Mauritania Country Office

Mid-term evaluation

Project of Enhancing Resilience of Communities to the adverse effects of Climate Change on Food Security in Mauritania (PARSACC)

PARSACC 200.609

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Limitations of the evaluation

This evaluation report does not pretend to be exhaustive. It is mainly limited by the time allotted to produce it and the impossibility of presenting in detail all evidences made available to us by the Project Management Unit and the various regional delegations and concerned technical services of the Ministry of Environment and Sustainable Development (MEDD).

We do not suggest, in any way in our observations that the debates on all the analyzed questions are closed or are definitive. The content is obviously perfectible and is only a contribution to respond as best as possible to the terms of reference of the study and to guide the managers for an implementation in good conditions and the attainment of the ambitious objectives of the project.

The role of PARSACC (Enhancing Resilience of Communities to the Adverse effects of Climate Change on Food Security in Mauritania) project team and the Ministry of Environment and Sustainable Development (MEDD) staff is crucial since they will work to optimize the results of this report in order to ensure the successful implementation and the achievement of the objectives of the project.

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ABBREVIATIONS AND ACRONYMS

IGA	Income Generating Activity.
ACCMR	Adaptation Project to Climate Change in Rural Areas
GAPACC	Global Alliance Programme Against Climate Change
WSC/SDR	Water and Soil Conservation / Soil Defense and Restoration
VMC	Village Management Committee
SC	Steering Committee
CREDD	Regional Committee for Environment and Sustainable Development.
CFS/FSO	Commissioner for Food Security / Food Security Observatory.
SFCP	Strategic Framework to Combat Poverty
PC	Project Coordinator
RTC	Regional Technical Committee
NPD	National Project Director
DREDD	Regional Delegation for Environment and Sustainable Development
AF	Adaptation Fund
GIZ	German Agency for International Cooperation
IUCN	International Union for Conservation of Nature
MASEF	Ministry of Social affairs, Childhood and Family
MEF	Ministry of Economy and Finance
MEDD	Ministry of Environment and Sustainable Development
NGO	Non-Governmental Organization
CCAAP	Climate Change Adaptation Action Plan
WFP	World Food Program
PANE	National Action Plan for Environment.
PARSACC	Project for Enhancing Resilience of Communities to the Adverse effects of Climate Change on Food Security in Mauritania
PARIIS	Regional Support Project for the Irrigation Initiative in the Sahel
GDP	Gross Domestic Product
LDC	Least Developed Countries
GNP	Gross National Product
PRAPS	Regional Project for Pastoralism in the Sahel
PROGRN	Natural Resources Management Program
SPESD	Sectorial Plan for Environment and Sustainable Development.
GPHC	General Population and Housing Census
EWS	Early-Warning System
SFOO	Success, Failure, Opportunities and Obstacles
SGP	Small Grant Programme
SNDD	National Sustainable Development Strategy
NSSFS	National Strategy System for Food Security
TOR	Terms of reference
MRO	Mauritanian Ouguiya
PMU	Project Management Unit
UNFCCC	United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

The mid-term evaluation of the Project to Enhancing Resilience of Communities to the adverse effects of Climate Change on Food Security in Mauritania (PARSACC) is entrusted to an international consultant during the period from January 24th to March 3rd 2017.

Managed and coordinated by a Project Management Unit (PMU), housed within the Ministry of the Environment and Sustainable Development (MEDD), the project aims to contribute to better governance of the environment, management and sharing knowledge on climate change at different levels. The project would also support the mobilization and participation of communities in the 08-targeted Wilayas to adapt to the effects of climate change. The project's intervention will thus help to strengthen the decentralization process and support the implementation of national adaptation and conservation strategies and programs.

The project receives a contribution from the Adaptation Fund (AF) of 7,803,605 US over four years, the equivalent of 2.3 billion MRO. The counterpart of the Mauritanian government amounts to 731,400 US dollars

The evaluation approach adopted in this work was been developed in accordance with the guidelines of the Terms of reference (TORs) of the mission (see Annex 7) and in close consultation with the Multilateral project implementation entity, the World Food Program (WFP) in Nouakchott and the Project Management Unit (PMU) based in the Ministry of Environment and Sustainable Development (MEDD). The methodology adopted has taken into account performance criteria, relevance, effectiveness, efficiency and indicators of sustainability and reproduction of project results. Therefore, the approach was based on the review and analysis of the project documentation including the project proposal base report and the documents produced by the PMU. Field visits and interviews with officials and structures at the regional and central levels and consultation meetings with the various partners involved and / or concerned were also carried out. The work resulted in a set of conclusions and recommendations to assist managers in the implementation of the project and the achievement of results and targets set within the stated deadlines.

Despite delays in the belated implementation of some of its activities, the project is progressing satisfactorily to achieve its objectives with the involvement of target communities, particularly the most vulnerable households. The project activities contribute significantly to the improvement of the production capacity of the target communities by increasing their resilience to the negative effects and impact of climate change

At the start of the project, the main challenge for the country is the launch of a process of rational use of fragile natural resources in the face of the climate change challenges, the restoration of productive bases and the structural problems of production. The project has contributed in a satisfactory manner to operational solutions aimed at improving food security, raising the standard of living and the incomes of communities and rural populations.
In addition, the project has supported initiatives to improve the conservation of natural resources in the lands of the 84 most vulnerable villages of the 08 Wilayas in the South and South / East of the country. This sustained effort reinforces the commitment of the MEDD to the decentralization and implementation of the National Adaptation Plan of Action (NAPA).

The relevance of the project is considered satisfactory with regard to the environmental, economic and social indicators of the communities at the start of the project, the rural development strategy and climate change and the priority needs of the rural poor and vulnerable population. However, the original design of the project wanted to meet a set of complex causes of limited and fragile natural resource management, poverty and insecurity of the rural poor, and although each component was relevant to the needs of beneficiaries.

