requirement to complete the work.
[99] With an emphasis on ZARs

Table 6.17b. Principal sources of revenue, treatment villages, beneficiaries only (by percentage)

	Agroforestry / Fishing-Tourism	Agropastoral Peanut	Sylvo-Pastoral	Agro Sylvo-pastoral Food	Agropastoral Cowpea	Agro Sylvo-Pastorale / Peanut-Cotton	Totals
Agriculture (cereals)	52.72	60	20	43.75	40	23.33	48.51
Agriculture (peanut)	1.67	25.71	0	13.54	0	0	7.45
Orchards (agroforestry)	4.6	8.57	0	1.04	0	16.67	4.89
Gardens	1.67	2.86	0	8.33	0	10	3.62
Fishery	12.13	0	0	0	0	16.67	7.23
Livestock	0.42	0	53.33	0	5	0	2.13
Fruit Picking	2.93	0	0	0	0	10	2.13
Small business	8.37	1.43	20	9.38	30	13.33	9.15
Employed with salary	7.53	0	6.67	4.17	10	3.33	5.53
Other activities	7.95	1.43	0	19.79	15	6.67	9.36
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

(HHS, 2013)

Table 6.17c. Principal sources of revenue, treatment villages, non-beneficiaries only (by percentage)

	Agroforestry / Fishing-Tourism	Agropastoral Peanut	Sylvo-Pastoral	Agro Sylvo-pastoral Food	Agropastoral Cowpea	Agro Sylvo-Pastorale / Peanut-Cotton	Totals
Agriculture (cereals)	33.33	62.5	7.5	29.73	39.29	0	41.57
Agriculture (peanut)	0	20.83	0	13.51	0	0	12.64
Orchards (agroforestry)	6.06	2.78	0	0.9	0	0	1.97
Gardens	0	0.69	0	1.8	0	0	0.84
Fishery	9.09	0	0	0	0	0	0.84
Livestock	0	0.69	60	0.9	10.71	0	8.15
Fruit Picking	0	0	7.5	0	3.57	0	1.12
Small business	27.27	2.78	7.5	12.61	10.71	0	9.27
Employed with salary	12.12	4.17	0	18.02	7.14	0	8.99
Other activities	12.12	5.56	17.5	22.52	28.57	0	14.61
Total	**100**	**100**	**100**	**100**	**100**	**0**	**100**

(HHS, 2013)

Table 6.17d. Principal sources of revenue by comparison villages (by percentage)

	Agroforestry / Fishing-Tourism	Agropastoral Peanut	Sylvo-Pastoral	Agro Sylvo-pastoral Food	Agropastoral Cowpea	Agro Sylvo-Pastorale / Peanut-Cotton	Totals
Agriculture (cereals)	46.8	60.8	5.26	36.86	5.88	21.43	44.55
Agriculture (peanut)	9.85	20.8	0	11.86	0	14.29	13.51
Orchards (agroforestry)	5.91	0.4	0	0.85	0	14.29	2.47
Gardens	1.97	0.4	0	0.42	0	7.14	1.04
Fishery	4.43	0	0	0	2.94	14.29	1.82
Livestock	0.49	0	73.68	0.85	82.35	0	5.84
Fruit Picking	4.93	0	5.26	0	0	3.57	1.56
Small business	10.34	3.6	10.53	5.51	8.82	14.29	6.75
Employed with salary	5.91	2.4	0	7.2	0	7.14	4.81
Other activities	9.36	11.6	5.26	36.02	0	3.57	17.53
Other	0	0	0	0.42	0	0	0.13
Total	100	100	100	100	100	100	100

(HHS, 2013)

Table 6.17e. Principal sources of revenue, by Livelihood Zone and Beneficiary Status (Frequencies)

	Agroforestry / Fishing-Tourism		Agropastoral Peanut		Sylvo-Pastoral		Agro Sylvo-pastoral Food		Agropastoral Cowpea		Agro Sylvo-Pastorale / Peanut-Cotton		Totals
	NB	B	NB	B	NB	B	NB	B	NB	B	NB	B	Total
Agriculture (cereals)	106	126	242	42	4	3	120	42	13	8	6	7	719
Agriculture (peanut)	20	4	82	18			43	13			4		184
Orchards (agroforestry)	14	11	5	6			3	1			4	5	49
Gardens	4	4	2	2			3	8			2	3	28
Fishery	12	29							1		4	5	51
Livestock	1	1	1		38	8	3		31	1			84
Fruit Picking	10	7			4				1		1	3	26
Small business	30	20	13	1	5	3	27	9	6	6	4	4	128

Employed with salary	16	18	12			1	37	4	2	2	2	1	95
Other activities	23	19	37	1	8		110	19	8	3	1	2	231
Other							1						1
Totals	**236**	**239**	**394**	**70**	**59**	**15**	**347**	**96**	**62**	**20**	**28**	**30**	**1596**

(HHS, 2013)

Annex 7. Asset Description (from verification exercise)

The following Table provides a description of each of the assessed assets, all of which were supported by WFP, the scope of their influence as well the numbers of people who participated where the information was made available. The partnership with whom it was created is also mentioned, where available, as are other agencies involved in the village in some project or another[100]. The sources of this information was gleaned largely through asset assessments and supplemented with FG discussions where the information was incomplete. Discrepancies in information reflect either lack of respondent recall or inability of the beneficiaries to clearly identify partners and donors. The asset number refers to the number assigned to the village in question. In some cases, there were two assets in 3 villages: Makacounda Rip, Louguéré Fafabé, and Labgar Wolof, where these are counted as one as they were evaluated together and in the context of a single community. In Gouloumbou, two assets were assessed in rated separately. Where two separate assessments are occurred, this is reflected in the following Table in the Ratings boxes. All of the ratings assigned to assets during the asset assessment are based on the legend[101].