The effectiveness and the efficiency of the project are satisfactory, given the level of achievement of the objectives and results of the project and of the budget allocated, despite the limited resources available, the time taken to mobilize partners and field teams, and the highly expanded field of actions (08 Wilayas and more than 84 villages). Although the project has opted for a time-consuming and community-based approach to capacity development, the implementation process has proceeded without major constraints.

The impact on rural poverty is also rated satisfactorily given the diversification of the means of production and the benefits to the target groups (especially women and young people) in terms of income improvement, food security, and agricultural production and of environmental resources. In addition, the project's strong influence on centralized and decentralized institutions and government policies and strategies should be highlighted and emphasized on.

The Sustainability is to be further strengthened in view of the current stage of development of the project and the investment made in creating the framework conditions for implementation (awareness and project introduction campaign, team building and capacity development ground). However, the project interventions show encouraging signs of sustainability, in particular the satisfactory level of appreciation by the village communities and the financial viability of the Income Generating Activities (IGA). However, challenges remain to be faced particularly in the consolidation and formalization of the 84 Village Management Committees promoted and the assumption of the investments undertaken and the preservation of the project's achievements.

The biggest success of the project lies in the commitment of a broader partnership with the various structures of the Administration, civil society and other national and international operators. This method allowed the dissemination of its innovative approach of synergy between the protection of natural resources and the raising of the standard of living of the target groups.

The simplified choice of the three main complementary components, supported by a participatory and partnership approach involving both the communities and the main actors involved at different levels, created a positive synergy with knowledge / information sharing and the dissemination of very promising knowledge. The mission attributes a very satisfactory rating to this aspect and recommends the continuation of the efforts undertaken to consolidate the achievements

In terms of the positive overall impact of the project on women (and young people), gender equality and empowerment of women are seen as remarkable. The representation of women in the basic institutions (village committees) exceeds 50% with the strengthening of their decision-making role in the Village Management Committees (VMC) and meetings is worth noting. From now on, women are more autonomous with the improvement of their well-being and relief of their daily workloads by facilitating access to sources of production. The project attached great importance to gender equality and the empowerment of women
Finally, on the institutional level, the collaborative performance of WFP and the government is considered satisfactory. The Government and the partners work in harmony in a spirit of

collaboration and mutual consultation for the well and the success of the project. The PMU ensures the good management of the project with a technical quality of the team engaged very satisfactorily, operating in harmony and with flexibility in the support to the implementation, when it is necessary. The government has invested heavily in designing and creating the framework conditions for the start-up of the project with the involvement and revitalization of the regional and local administrations concerned and which still needs to be strengthened. This has created a good foundation and support for the implementation and monitoring of project interventions and commitments. However, it is expected that WFP and the Government will continue to build on and maintain the achievements of the project, and above all, seek synergies and collaboration with other initiatives undertaken in the country

After two years of implementation, **the physical performance** of the three components of the project is relatively mixed. The project's initial investment in awareness-raising at different levels, the constitution and training of the regional teams and the selection of target villages with the elaboration of their Climate Change Adaptation Action Plan, significantly affected the implementation of the operational activities of the project (with about 7 to 8 months delay).

Component 1- *To support technical services and communities so that they serve to better make understand climate risks, their impact on resources and food security, and facilitate decentralized and participatory adaptation planning*- is well advanced and presents differentiated rates of execution. Achievements can come close to or even exceed the target for some planned activities

Components 2 and 3 - *Design and implementation of specific adaptation measures identified (linked to desertification and land degradation) and design of concrete adaptation measures focused on diversifying sources of income and livelihood resources among the most vulnerable target groups* -, have created a significant local dynamics and secured households by promoting Income Generating Activities (IGAs), especially among women and young people. Forecasts are sometimes beyond the capacities of realization but the impact is visible on the increase of incomes and food security of the most deprived households.

The average success rates of 73 to 83% of seedlings in the 51 flying nurseries created with the production of more than 474 thousand plants is to be attributed to the regional teams of the project, piloted by the DREDD and the appropriation of techniques by local populations. The success of the young plantations carried out by the members of the communities and the respect of the fenced grazing areas, testify the adherence and support for implemented investments. However, considering the vast scope of intervention of the project, the impact of these achievements remains limited and requires a contribution and commitment from other partners and operators in order to consolidate these achievements and reinforce the resilience of these fragile ecosystems in the face of adverse effects of climate change

The financial implementation of the project was also affected in the first year by the period of awareness raising and preparation of the Climate Change Adaptation Action Plans (CCAAP) to return to its normal rhythm during the second implementation exercise artwork. After two years of implementation, disbursements on the amount allocated by the AF amount to 2,020,605 USD, or 26% of the overall cost of the project. As for distribution by component, this rate declines to 26% for Component 1, 32% for Component 2 and 14% for Component 3
Exchange rate volatility is a crucial element to be taken into account in managing the special account of the project. Indeed, the exchange rate of the dollar, which was only 294 Mauritanian

Ouguiya (MRO) at the time of the grant agreement in July 2012, currently stands at the end of 2016 at 356 MRO, an increase of almost 22%, resulting in an increase in the initial project budget.

The evaluation of the 19 outcome and impact indicators revealed a relatively satisfactory implementation rate. It is also pointed out that there are delays in the implementation of a single activity on the 07 programmed for Component 1 (community radios). The same delay is observed for Component 2. Only one activity lags behind the 04 planned interventions and related to water and soil conservation work scheduled from 2017. For Component 3, we note a delay at the level of 3 activities out of the 08 planned (village cereal banks and training / manufacturing of improved stoves). Overall, the project performs satisfactorily in accordance with the expected results

The major constraints faced by the project are summarized in the following points:

- ✓ A very broad intervention zone, given the complexity of the problems of the affected ecosystems, and the limits of the resources allocated and time of implementation;
- ✓ Much time was devoted to raising the awareness of partners and operators at different levels and to the mobilization and training of field teams;
- ✓ A long process of mobilization of the communities for their participation and commitment in the development and validation of the CCAAPs before proceeding to the implementation;
- ✓ Weak mobilization of other funding partners to complement CCAAPs in order to meet the needs of communities and improve the resilience of fragile and vulnerable ecosystems to the effects of climate change;
- ✓ Permanent concern for the sustainability of investments and appropriation of project achievements;
- ✓ Maintaining motivation of the staff involved in their increasing workload and insufficient mobilization of Regional Technical Committees (RTCs);
- ✓ Low synergy with other natural resource management, poverty reduction and climate change adaptation initiatives.