Table 7.1. Descriptions of Assets, partners and dominant issues

N°	TREATMENT VILLAGE ASSET TYPE RATINGS	RESULTS, OUTCOMES AND IMPACT FROM ASSET ASSESSMENT
1	MISSIRAH MOURIDE Reforestation /Nurseries 3 | 3 | 2	This was a plantation of eucalyptus built on the village's periphery between 2006 and 2009 with the help of World Vision and the Departmental Service of Waters and Forests (SDEF)[102] There were 39 participants involved in this collective action. This asset was scored as passable for its location and quality but mediocre (2) for its maintenance. The beneficiaries were highly satisfied with the asset and able to generate significant revenue from this plantation – hence, the economic impact on livelihoods.
2	MABO1 Assisted Natural Regeneration (ANR) 4 | 5 | 1	Assisted Natural Regeneration in 2009 in partnership with World Vision appears as a project that targeted 5 individuals. Other activities in the village included another World Vision project with 50 to 70 participants in 2009, a cereal bank as well as management committee of five persons established in 2013 (with WFP support). The asset was scored as good for its location[103] excellent for its quality but poor in its maintenance.
3	SAM THIALENE Assisted Natural Regeneration (ANR) 4 | 4 | 3	This Assisted Natural Regeneration (ANR) asset was planted with the dominant species of *Combretumglutinosum*de in 2009 in partnership with World Vision where 37 persons participated as individuals. This species is an indigenous species where leaves are harvested for forage and wood is used as firewood, for carpentry or in traditional medicine. Other species planted included *Combretum glutinosum*, d'*Acacia raddiana* et d'*Acacia nilotica*. This asset was scored as 4 – good for location and quality and, with a passable maintenance score.
4	MANKAKOUNDA RIP Anti-salt dyke/ Reforestation 2 assets Dyke 3 | 3 | 3 Eucalyptus plantation	MANKACOUNDA RIP is one of five villages organized around the anti-salt dyke. It has two assets: a eucalyptus plantation and the anti-salt dyke. With support from WFP through Caritas Kaolack, 19,525 MT of food were distributed for an anti-salt dyke of 500 metres. The Reforestation asset has a double function in that it assists in soil restoration and prevention against salinization as well as loss of arable land and although its source of support was not identified, it was informally assessed. As well, its economic function with the marketing of wood harvested from the plantation presents another significant impact. However, this dyke like many others, has not been fully completed and requires additional work

[100] (AA, FG, HHS, IA, SSI)
[101] Location, Quality, Maintenance with scores of 1 to five – 5 - excellent, 4 - good, 3 – passable, 2 – mediocre, and 1 – poor.
[102] Service Départemental des Eaux et Forêts
[103] There is no choice about location with ANR – it happens to be the land owned by the beneficiary.

N°	TREATMENT VILLAGE ASSET TYPE RATINGS	RESULTS, OUTCOMES AND IMPACT FROM ASSET ASSESSMENT
	5 3 3	to renovate it and build it to its full functional capacity which would allow it to undertake additional activities such as aquaculture. This village is among one in four with a local development committee. This dyke was rated as passable in location, quality and maintenance. The plantation received a somewhat better score of excellent for location but passable for quality and maintenance.,
5	KOHEL[104] Reforestation 0 0 0	This reforestation project built at the juncture of Koyel and Médina Sabakh in 2009 in partnership with Symbiose and SDEF. This project involved 3 beneficiaries as individuals without any remaining traces. For this reason, this asset was scored 0 across the board. This village is among one in four which has a local development committee.
6	TELLAYARGOUYE Agroforestry /nursery 4 2 3	This asset also focused on 2 beneficiaries –a nursery implemented under the DGEF. Training offered by DGEF for the establishment of the nursery occurred with 3 beneficiaries. This asset scored good for location, mediocre for quality, and passable for maintenance.
7	KEUR BABOU DIOUF Community garden 5 4 4	The asset is a community garden built in partnership with Caritas. It covers 0.57 hectares and is managed collectively by 45 beneficiaries. This village has the advantage that it has over time had important linkages with development partners which have helped them to take advantage of the assistance and support from development agencies. This asset scored well at 4 for all categories: location, quality, and maintenance.
8	LOUGUERE FAFABE Agroforestry nursery /Community garden for women 2 assets combined into one AA 5 4 4	This agroforestry nursery asset was established by the Great Green Wall, in a partnership with 75 beneficiaries collectively. This group also benefited from training in nursery development and maintenance. They received what they considered an inferior ration for the work completed, food that only covered one week's needs. This asset, treated as a combined asset scored excellently for location, and received a 4 for quality and maintenance.
9	LABGAR WOLOF Nursery/community garden for women 2 assets combined into one AA. 4 4 4	This agroforestry nursery and community garden assets were organized in partnership with the Great Green Wall, and the DFEG (who often combined for a WFP project) as a community effort that included 250 beneficiaries, of which 40 were women. Some persons also benefitted from technical training provided by DGEF. This community has also benefitted from other assistance from WFP and the Red Cross in mother and child nutrition as well as the PGIS[105]. This rated as a 4 across all categories. Although irrigation is noted in the photograph presented in Annex 8 as noted above, other donors had provided this assistance and no other details were provided.
10	SYER 1 Agroforestry nursery 1 4 4	A nursery asset established in partnership with the Great Green Wall. This project was implemented with one beneficiary who held the nursery. This asset created conflicts between villagers because of its location. The location was scored as very poor (1) for its location, with good quality and maintenance.
11	KHOSSANTO Community garden 5 3 4	This asset was a collective community garden which involved 45 beneficiaries on 2 ha, supported with the ASPRODEB partnership. A structure was built to protect the garden from gully erosion (Photo 16 – A&B report). (Although this gully prevention soil and water conservation structure near the garden in Khossanto was photographed, is was not WFP supported nor was information provided on this as part of the AA). Progress in this garden's development was retarded due to the competition in labour where women were also panning for gold. Even though, there was an understanding of the benefits and impact related to gardening, and the need to maintain the garden, they do not have sufficient time to tend to it. The vegetables include onion, lettuce, tomatoes amaranth, sorrel, etc.) which are

[104] This asset no longer existed
[105] Participatory Geographic Information Systems

N°	TREATMENT VILLAGE ASSET TYPE RATINGS	RESULTS, OUTCOMES AND IMPACT FROM ASSET ASSESSMENT
		an important nutritional complement for these women and their families. Technical training was also provided to 32 participants, another 18 received nutrition education and through GADEC and ANCAR. KHOSSANTO is one of the few sampled villages located near an urban site which in the re-alignment of administrative boundaries have now become urban. In addition to being in the Agro-pastoral food zone, this is a gold mining area. Traditionally gold mining mobilizes men, women and children. As a consequence, agriculture has been relegated to a lesser priority. Agricultural lands are not maintained and are contaminated due to other mercury and cyanide used in large scale industrial mining. The environment has been completely ravaged by gold mining and the effects on flora and fauna cannot be underestimated. This garden received an excellent score for location but a three quality and was rated good for maintenance.
12	TAÏBATOU Community garden of A&B Report 5 3 4	This community mixed garden had 20 beneficiaries and received three FFA distributions on a yearly basis from 2006-2008. This garden has a high level of nutritional diversity with vegetables, green vegetables, orange trees, mangoes, sapodilla tress. This asset is well appreciated as it supplies vegetables as well as additional income with the sale of surplus produce from the garden. Another important element, highlighted by the women was the improvement of nutrition for children as a result of the garden. A well installed as part of the community garden allows neighboring families to avail of the water, despite its defective pump. Taïbatou is one of the few sampled villages located near an urban site which in the re-alignment of administrative boundaries have now become urban. Location was excellent (5) but the remaining two categories were scored passable.
13	GOULOUMBOU Anti-Salt Dyke Micro-Ridged Plots 2 assets Anti-salt dyke 5 3 3 Micro-ridged plots 5 3 2	This dyke was supported by WFP from 2007-2009 over a three year period. This is one of the more impressive assets evaluated for its length of 32,500 metres which are complemented by micro-ridged plots, assets that were built by thousands of men and women The asset has consolidated the efforts of many villages which have benefited from many positive impacts where the populations have learned to work together in a collective action. As well, an association of farmers was established to assume the management of community development activities. The dyke has also created the environment to enhance and amplify agricultural activities in rice culture which was allowed the communities self-sufficiency in rice. Surplus rice is sold at weekly markets bringing in additional revenue for these beneficiary families. Other projects and technical assistance included: APROVAG Technical Assistance for banana production) as well asPROGEDE- GOULOUMBOU also focused on banana and rice production in the plateau. This village is well disposed for irrigated rice culture as it has the right type of land, the availability of water to irrigate. They are only hampered by the lack of adequate equipment: shellers, mowers and timely access to quality inputs, etc. These were rated as excellent in terms of location but only passable with regard to quality, and maintenance for the anti-salt dyke. The scores for the micro-ridged plots were the same except their maintenance was rated as mediocre.
14	BODÉ Anti-salt dyke 5 4 4	This anti-salt digue of 2000 metres was built with the support of GRDR in 2008. Additional composting training was also provided that same year with WFP support. Again, the lack of mechanization and the rudimentary tools with which people are working are limiting the impacts. Further, issues related to land tenure cannot be easily addressed as a result of the conflict in the area. This was rated as excellent for location and good for all other categories.
15	TOBOR Regeneration of Mangrove / anti-salt dyke Mangrove	This regeneration of mangrove asset was supported by WFP over many year (4 years of FFA distribution), OCEANIUM inputs from 2006-2008 and from IREF. The largest of villages in the sample, is one in four with a local development committee, along with Mankacounda, Kohel, and Thiobon) who also have local development committees. TOBOR, who also has an anti-salt dyke that is unfinished, would require additional support to render these more functional and efficient with possible aquaculture benefits once these were reinforced. There

N°	TREATMENT VILLAGE ASSET TYPE RATINGS	RESULTS, OUTCOMES AND IMPACT FROM ASSET ASSESSMENT
	regeneration 5 5 4	have been conflicts and unintended impacts between villages who received food from WFP, such as Tobor and a neighboring village BAGUANGUAN[106]. A conflict dating back to 2004-2005, issued from very low amounts of food distributed in exchange for work completed. Another unintended impact is that to mobilize populations for large scale assets such as anti-salt dykes, when there is no food distribution, people refused to work. This asset was the only one of its kind and is rated as a 5 for location and quality and 4 for maintenance.
16	THIOBON Anti-salt dyke 5 4 4	An anti-salt dyke was built in partnership with ANCAR and WFP distributions from 2006-2008. Additional technical assistance in composting was provided by GRDR. Thiobon is a large village with five zones: Amanque, Dablé, Erindian, Kabine et Kafone where not everyone can benefit from the impacts of the dyke in terms of the recovery of irrigated rice paddies. Nonetheless, beneficiaries and non-beneficiaries alike could attest to the desalinized water in wells as well as an improvement in the vegetative cover. Trees in the village have returned to their original lushness and fruit trees are now producing much better. Two hundred and eighty (280) ha area are covered by the dyke and additional mechanisation for plowing would be helpful. Within the different zones of the village, several village organizations can be found; GIE, GPF). A broader organization regroups the overall population – the Association pour la Rénovation de THIOBON (ASSORETH). This association functions with membership fees of dFCFA 10,000 FCFA for its staff FCFA 1,000 FCFA for its regular members. These funds are used to support community-based projects in education, sports, health, etc. The greatest limiting factor for overall improvement of the agriculture of the area is the lack of mechanized agricultural equipment. Other limiting factors are a re-organization of land tenure which is also not being addressed because of the already generalized volatility in the region. This asset had an excellent location (5) and rated good for quality, and maintenance.
17	KAYLOU Anti-salt dyke 5 4 5	This anti-salt dyke of 1,662 meters was built between July 20, 2005 to February 6, 2006. A total of 72 men and 122 women worked in partnership with WFP to build it. The **CRS** has also been involved in building a dyke in 2012. Unintended impacts of FFA have been caused by perceived inequities between Kaylou and the neighbouring village of Nyassa. The first distribution went well but in the second, Nyassa which was the least populated by half received three times the food distributed. One of the positive impacts was the reduction of vulnerability as people, both beneficiaries and non-beneficiaries, had access to food as a result of the additional production activities resulting from the FFA. Another positive impact has been the positive social cohesion to result in this village where FFAs were also distributed to the more vulnerable such as widows, handicapped who have suffered from exploded mines. This was excellently located (5) and was scored at 4 for quality, and 5 for maintenance.
18	ÉDIOUNGOU Anti-salt dyke 5 3 3	Anti-salt dyke was the asset built over several years – from 2006 to 2008: 515 meters; 352 meters; 958 meters for each respective year with 154 persons in 2006, 145 in 2007, and 169 in 2008 working to build this dyke. This dyke like many is not fully benefitting from potential impacts that would require additional maintenance and further mechanized reinforcement. Although this dyke is well covered in grasses and reasonably stabilized, it only protects a small amount of potentially cultivable land. Its impact is therefore limited as a result. Its location is excellent, quality and maintenance is only passable at 3. Unfortunately, its lack of maintenance is what compromises its potential as with other unfinished dykes in the sample,
19	HAMADALLAYE Anti-salt dyke 5 2 2	This anti-salt dyke was built in a partnership with CRS**.** It is 700 metres long and it took 540 beneficaries to build it in 2010. Although this dyke is well covered in grasses and reasonably stabilized, it only protects a small amount of potentially cultivale land. Its impact is therefore limited as a result. Similarly with the dyke above, it is remains