The main recommendations for improving the implementation of the project and increasing its efficiency and effectiveness are summarized as follows:

- ✓ To suspend the extension of the scope of the project (limited to the current number of 87 villages approached) in order to avoid sprinkling and maximizing the impact of project results;
- ✓ To consolidate ongoing measures, including the formalization and visibility of the programming of the PMU's activities in consultation with the technical partners at central and regional level;
- ✓ To further strengthen and develop the capacities of regional DREDD teams involved in the implementation of the Project, and to maintain their degree of motivation;
- ✓ To revitalize and formalize the functioning of the Regional Technical Committees with a greater involvement of municipalities and local and regional authorities;
- ✓ To further develop the capacities of the project's partner communities and NGOs involved in the management of investments as well as the formalization of the Village Management Committees (VMC);

- ✓ To capitalize on the achievements of the project by developing and disseminating the technical references tested and applied;

- ✓ To increase efforts and investigations to mobilize partnerships and additional funds to consolidate the achievements of the project and broaden its impact;

- ✓ To improve the functioning of the monitoring and evaluation system with the development and monitoring of relevant impact and impact indicators;

- ✓ In view of the increasing workload for implementing the project's activities and ensuring their sustainability, it is recommended that additional support be provided to the project team, for expertise and the use of resource persons to ensure effectiveness achievements and their sustainability;

- ✓ To adjust the initial objectives for some products, taking into account the real conditions of implementation and reallocate the corresponding budgets;

- ✓ Given the initial investment in training of regional teams, capacity development at different levels and time spent developing participatory adaptation action plans, an extension of the project closing date from 8 to 12 months is necessary.

I. INTRODUCTION

I.1. General Framework

This report is being elaborated as a part of the mid-term evaluation of the Project to Enhancing Resilience of Communities to the Adverse effects of Climate Change on Food Security in Mauritania (PARSACC). The Project is financed by the Adaptation Fund (AF), and its implementing entity is entrusted to the World Food Program (WFP), in close collaboration with the Ministry of Environment and Sustainable Development (MEDD), the Governmental execution entity. As stated in the terms of reference (TORs), the evaluation aims at assessing progress, lessons learned and learning to inform the implementation of the project.

With an overall cost of 7,803,605 USD, PARSACC aims to strengthen the resilience of vulnerable communities to the effects of climate change on food security and contribute to the sustainable management of natural resources in eight (08) Wilayas among the most vulnerable to the effects of climate change. They cover a strip extending from east to west in the south of the country, which includes the regions of Trarza, Brakna, Gorgol, Tagant, Assaba, Guidimakha, Hodh El Gharbi and Hodh El Chergui. Initially, the project will target 100 poorest villages, spread over 75 municipalities. Groups of 5 to 6 villages will be set up with a possible extension to cover 134 villages depending on the availability of resources that could be provided by other sources of funding or associated partners and taking into account implementation capacities.

The project is structured in three (03) main components:

Component 1 : Support technical services and the communities they serve to (a) better understand climate risks, their impact on livelihoods and food security; and (b) facilitate participatory decentralized adaptation planning.

Objective	:	Enhance the understanding and capacity of government and the communities it serves to facilitate and undertake participatory adaptation planning
Component 2	:	Design and implement concrete adaptation measures identified through community adaptation planning that aim to combat desertification and land degradation
Objective	:	Improve the long-term sustainability of the productive ecosystems needed to support climate-resilient and food secure livelihoods
Component 3	:	Design and implement concrete adaptation measures identified through community adaptation planning that aim to diversify and strengthen the livelihoods of the most vulnerable population
Objective	:	Increase the resilience and food security of communities and households through livelihood diversification and sustainable use of natural resources

I.2. Process and mission proceedings

The mid-term evaluation mission took place from 24 January to 3 March 2017. It was conducted in close collaboration with the WFP Country Office in Mauritania, the PMU and MEDD officials.

A first introductory meeting was organized with the Project Coordinator (PC) at the start of the mission on 24 January 2017 at MEDD headquarters in the presence of the PMU team. Interviews with the WFP Director and Resident Representative in Nouakchott, His Excellency the Minister of the Environment and Sustainable Development and the National Project Director (NPD) clarified the expectations and the course of the mission.

The terms of reference, the program of the mission and the complete list of persons met in Annexes 2, 3 and 4.

Following the preparation for the field visit, an 'aide-mémoire' was drawn up, reflecting the progress of the mission and the main lessons and conclusions drawn. Two restitution meetings were also held on 22 February 2017 at the headquarters of the WFP Country Office and on 24 February at MEDD headquarters. The first meeting was chaired by Mr Yasuhiro TSUMURA, Deputy Director of the WFP Country Office in Nouakchott, in which the PC and the WFP Officers participated. The second meeting was chaired by Mr. Sidi Mohamed Wavi, National Project Director, in the presence of the technical representatives of the Ministry. A presentation of the preliminary findings and key recommendations of the evaluation mission was the subject of a validation discussion.

II. II. THE PROJECT

This section is reserved for the presentation of the national context of the genesis of the project and a synthetic description of the project in its initial conception during the preparation of the ex-ante evaluation (basic document, Prodoc). The aim is to place the project in its national context and to describe the main conceptual and operational characteristics of the project. This would make it possible to verify, on the one hand, the common and shared understanding of the project and, on the other hand, to be able to verify and detect, during the preparation of the

following sections of the evaluation, the modifications and possible changes which have occurred during the implementation of the project.