N°	TREATMENT VILLAGE ASSET TYPE RATINGS	RESULTS, OUTCOMES AND IMPACT FROM ASSET ASSESSMENT
		This dyke like many is not fully benefitting from potential impacts that would require additional maintenance and further mechanized reinforcement. This asset's location was rated at 5; its quality and maintenance were mediocre with a rating of 2.

Annex 8. Photographs of the assets found [A&B report]

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
1	MISSIRAH MOURIDE Reforestation /Nurseries 3 | 3 | 2	
2	MABO1 Assisted Natural Regeneration (ANR) 4 | 5 | 1	
3	SAM THIALENE Assisted Natural Regeneration (ANR) 4 | 4 | 3	No photo

[107] Location, Quality, Maintenance with scores of 1 to five – 5 - excellent, 4 - good, 3 – passable, 2 – mediocre, and 1 – poor.
[108] Legend: Location,

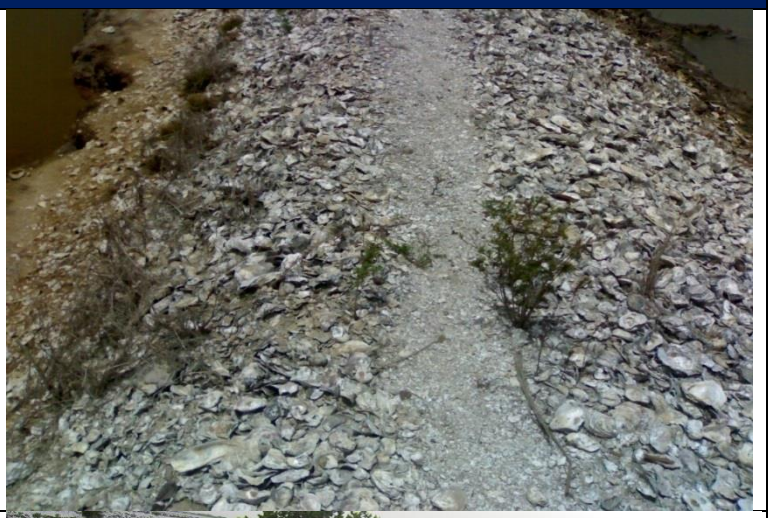
N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
4	MANKAKOUNDA RIP Anti-salt dyke/Reforestation 2 assets Dyke 3 3 3	
	Reforestation The harvesting of eucalyptus for market Eucalyptus plantation 5 3 3	
5	KOHEL[109] Reforestation 0 0 0	Did not exist
6	TELLAYARGOUYE Agroforestry /nursery 4 2 3	No photo available

[109] This asset no longer existed

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
7	KEUR BABOU DIOUF Community garden 5 | 4 | 4	
8	LOUGUERE FAFABE Agroforestry nursery /Community garden for women 2 assets combined into one AA 5 | 4 | 4	
9	LABGAR WOLOF Nursery/community garden for women Irrigation system Not assessed	

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
	Nursery in Labgar Wolof 4 4 4	
10	SYER 1 Agroforestry nursery 1 4 4	No photo available but hardly a community effort
11	KHOSSANTO Community garden (no photo of garden) Near a gold mine – slag heap from gold mine	
	Gully prevention soil and water conservation structure near the garden in Khossanto	

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
	Fencing around the garden in Khossanto 5 | 3 | 4 Gardens at this time of year were not flourishing as it is the dry season	
12	TAÏBATOU Community garden 5 | 3 | 4 This garden was in better shape as it was watered and located in the extended family compound.	
13	GOULOUMBOU Anti-Salt Dyke Micro-Ridged Plots 2 assets Anti-salt dyke 5 | 3 | 3 Micro-ridged plots 5 | 3 | 2	

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
14	BODÉ Anti-salt dyke This is an innovative way of reinforcing this dyke – oyster shells are tamped down into the structure to help it withstand the rains 5 | 4 | 4	
15	TOBOR Regeneration of Mangrove / anti-salt dyke Mangrove regeneration 5 | 5 | 4	
16	THIOBON Anti-salt dyke 5 | 4 | 4	

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
	THIOBON Recovered salinized rice culture as a result of the anti-salt dyke.	
17	KAYLOU Anti-salt dyke 5 | 4 | 5	
	Recovered rice fields (after harvest)	

N°	TREATMENT VILLAGE AND ASSET TYPE[107] Ratings[108]	PHOTOGRAPHS OF THE ASSET
18	ÉDIOUNGOU Anti-salt dyke 5 | 3 | 3	 
19	HAMADALLAYE An i-salt dyke/dyke 5 | 2 | 2	

Annex 9. Potential Environmental Impacts associated with FFA assets[110]

Ensuring environmental sustainability (MDG 7) is still not a deliberate and articulated component of WFP FFA programming. Whether at the level of training, implementation or human resources, as observed during the period under review, there were no measures or systems in place to follow environmental impacts or to monitor and mitigate these impacts. Partnership projects such as PAPIL and PADERCA undertook their own Environmental Impact Assessments (EIAs) and developed Environmental Management Plans (EMPs) and Social Development Plans but only from 2011 onward. These said plans provide an indication of potential impacts caused by dykes, reforestation and community gardens. The Law on Environment 2001 (proclaimed on January 15, 2001 its Decree 2001-282 of April 2, 2001) stipulates that all development projects or activities in Senegal that affect the environment and human health will require an EIA before implementation. An EIA is a prerequisite for any project and must be conducted in accordance with procedures defined in the regulations of the Environment Law.

The following Table provides an overview of examples of potential environmental impacts that could occur with the implementation assets of a similar nature and which need to be considered in the conduct of EIAs.

Table 12.1. Potential Environmental Impacts that could result from FFA

Asset	Positive Impacts	Negative Impacts	Mitigation Measures
Village and Home Gardens	Income, food, nutritional diversity, forage for animals, social cohesion and village organization, autonomy for women.	Soil and water pollution caused by pesticides, weeds, conflicts, social issues, poor water management, unsedentarized beasts that come into gardens.	Training, Integrated Pest Management (IPM), Environmental monitoring.
Dykes, irrigation and small check dams	Income in (FCFA), Village organization, food security, diversification of food (fish), Improved water table that helps to feed into w wells in the area, Flood protection, Rehabilition of salinated soils (in ha), Improved biodiversity in flora and fauna (additional birdlife and fish)	Water deviation could affect the quality of water and surrounding habitats, fish, fresh water areas, fishing, changes in water flows and volume that can affect other water uses (for drinking water, hygiene, sanitation, and livestock watering) . **Water Quality:** Accumulation of nutrients, eutrophication, salinization or alkalinization, turbidity, water stagnation leading to waterlogging, insect breeding of disease vectors (snails/schistosomiasis, malaria, onchocerciasis, fecal coliform, other) animal diseases (liver fluke, others),	Training , Environmental Management Plan (EMP),Environmental monitoring, Training provided on water and sanitation, Water management, Asset maintenance plan[111] Potable water and latrines, Planting of micro-ridged plots and on dykes with grasses to minimize erosion. Ensuring water flows for the

[110] These environmental impacts are potential environmental impacts that could be caused by FFA construction without the proper environmental considerations and environmental impacts for the more complex assets being undertaken. These were prepared based on the expertise of the evaluation team.

[111] This type of maintenance plan specifies how assets will be maintained, how frequently, through which means, etc.

Asset	Positive Impacts	Negative Impacts	Mitigation Measures
		reducing downstream water (fishing and agriculture), pesticide pollution/ mineral fertilizers, eutrophication, encroachment of salt water, etc. **Soil Quality:** acidification, alkalization, salinity, weeds, structure, level of erosion, siltation, trampling, etc. **Biodiversity:** changes in vegetation, deforestation/clearing, invasive species (cattail), changes in species of fish, birds, small animals etc. **Humans:** displacement, loss of livelihoods, loss of cultural sites, user conflicts, equity in the distribution of plots.	passage of fish considered in building assets. Wind-breaks integrated into planning and design. Animal paths, Best agricultural practices such as System of Rice Intensification (SRI), Soil and Water Conservation Technologies, Integrated Pest Management Plan, Resettlement Plan[112]
Reforestation (firewalls, mangrove regeneration, ANR)	Income generation (fruits, grains, lumber, etc.), microclimate, fewer bush fires, the restoration of habitats for flora and fauna, protection against climate change disasters and hazards.	Poor choice of species, Aridization of abutting plots, Conflicts in natural resources use, Robberies, Poaching, Etc.	Measures taken for equity of distribution, Choice of species, Participation of beneficiaires, etc.
Soil and Conservation Works/ Technologies	Rehabilitation of lands, Increase in yields, and income.	Weeds, increased gully erosion.	Maintenance program for asset Training and awareness raising
Livestock husbandry /Animal corridors	Fewer conflicts between farmers and livestock holders.	Conflicts	Training and awareness raising of communities

Source: Compilation of impacts prepared by the evaluation team based on a literature review of environmental impacts and EIA studies conducted by PAPIL.

The evaluators conclude that there are no CO SEN requirements or procedures to consider the environmental aspects of FFA[113]. This represents an important oversight and one that should be addressed in future programming as it represents an important deficiency vis a vis the Environment Law of Senegal. There are no guidelines for monitoring the environment by personnel or partners, no early detection guidelines that would determine the necessity for an EIA. To date, a single clause on environment was included in new contracts/agreements with partners. But, there has been no associated environmental impact training with this new clause nor does the monitoring system consider environment. Translating the *Catalogue of Technologies for FFA* and the establishment of an environmental screening tool during the approval stages of FFA projects to validate would be a first step. The introduction of monitoring forms that include environmental issues associated with FFA, the appointment of environmental focal points at COSEN level and in sub-offices of WFP, and training of personnel in all

[112] When lands or goods are expropriated, a resettlement provides for how populations will be compensated or relocated.
[113] Although some corporate guidelines to this effect do exist, namely the 2011 FFA Manual Module C, and a 1999 WFP Guideline on Environmental Impact Assessments, they were not used at CO level under the period in review

partner contracts would contribute to ensure that environmental management is integral to future climate change adaptations in FFA.