II.1. National Context

Mauritania, with 1.03 million square kilometers, is one of the Sahelian countries most exposed to the effects of desertification, therefore climate change. The Mauritanian territory is in its entirety located in the arid zone but with 75% in the Saharan zone. The country is divided into two major climatic zones: the Sahara and the Sahel, each with a coastal shade and a continental shade. The coastline for each climatic zone is characterized by relatively high humidity and low diurnal and annual diurnal ties, while the mainland has larger (diurnal and annual) temperature differences and extreme air aridity; especially in the Saharan region, which has very low rainfall and high evaporation.

Mauritania has an economic potential that relies mainly on mining, fisheries, livestock and, to a lesser extent, agriculture. However, with a per capita GDP of US $ 537 and 46.3% of the population living on less than one dollar a day, Mauritania belongs to the Least Developed Countries (LDCs) group. It is ranked 152nd out of the 173 countries classified by the 2002 Human Development Report. Mauritania's economic growth over the last five years is rather sustained with rates of 5 to 6% per year excluding oil. However, the country still faces significant structural constraints of its own.

The Economic and Financial Reform Policies undertaken by the country in the 1990s with the support of the donor community have restored macroeconomic balances and laid the foundations for sustainable growth with a private sector Dynamic and competitive.

With a human development index (HDI) of only 0.433, Mauritania ranks 136th worldwide in 169 countries. The poverty rate in rural areas is nearly 60 percent, with 30 percent of the population living in extreme poverty. The country has always experienced large food deficits with a production of barely 30 percent of these needs. Twenty-five percent of the rural population is food-insecure and concentrated in the agro-pastoral zones in the southeast, the area covered by the proposed project. Half of rural households do not have access to safe drinking water and spend up to 80% of their income on food, depending on other expenditures such as health and education. Chronic malnutrition affects nearly one third of the population in the interior and southeastern areas of the country

Forty per cent of the population (estimated at about 3.3 million in 2011 and having doubled in the past 25 years) is under 14 years of age. The low overall density of the population varies considerably between regions, with the highest concentrations found in the capital Nouakchott, the port city of Nouadhibou, and along the Senegal River in the south. The share of the urban population increased from 3 per cent in 1960 to 41 percent in 2010. A rural exodus causes this rapid urbanization where a combination of human and climate-induced factors leads to degradation of the base of production for nearly a third of the country's population. Nevertheless, due to population growth, the absolute number of people living a nomadic life has also increased over the last three decades. There is also a higher percentage of women among these groups than in urban areas due to the migration of men looking for jobs in cities.

II.2. Methodology

The evaluation methodology focused on techniques and instruments such as semi-structured and group individual interviews, thematic discussions with the various partners, exchange with the Project Management Unit (PMU) as well as village and the target groups in the 04 Wilayas visited on the 08 concerned by the interventions of the project. Direct field observations, triangulation, and SEPO analysis techniques (Success, Weaknesses, Opportunities and Obstacles) were applied in order to verify the findings, using various sources of information. The secondary data collected are based on studies and analyzes carried out before and during the implementation of the project. The four consultation workshops with the regional decentralized departments of DRESD encouraged a fruitful exchange with them, the regional technical committees (RTCs) and the various partners involved, including representatives of the NGOs selected.

In accordance with the TOR guidelines, the approach attempted to evaluate the project based on the following evaluation criteria:

(i) Evaluation of the project's performance by assessing the relevance of the project (Necessity, Priority, Relevance as a means of change in the project environment (policy, economy, society, etc.)

(ii) Assessment of project effectiveness (level of achievement of objectives against target) by identifying conditions

(iii) Evaluation of the project's efficiency (qualitative evaluation of the conversion of resources (funds, skills, timeframe) into economic outcomes,

(iv) Assessment of the effectiveness of the project The impact and sustainability of committed investments and reproductive prospects, and finally

(v) Draw operational conclusions and recommendations to eventually improve the current conditions for the implementation of the project and the achievement of its objectives.

II.3. Key sectors and position vis-à-vis the climate change

Mauritania ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 and acceded to the Kyoto Protocol in 1997. At the national level, the National Sustainable Development Strategy (SNDD,) by 2015, October 2006 constitutes the reference framework for national policy in relation to climate issues. Operationally, it is articulated with the second National Action Plan for Environment and Sustainable Development (PANE II) covering the period 2012-2016. Long before, Mauritania drew up its National Adaptation Plan for Climate Change (PANA) in 2004. In 2015, Mauritania launched the first preparatory milestones of its National Adaptation Plan with medium and long-term vision. PANA identifies agriculture and livestock as the sectors most vulnerable to climate change

Almost half of the total population, and three-quarters of the poor, still depend on agriculture and livestock for their livelihood. Together, these two sectors generate about one third of the country's

gross national product (GNP), leading the government to make rural production a priority to make it more resilient to the effects of climate change.

Agriculture is a traditional activity in Mauritania. Strongly conditioned by the presence of water; It is therefore very localized in the east and south-east of the country, and along the river Senegal. Over the past two decades, crops such as irrigated rice in the Senegal River Valley, market gardening and fruit growing in various parts of the country have appeared on a larger scale and Importance in the Mauritanian culture system. The four traditional cropping systems in Mauritania are the rain fed or Diéri culture system, the flood recession system, the irrigated cropping system, the oasis system

Agriculture is characterized by its poly culture, which in most cases combines livestock with food crops mainly intended for self-consumption. Serious problems are caused by the fragmentation of land. The average area of farms is between 1 and 5 ha and the number of households is over 557 248 (RGPH, 2013[1]). Soil fertility in Mauritania is relatively low and desertification affects virtually the entire country and dramatically reduces arable land area, which does not exceed 5% of the country's land area.