Annex 10. List of people consulted

Organization	Name and Title
WFP Senegal Staff	
WFP Country Office, Dakar	Inge Breuer , Representative Country Director Wanja Kaaria, Deputy Country Director Robert Dekker, Head of Program Bakalilou Diaby , National Program Officer FFA Isabelle Confesson, M&E Cheik Wade, M&E assistant Maria Luigia Perenze, VAM Uwe Sontag, Logistic Officer Sidou Dia, National Logistic Officer Fabou Soumare ,Finance Officer Moussa Sidibe, COMPAS Kokou Amouzou, VAM Data analyst Daddy Dan Bakoye, Program Officer EWS Mamadou Wane, National program officer R4 rural resilience coordinator Rosa Charpentier, Donor Relations
WFP Head quarter, Rome	Jean Noel Gentile, former deputy director COSEN
UNDSS	Mamadou Sall, National Assistant Security Officer Babacar Diop, Ziguinchor
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WFP Country Sub Office Tambacounda	Binata Sankara, Head of sub office Lansana Diediou, programme
WFP Country Sub Office Ziguinchor	Jean Baptiste Bigirimana, Head of sub office William Diatta,senior programme assistant
WFP Regional Office	Pasqualina Di Sirio senior regional programme advisor
WFP Senegal FFA Partners	
PAPIL	Younoussa Mballo Director Momoudou Camara Chef d'antenne de Fatick Babacar Diop environmentalist Fatick
Catholic Relief Service	Noah Zahrobsky,program Officer Malik Ndione,Health and HIV coordinator Francois Sagna, coordonateur projet PANA Ziguinchor
Worldvision	Patrice Diatta, Rural Development National Coordinator Marie Pascale Faye chef programme ADP Niakhar Marie Louise Diouf chef de base Amadou Dia ADP Manager Malem Hoddar
Caritas	Leon Sarr, Caritas Tambacounda
Agence Nationale de la Grande Muraille Verte	Colonel Matar Cissé, Director Papa Sarr Director for Operations
PERACOD (GIZ)	Yoro Olivier Tivoly technical advisor Abdou Salam conseiller au Conseil regional de Fatik
PADERCA	Oumar Wane, directeur Adama faye Communication Abdoulaye Ndiaye environnement et GRN
PROGEDE	Mme Fatou Touré chef d'équipe PROGEDE 2 à Kolda M Diop expert en organisations locales à Kolda Allassane Ngom responsable des opérations à Dakar
ASPROBEB	Ousmane Ndiaye National Director
SAPCA EGAS	Kalifa Coli coordonnateur, ex ASPRODEB

Organization	Name and Title
Goverment	
Min of Agriculture	Thierno Mademba Gaye, Directeur de Cabinet Ahmet Fall, WFP Focal point
Min of Environment Water and Forest Division	Colonel Aliou Diouf Deputy Director and M&E officer , Colonel Tiecouta Traore, conseiller technique Forets classées Colonel Baba Ba, Chef Division reboisement Elie Senghor, adjoint reboisement
Commissariat à la Sécurité Alimentaire	Colonel Issa Seye Aliou Ndoye chef division commerciale Mahamoudon Ndiaye cahrgé du SIM Nar diop chargé des stocks Moussa Niang Chef cellule Études et infromaiton
Cellule de Lutte contre la Malnutrition	Ndeye Khady N.Toure, conseillère en micro nutriment Mme Gueye conseillère nutrition Adama Cissé Directeur communication
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Regional Governmental Partners and beneficiaries	
Gouvernance Ziguinchor	M Dieng Governor of the Ziguinchor Region
Gouvernance Tambacounda	Abdourahmane Ndiaye Deputy Governor
Regionl Development Agency of Ziguinchor	Rémy Diatta, responsable suivi-évaluation
Regional Development Agency of Tambacounda	Tarjo Azziz, directeur Ali Bocar Ann ex responsable cellule PAM-ARD Ismaila Diatta, chef division appui à la matrise d'ouvrage Yoro Ba suivi-évaluation Souleymane Mbengue assistant au développement Mme Ping Kadiatou Sy, secrétaire
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Regional Development Agency of Kaolack	Mamouth Diop Director
Conseil régional de Fatick	Alassane Ndour, general Secretry
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DRDR Ziguinchor	YoussouaSounko Chef production végétale Seydou Badji M Diedhiou, chef service Génie rural
SDDR Kaolack	Mamadou Ngom chef de service
Communauté rurale de Mbabo (Kaffrine, Kaolack)	Bénéficiaires de reboisement: Masall Sall chef de village M Sakho PCR
Communauté rurale de Patar	Mamdou Diouf, assistant communal Bimama Faye, conseiller
Jardin du village de Bilbambara, CR Ndiaffate, Arr Ndiedieng	Fatou Sangare, membre du groupement féminin
Sous prefecture de Mbabo (Kaffrine, Kaolack)	Amdy Moustapha Ba
Sous prefecture de Ida Mouride	Malick Coumba Thiam

Organization	Name and Title
(Kaoloack)	
Communuaté rurale de Nietelebougou (Tambacounda)	Issa Signaté PCR
Village de Goulombou (Tambacounda)	Oumar Dia président du périmètre et 50 bénéficiaires Amadou Sow Groupe d'Action pour le Développement communautaire (GADEC)
Jardin du quartier Tambacounda 1	Groupement des femmes (12) et hommes (4) exploitant le jardin
Village de Tobor (Ziguinchor)	William Diattou président du collectif de développement de Tobor Léopold Coli PCR Mane Ibrahima Tamsir
Village de Thiobon (Ziguinchor)	Chef du village de Thiobon
Donors and Technical partners	
European Union (Délégation de la Commission Européenne à Dakar)	Boubacar Kanouté, Rural Development Officer
JICA (Agence Japonaise de Coopération Internationale)	Kazunao Shibata, Office Chief Atobe Rika,Rural Development Advisor Marina Isabelle Bambara, consultante
CIDA (Canadian Development Agency)	Edith Gouin, First Secretary Babacar Diop, Rural development advisor
UNICEF, Dakar	Abdoulaye Gueye, Monitoring and Evaluation Specialist Halifousseyni Gassama Education/protection specialist Ziguinchor
USAID/Senegal	Dr. Aminata Niane Badiane AG/NRM Specialist
USDA	Mme
African Development Bank	Mamadou Abdoul Kane Irrigation Enginer
FAO	Cheik Gueye Assistant representative
Worldbank	Awa Seck
IFAD	Amadou Daouda Dia Country programme Officer
UNDP	M Kahiré responsable changements climatiques
Others informants	
Cadre National de Concertation des Ruraux	Bab Ngom General Secretary
Projet PADEC Kolda	Samba Moussa Baldé expert en développement organisationnel Moussa Dia Assistant au suivi des contrats
Projet Wuula Naafa	Abdou Sene deputy director Alph Sega Diedhiou, facilitateur Tambacouta
CILSS/Ouagadougou	Amadou Mactar Konate, volet Prévention et gestion des crises alimentaires
FEWs net/Ouagadougou	Salif Sow, Technical Advisor
Club du Sahel/Paris	Jean Sibiri Zoundi, Principal administrator