Mauritanian livestock farming is characterized by the optimal use of natural resources thanks to the mobility of its production system, leaving more and more room for sedentarization. Although support for it is limited to a few animal health actions and the creation of pastoral community organizations, livestock farming remains one of the main activities in the country.

The limited development effort undertaken over the last forty years in the field of range management has aimed at transforming the transhumant mode of production without considering the eco-climatic conditions and the experience and knowhow of the breeders. Legislation has always repressed pastoralism through models of agricultural intensification, spatial organization and, consequently, livestock fixing, thus disrupting transhumance and consequently the flexible management of natural resources. Based on this observation, the Government has opted for a set of measures aimed at preserving and promoting transhumant livestock farming by adopting the new pastoral code

The forest sector is characterized by the exploitation of wood and non-wood resources by the populations to satisfy their needs. Collecting wood for cooking was limited to dead wood. At present, urban centers maintain a particularly devastating charcoal chain of the few forestry formations to satisfy households' household energy needs in the absence of alternative energy. Non-timber resources are also exploited by local populations for various uses, such as poles in the construction of habitats, handicrafts, food and pharmacopoeia, in particular.

Until the 1980s, 70% of Mauritanians were nomads and small subsistence farmers. Over the past three decades, and due to recurrent drought, there has been a migration to cities. The increase of this scourge made cities unable to cope with the new demands leading to higher unemployment rates and a serious failure of social services

II.4. Genesis of the project

Mauritania is one of the Sahelian countries that has been most affected by successive droughts during the past 30 years. As a result of this decline in precipitation, the aridity limit that crosses

[1] *RGPH: General Population and Housing Census of 2013*

the country has shifted southward, resulting in a desert expansion of about 150,000 km², thus reducing the amount of land suitable for agriculture and breeding. According to climate projections, this trend will continue. Some scenarios predict that average annual rainfall in Mauritania will decrease by 20% by the 2090s compared to the 1990s. At the same time, projections suggest that rainfall events will be more intense, resulting in more dry global conditions, but punctuated by more frequent and severe floods. In some areas in the south of the country, rainfall is very limited and sometimes with an absence throughout the year.

The National Adaptation Program of Action of Mauritania (PANA, 2004) stresses that desertification and degradation of natural resources induced by climate change could exacerbate food insecurity in the country, particularly in fragile areas that receive just enough rain now.

In 2011, the Government of the Islamic Republic of Mauritania, represented by MEDD, requested WFP assistance in the preparation of a project proposal to the Adaptation Fund United Nations Conference on Climate Change (UNFCCC). This project, entitled "Improving the Resilience of Communities and their Food Security in the Face of the Negative Effects of Climate Change in Mauritania"(PARSACC) ", was approved in July 2012 and will be implemented over a period of 4 years, with a budget of 7.803,605 USD

II.5. Overall objective of the project

The overall objective of the project is to strengthen the resilience of vulnerable communities to the effects of climate change on food security. This objective will be pursued by (a) strengthening government services to support communities in their participatory development and implementation of local adaptation and natural resource management plans (component 1), and (b)) Mobilize communities to invest in resilience and adaptation to climate change (components 2 and 3).

II.6. Intervention Strategy and Key Components

The overall approach of the project focuses on empowering regions and communities. This participatory and partnership approach is in line with the Government's decentralization plan, and in particular the will of the MEDD to accelerate the local implementation of the national adaptation strategy through its regional branches; the DREDD. The project is designed in three Complementary Components:

Component 1: Support the technical services and communities they serve to (a) better understand climate risks, their impacts on resources and food security; and (b) facilitate decentralized and participatory adaptation planning.

Component 2: Design and implementation of specific adaptation measures identified through community-based adaptation planning to combat desertification and land degradation

Component 3: Design and implement concrete adaptation measures, identified through community-based adaptation planning, in order to diversify and strengthen food resources of most vulnerable populations

The main beneficiaries are communities of the eight (08) Wilayas, covering a band extending from east to west in the south of the country, which includes Trarza, Brakna, Gorgol, Tagant, Assaba, Guidimakha, Hodh El Gharbi, and Hodh El Chergui

II.7. The Project framework results

The following matrix describes the framework of the project results:

Table 1: The Project framework outcome

Programme Strategy	**Objectively verifiable indicator**		
Overall objective	*The overall goal of the project is a strengthened capacity of government technical services to guide and assist vulnerable communities increasing their food security and resilience to the impacts of climate change by providing them the information, organization, planning and implementation skills and means to improve the foundations on which their livelihoods are based.*		
	Indicator	**Baseline**	**Target**
OBJECTIVE 1: **Enhanced understanding, skills and means of decentralized government and communities for leading and facilitating participatory adaptation planning**	Number of community adaptation plans prepared through participative local planning supported with information and facilitation by DREDD	No adaptation plans exist in intervention zones	20 clusters of villages have established adaption plans in a participatory manner
Outcome 1.1: Strengthened awareness, ownership and facilitation capacities of government services (DREDD)	DREDD have played an active and supportive role in the mobilization, organization and implementation of inter-village adaption planning processes	DREDD do not have capacity to provide any support to communities	DREDD have succeeded to provide information, guidance and facilitation support to 20 village clusters
Output 1.1: Technical services strengthened to access and analyze climate change information, food security, livelihoods and vulnerability information, and to monitor local development, and mobilize and support communities.	DREDD have been trained, have communicated with department and local level, have visited communities, have facilitated village cluster establishment and discussions	DREDD do not visit communities and do not provide information, support, guidance or facilitate processes	DREDDs have regular contact and trustful relationship with village clusters and communities that value their support

Output 1.2: Strengthening of Government's threat, risk and vulnerability analysis capabilities by expanding current Vulnerability and Analysis methodologies to overlay climate threats and monitoring changes in landscapes using GIS technologies.	Preparation and communication to regional level of up-to-date and reliable information and analysis of climate change information and of government priorities	DREDD hardly receive any guidance, information and analysis from central level	Regular communications between central level and DREDD provide up-to date information and guidance, adapted to the capacity at regional level
Outcome 1.2: Strengthened awareness, ownership, planning and management capacities at community level for local natural resource management and climate change adaptation	Communities and their relevant sub-groups (e.g. women, livelihood groups, etc.) have actively participated in the preparation of the inter-village adaptation plans prepared and see their interests adequately reflected.	There is only little joint discussion at community level, and not all groups are involved; no inter-village discussions take place	About 100 villages in 20 village clusters understand, own and manage their adaption plans and their natural resources
Output 1.3: 20 inter-village associations established and supported.	Inter-village associations exist and are active in on form or the other in each of 20 targeted clusters	In some clusters, some form of cooperation structure may exist, on which the project can build.	20 inter-village associations with a role in managing natural resources and adaptation plans recognized by population and DREDD
Output 1.4: Communities trained in climate change threats and adaptation measures, which reduce vulnerability, in particular related to food insecurity.	Number of people (gender-disaggregated) and communities trained	Communities are aware of degrading natural resources, but rarely of context, causes and adaptation options	Communities have the capacity to analyse and understand their situation, and adaptation options
Output 1.5: 100 villages, being clustered according to landscape, ecosystem and livelihoods, have prepared adaptation plans that are integrated into local development planning. Identification of adaptation technology requirements such as integrated livestock water and cropping systems.	20 village cluster adaptation plans developed in a participatory way and officially recognised by DREDD Specific studies on adaptation technology requirements are available at the relevant levels	Communities and village associations do not prepare comprehensive adaptation plans A number of *ad hoc* studies exist within several projects, but are not systematically made available	Adaptation plans include analysis, discussion of options, decision on priorities and analysis of implications (costs, maintenance) Studies on technology for 3-4 "standard" adaptation assets are available to all partners and stakeholders
Output 1.6: Communities share success stories and lessons	Community radios are on air, involving communities in	To be established during project year 1 as part of CR feasibility study	Four CR are on air, have strong volunteer

learned, including through the establishment of 4 community radio stations focused specifically on sharing information on early warning and adaptation management.	programming and feed-back		involvement and a sustainability strategy
Outcome 1.3: **National ecologic monitoring system strengthened and tested**	Participating communities and government services have provided quality, timely and reliable ecologic monitoring reports aligned with the national monitoring system	No ecologic monitoring system exists – this will be established as part of PANE II operationalization.	The new national ecologic monitoring system is known, used and maintained by DREED and in project village clusters
Output 1.7: Monitoring system in place (establishment, training, production of data and reports) to track climate events and ecologic development in project intervention zones.	Number of people trained at regional and village cluster level; amount and quality of data provided by village clusters / regional teams	There is no systematic collection, consolidation and analysis of data on nationally agreed-upon indicators	Participating DREDD and village clusters provide data on agreed-upon indicators; and receive, understand and use reports.
OBJECTIVE 2 **Design and implement concrete adaptation measures identified through community adaptation planning that aim to combat desertification, soil erosion and land degradation**	Number of implemented community adaptation plan action aiming to combat desertification, soil erosion and land degradation	No comprehensive community (cluster) adaptation plans exist in the intervention zones to be selected.	20 comprehensive adaptation plans have been implemented with respect to combat desertification, soil erosion and land degradation.
Outcome 2.1 : **Advance of sand dunes slowed down, halted or reversed**	Reduced, halted or reversed dune advance in participating communities	To be established during project year 1	Significant deceleration – and ideally reversal – of dune advance
Output 2.1: 1,500-2,000 ha of dunes fixated.	Plants – and other measures – have stopped advance of dunes	Sand dune fixation does take place as part of several projects, but hardly in the zones to be selected.	Communities have fixated dunes and have a clear plan for maintaining / reinforcing fixation
Outcome 2.2: **Increased vegetation cover in intervention zones**	Increased Vegetation Cover Index in participating communities	ICV is not used systematically (mainly in ProGRN). Baseline to be established as part of adaptation plan preparation	Increase of ICV by at least 10% in participating village clusters until end of project, and clear prospect for further increase

Output 2.2: 1,000-1,500 ha of vulnerable zones protected.	Area of land protected from against uncontrolled grazing and bush fires	There will only be sporadic protected areas in selected village clusters	1,000 – 1,500 ha of land protected and encompassed by sustainable management plan
Output 2.3: 1,000-1,500 ha of community fuel wood forests planted.	Area of land planted and controlled for fuel wood production; volume of produced fuel wood	There is hardly any controlled fuel wood plantation in areas to be selected	Participating communities cover at least 50% of their fuel wood requirements from controlled wood production
Outcome 2.3: **Decreased loss of water and soil through surface run-off**	Increased surface and underground water availability	There are only few – if any – water retention structures functioning in areas to be selected	Area where days of water availability has increased with at least 20% has grown by at least 20%
Output 2.4: Water retention structures built covering approx. 500 ha.	Number, kind, surface size and volume (where applicable) of water retention structures	To be established as part of adaptation plan preparation	Communities construct and maintain retention assets according to plan
Objective 3 **Design and implement concrete adaptation measures identified through community adaptation planning that aim to diversify and strengthen the livelihoods of the most vulnerable population**	Number and type of implemented community adaptation plan action aiming to diversify and strengthen the livelihoods of the most vulnerable population	No adaptation plans are in place, livelihood bases are hardly diversified in areas to be selected	Communities have implemented adaptation plan action and continue to gain sustainable income from new sources
Outcome 3.1: **Increased number of sources of income for participating households**	Number and type of sources of income for participating households before and after the project	Livelihood bases are hardly diversified in areas to be selected – specific baselines to be established as part of adaptation plan preparation	At least 20 % of village cluster population have widened their livelihood bases with new sources of income
Outcome 3.2: **Increased income for participating households**	Level of income for participating households before and after the project	Participating households are among the poorest in the selected areas.	Participating households have increased their revenues by at least 40%
Outcome 3.3: **Increased availability of and access to food for**	Food gap (number of weeks/months) for participating households	Participating households have the greatest food gap in the selected areas.	Participating households have