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Annex 12. Acronyms[114]

Acronyms/ Acronymes	Anglais	Français
AAA	FFA to Reinforce Resilience	Assistance Alimentaire pour la création d'Actifs et le Renforcement de la Resilience
AFDB/BAD	African Development Bank	Banque Africaine de Dévelopement
AGIR	Global Resilience Initiative Agency	Agence Globale pour l'Initative Résilience
ANR/RNA	Assisted Natural Regeneration	Régénération Naturelle Assistée
CFSVA/AGVSAN	Comprehensive Food Security and Vulnerability Analysis	Appréciation globale de vulnérabilité et sécurité alimentaire et nutrition
ANACIM		Agence Nationale de l'Aviation Civile et de la Météorologie
ANGMV	National Agency for the Great Green Wall	Agence Nationale de la Grande Muraille Verte
ANSD	National Agency for Statistics and Demography	Agence Nationale de la Statistique et de la Démographie;
APE	Parent Student Association	Association des Parents d'Élèves
ASPRODEB	Association for Rural Development	Association pour le Développement Rural à la base
BALISE	Data Base for School Canteen in Senegal	Base de données pour l'alimentation scolaire au Sénégal
CADL	Support Centre for Local Development	Centre d'Appui au Développement Local
CCA	Climate Change Adaptation	
CIDA/ACDI	Canadian Agency for International Development	Agence Canadienne de Développement International
CILSS	Permanent Interstate Committee for Drought Control in the Sahel	Comité Permanent Inter-États de Lutte contre la Sécheresse au Sahel
COSEN	Senegal Country Office	Bureau National du PAM au Sénégal
CSA	Food Security Commission	Commissariat à la Sécurité Alimentaire
CSB	corn-soya blend	Mélange mais soya
CLM	Struggle Against Malnutrition Cell	Cellule de Lutte contre la Malnutrition
CNCR	National Round Table of Rural People	Cadre National de Concertation des Ruraux
CP	Country Programme	Programme pays
CNSA		Commissariat National à la Sécurité Alimentaire
CSE		Centre de Suivi Écologique
CSI	Coping Strategy Index	
CTS	Commodity Tracking System (COMPAS –related)	
DAPS	Direction for Analysis, Predictions and Statistics	Direction de l'Analyse, de la Prévision et des Statistiques
DEFC	Direction of Water, Forests and Hunting	Direction Eaux Forets et Chasse
DNCS	National Division of School Canteens	Division Nationale des Cantines Scolaires
DRDR	Regional Rural Development Division	Direction Régionale du Développement Rural
DRM	Disaster Risk Management	
DRR	Disaster Risk Reduction	
DSC	Direct Support Cost	Coûts directs
EIA	Environmental Impact Assessments	
EMP	Environmental Management Plans	

[114] French acronyms are retained to facilitate reading of document by COSEN and other native French speakers

Acronyms/ Acronymes	Anglais	Français
EMOP/OU	Emergency Operation	Opération d'Urgence
ESPD/DPES	Economic and Social Policy Document	Document de Politique Économique et Sociale
EU/UE	European Union	Union Européenne
EDS	Demographic and Health Survey	Enquête Démographique et de Santé
EQAS	Evaluation Quality System	Système d'Assurance d'Evaluation de Qualité
ESASU	Food Security Emergency Survey	Enquête de Sécurité Alimentaire en situation d'urgence
ESPD/DCPES	Economic and Social Policy Document	Document de Politique Économique et Sociale
FAO	Food and Agricultural Organization of the United Nations	Organisation des Nations Unies pour l'Agriculture et l'Alimentation
FCFA	Franc of the African Financial Village	Franc de la Communauté Financière Africaine
FEWSNET	Famine Early Warning System network	Réseau d'alerte précoce à la famine
FFA/	Food for Assets	Vivre contre actifs
FFN/	Food for Nutrition	Distribution générale de Vivres
FFNA/	Food for Nutritional Awareness	Vivres pour la sensibilisation nutritionelle
FFT/	Food for Training	Vivres pour formation
FFW/	Food for Work	Vivres contre travail
FLA	Field Level Agreement	Accord de partenariat
FRN	Food Release Note	Note
GAM/MAG	Global acute malnutrition	Malnutrition aigue
GIE	Association for Economic Development	Groupement d'Intérêt Économique
GIZ	German Technical Assistance	Coopération technique allemande
GFD	General Food Distribution	Distribution générale des vivres
GFDRR##	Global Facility for Disaster Reduction and Recovery	
GOANA	Grand Agricultural Offensive for Food	Grande Offensive Agricole pour la Nourriture et l'Abondance
GRDR	Research and Rural Community Development Project Group	Groupe de recherche et de Réalisations pour le Développement rural
IDEN	Department level Education Division	Inspections Départementales de l'Éducation Nationale
IDRC/CRDI	International Development Regional Center	Centre Régional de Développement International
IDP	Deplaced Person	Personnes Déplacées internationales
IREF	Regional Forestry Services	Inspection Régionale des Eaux et Forêts
ISC	Indirect support cost	Couts indirects d'appui
ISRA	Senegalese Institute of Agricultural Research	Institut Sénégalais des Recherches Agricoles
JICA	Japanese International Cooperation Agency	Agence Japonaise de Coopération Internationale
LADA	Land Degradation Assessment	
LDP	Local Development Plan	Plan Local de Développement
LOASP	Orientation Law for Agriculture and Livestock	Loi d'Orientation Sylvo Pastoral
LTI	Letter of Transport Instructions	Ordre de Chargement pour transport
LTSH	Landside transport, storage and handling rate	Taux de transport, entreposage et manutention