participating communities	before and after the project		decreased their food gap by at least 50%
Output 3.1: Approx. 300,000 trees for revenue generation and food planted in protected areas.	Number of trees planted and growing in protected areas; amount of food and revenue gained from these	Baseline to be established as part of adaptation plan preparation	Planted trees already are – or have at least a clear prospect of – providing substantial amounts of food and income
Output 3.2: 4,000 technical staff and community leaders trained in livestock management, agricultural techniques and water utilizatio	Number of people (gender disaggregated) trained	Hardly any training is available in areas to be selected; extension staff requires training, too	Extension staff and cluster population are aware of and apply appropriate techniques
Output 3.3: 5,000 technical staff and community leaders trained and equipped for plant/seed multiplication.	Number of people (gender disaggregated) trained	Hardly any training is available in areas to be selected; extension staff requires training, too	Extension staff and cluster population are aware of and apply appropriate techniques
Output 3.4: 4,000 technical staff and community leaders trained and equipped for poultry development.	Number of people (gender disaggregated) trained	Hardly any training is available in areas to be selected; extension staff requires training, too	Extension staff and cluster population are aware of and apply appropriate techniques
Output 3.5: 1,600 technical staff and community leaders trained and equipped for apiculture.	Number of people (gender disaggregated) trained	Hardly any training is available in areas to be selected; extension staff requires training, too	Extension staff and cluster population are aware of and apply appropriate techniques
Output 3.6: Approx. 20 community cereal banks established.	Number of functioning village cereal bank associations; volume of cereals and money in bank.	No village-owned cereal banks exist in areas to be selected – to be confirmed during adaptation planning	Participating communities own their VCB, membership, money and food held by associations is stable
Output 3.7: 30,000 fuel efficient stoves provided.	Number of fuel efficient stoves built by participating communities; share of reduced consumption of fuel wood	Fuel-efficient stoves are hardly know and available in areas to be selected – to be confirmed during adaptation planning	Communities know, understand and use fuel efficient stoves; fuel-wood consumption by participating households reduced by at least 40%
Output 3.8: 2,000 community members (mostly youth) trained to build and maintain fuel-efficient stoves.	Number of people (gender-disaggregated) trained	No training is available in areas to be selected; extension staff requires training, too.	In all participating communities a group of people regularly builds and repairs fuel-efficient stoves;

II.8 Project Start-up Conditions

In order to implement the project, a broader consultation and concerted process began with the Project Coordinator (PC) recruitment by WFP in December 2013. This process took place according to the following sequential chronology:

Sequential timeline for project implementation

December 13th, 2013	A kick-off workshop in Nouakchott by MEDD and WFP. ▪ Launch of the project; ▪ Presentation of the project to key stakeholders at central and regional level (components, implementation strategy, institutional arrangements, etc.); ▪ Announce the start of the consultation process for the selection of areas of intervention and the development of project planning.
December 16th 2013 to January 31st, 2014	Regional meetings. ▪ Presentation of the Project to the local authorities and project partners in the regions and inform the participants about the objectives of the project; ▪ Initiation of the data collection work by the DREDD to the competent technical services for the preparation of the regional technical workshops; ▪ Engage DREDD in consultation with all partners, including representatives of the communities, to collect the information and data needed to target areas of intervention and identify activities related to their regions
February - March 2014	Establishment of Regional Technical Teams. ▪ Decision to set up the Regional Technical Teams by the Walis of each region, at the proposal of the MEDD ▪ These teams are chaired by the DREDD and constituted by representatives of the following regional technical services: o Regional Directorate for Rural Development (DRDR); o Regional Direction of Hydraulics and Sanitation (DRHA), o Regional Directorate of the Commissariat for Food Security (DRCSA); ▪ Regional Directorate for Social Affairs, Children and Women (DRASEF).
April – May 2014	Regional Technical Workshops. ▪ The proposal for a first prioritization of the project's intervention zones at the municipal level;

- The identification of a set of activities eligible for the region, in accordance with the expected results of the project at national level and the nature of the ecosystems existing in the Wilaya;
- Identification of potential partners for the implementation of project activities in the region;
- Identification of a set of capacity-building activities for the region

June - July 2014

Meetings of the CREDD.

- Each Wilaya presented a proposal for the project's intervention zones and the priority activities selected for the region. These proposals were submitted to Steering Committee for approval;
- The PMU has compiled all the information received from the CREDD and prepared the following documents:
  - List of villages proposed by Wilaya and the map of the municipalities concerned
  - Multi-annual planning (2014-2018) of the project on the basis of the regional proposals;
  - Operational planning for the first year of project implementation;
  - Budget by component and by result.

July 2014

2nd Regular Meeting of the Steering Committee

- Validation of a list of villages representing the zones of intervention of the project proposed by the RCESD;
- Validation of the overall project planning;
- Validation of the plan of operation for the first year of project implementation
- Approval of the project budget;
- Agreement on the date and agenda of the project's start-up workshop;
- Approval of the timetable for the implementation of the project

August 14th, 2014

Project Inception Workshop

- The workshop was opened by Mr Janne SUVANTO, WFP Resident Director in Mauritania and Mr Mohamed Abdellahi Salem Ahmedoua, General Secretary of MEDD (More than 80 participants attended this workshop):
  - Present the process of consultation with stakeholders at central and regional level;
  - Present the approach of prioritization of the project's intervention zones and the validation of the proposals of the project sites presented by the 8 Wilayas and approved by THE Steering Committee;
  - Present and validate the overall planning and operation plan for the first year of project implementation.