Acronyms/ Acronymes	Anglais	Français
MFI	Micro-Finance Institutions	Institutions de Micro-Finances
M&E	Monitoring and Evaluation	Suivi et évaluation
MFDC	Democratic Forces Movement for Casamance	Mouvement des forces démocratiques pour la Casamance
MAM	Moderate acute malnutrition	Malnutrition aigue modérée
MDG/OMD	Millennium Development Goals	Objectifs de Développement du Millénaire
MUAC	Mid-upper arm circumference	Périmètre brachial
NAPC	National Adaptation Plan for Climate Change	Plan National d'Adaptation aux Changements climatiques
PAA	Purchase from Africans for Africa	
PAPIL	Small Irrigation Support Project	Projet d'Appui à la Petite Irrigation
PGIS	Participatory Geographic Information Systems	
PNIA	National Program for Agricultural Investments	Programme national d'Investissement Agricole
PRC	Project Review Committee	Comité de revue de projet
PRN		Programme de Renforcement de la Nutrition
PRSP/DRSP	Poverty Reduction Strategy	Document de Stratégie de la Réduction de la Pauvreté
NAPC	National Adaptation Plan for Climate Change	Plan National d'Adaptation aux Changements climatiques
NR/PV	Note for the Record	Procès verbaux
NU/UN	United Nations	Nations Unies
ODD		Bureau régional
ODOC	Other direct operational costs	Autres couts directs opérationnels
WHO/OMS	World Health Organization	Organisation mondiale de la santé
OIM	International Organization for Migration	Organisation internationale pour les migrations
NAPA/PANA	National Adaptation Programme of Action	Programme d'Action Nationale d'Adaptation
ODOC	Other Direct Operational Costs	
NGO/ONG	Non-governmental organization	Organisation non gouvernementale
PAEFS	Senegal Forest Action Plan	Plan d'Action Forestier du Sénégal
PAPEL	Livestock Support Project	Projet d'Appui à l'Élevage
PLW	Pregnant and lactating women	Femmes enceintes et allaitantes
PNC	Village Nutrition Project	Projet de Nutrition Communautaire
PNAR	National plan for Rice Self Sufficiency	Plan National pour l'Autosuffisance en riz
PRN	Nutrition Enhancement Program	Programme de Renforcement Nutritionnel du Sénégal
PROGEDE	Sustainable Participatory Management Program for Traditional and Alternative Energies	Programme de gestion durable et participative des énergies traditionnelles et de substitution
PROGERT	Soil Management Program	Programme de Gestion des Ressources en Terres
PRSP/DRSP	Poverty Reduction Strategy	Stratégie de Réduction de la Pauvreté
PSU	Social Emergency Program	Programme Social d'Urgence
PRAESC	Programme de Relance des Activités Économiques et Sociales en Casamance	Programme for the Revival of Economic and Social Activities in the Casamance
PROGES	Project for Water Management in the South	Projet de Gestion de l'Eau du Sud

Acronyms/ Acronymes	Anglais	Français
PROPAC	Fisheries Support Programme in Casamance	Programme d'Appui à la Pêche Artisanale en Casamance
PRRO/IPSR	Protracted relief and recovery operation	Intervention Prolongée de Secour et de Redressement
RDA /ARD	Regional Development Agency	Agence Régionale de Développement
RIDP/PRDI	Regional Integrated Development Plans	Plan Régional de Développement Intégré
REVA (Plan)	National Plan for Return to Agriculture	Retour vers l'Agriculture
RUSF	Ready-to-use supplementary food	Supplément alimentaire prêt à l'emploi
SAP	Early Warning System	Système d'Alerte Précoce
SCA	Accelerate Growth Strategy	Stratégie de Croissance Accélérée
SDDR	Department Service for Rural Development	Service Départemental du Développement Rural
SMART	Simple, Manageable, Achievable, Realistic, Timely	Simple, gérable, atteignable, réaliste dans le temps
SO SEN	Senegal WFP Sub Offices	Sous bureau du PAM au Sénégal
NSESD/SNDES	National Strategy for Economic and Social Development	Stratégie Nationale de Développement Économique et Social
SNPS	National Policy for Social Protection	Stratégie Nationale pour la Protection Sociale
TFD	Targeted Food Distribution	
TTEM	Land Based Warehousing	Transport terrestre, entreposage et manutention
TOT	Training of Trainers	
UNDAF	United Nations Development Assistance Framework	Cadre de Developpement des Nations Unies
UNICEF	United Nation Children's Fund	Fonds des Nations Unies pour les Enfants
UNDP/PNUD	United Nations Development Programme	Programme des Nations Unies pour le Développement
UNEG	United Nations Evaluation Group	Groupe Évaluation des Nations Unies
UNESCO	United Nations Educational, Scientific and Cultural Organization	Organisation des Nations Unies pour l'Éducation, la Science et la Culture
USD	US Dollar	Dollar des Etats-Unis
UNISDR	United Nations International Strategy for Disaster Reduction	
VAM/ACV	Vulnerability Analysis Mapping	Analyse et Cartographie de la Vulnérabilite
FSAC/ VCAD	Food for Sustainable Asset Creation	Vivres pour la Crèation d'Actifs Durables
FFA/VCF/VPF	Food for Training	Vivres contre Actif/Vivres pour Formation
FFW/VCT	Food for Work	Vivres contre Travail
VHF/HFR	Very High Frequency	Hautes fréquences radio
VCB/BCV	Village Cereal Bank	Banques céréales villageoises
ZAR	Zones at Risk	Zones à risques

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