- Present and validate the budget broken down by component and result.

II.9. Areas of intervention and target groups

The project covers 08 Wilayas in the South-Eastern and Western regions of Mauritania, namely Trarza, Brakna, Gorgol, Tagant, Assaba, Guidimakha, Hodh El Gharbi and Hodh El Chergui. Based on a vulnerability analysis and after extensive consultation with regional and central authorities, 100 villages were selected in an initial stage of project intervention. They cover an area of almost 39 417 km^2, or 8% of the total area of the 8 Wilayas, affecting fragile and highly vulnerable pastoral and agro-pastoral ecosystems.

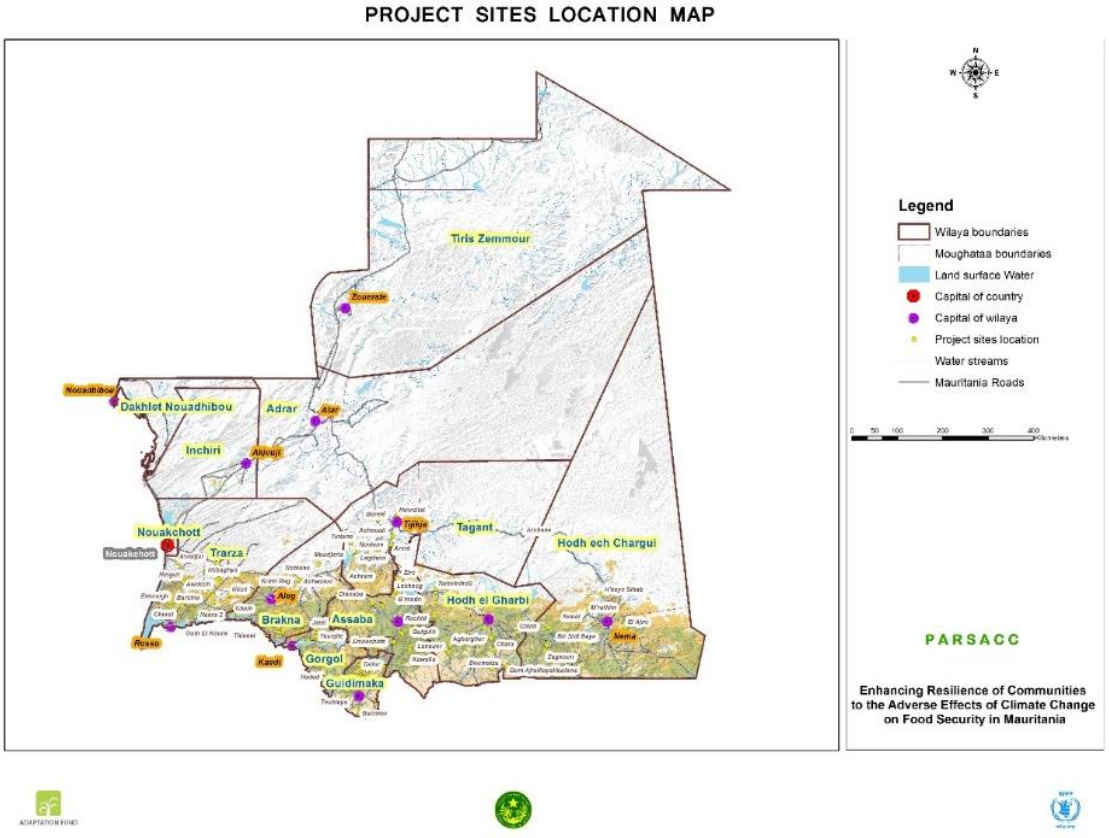

Figure 1. Map of Wilayas and PARSACC intervention sites

The target group is made up of poor and vulnerable village communities and disadvantaged households facing the challenges of climate change. The project targets the most vulnerable groups, women, youth, household heads / farms, rural poor and landless. At the time the project was formulated, the workforce of the target group, estimated on the basis of structural vulnerability, was in the order of 37,368 households or 186,718 inhabitants out of a total population of the 8 Wilayas of 2,319,632 inhabitants (65 % of the country's total population). Women and young people under 25 represent 59% and 44% of the target population. The main activities in the Wilayas and the villages concerned are agriculture, livestock, services and especially trade in certain regions.

II.10. Institutional Arrangement and Governance (including Monitoring and Evaluation)

The project is implemented by the MEDD, which is the executing entity of the project under the supervision of the multilateral implementation entity entrusted to the World Food Program (WFP). As for the central structure of project implementation, a Project Management Unit (PMU) was created to coordinate and manage the activities and interventions entrusted to the various partners. The PMU, consisting of a PC and a small team consisting of a monitoring and evaluation specialist, a PC deputy adviser and a financial officer. The project is assisted by a Steering Committee (SC) made up of representatives of the MEDD and WFP. The SC is the implementation structure with prerogatives of decision and responsibility for direct supervision of the project. The SC is supported by a Technical Advisory Committee made up of representatives of the MEDD, the Commissariat for Food Security (CFS) and the other ministries concerned, in addition to the representatives of the Technical and Financial Cooperation Agencies.

At the regional level, the project is managed and implemented by DREDD with the support of a Regional Technical Committee (RTC) bringing together the various technical partners. By 2017, the work of the DREDD will be supported by the NGOs contribution, which will ensure, in particular, rural animation, updating the Adaptation Action Plan (AAP), the organization and Formalization of VMCs and the promotion of Income Generating Activities (AGAs).

Finally, the Monitoring and Evaluation unit is part of the PMU and is directly attached to the PC. The assignment of a specialist is likely to monitor project activities, contribute to the development of quarterly and annual progress reports, which should serve as a basis for information and discussion. Consultation with other partners will support the implementation of the Early Warning System (EWS).

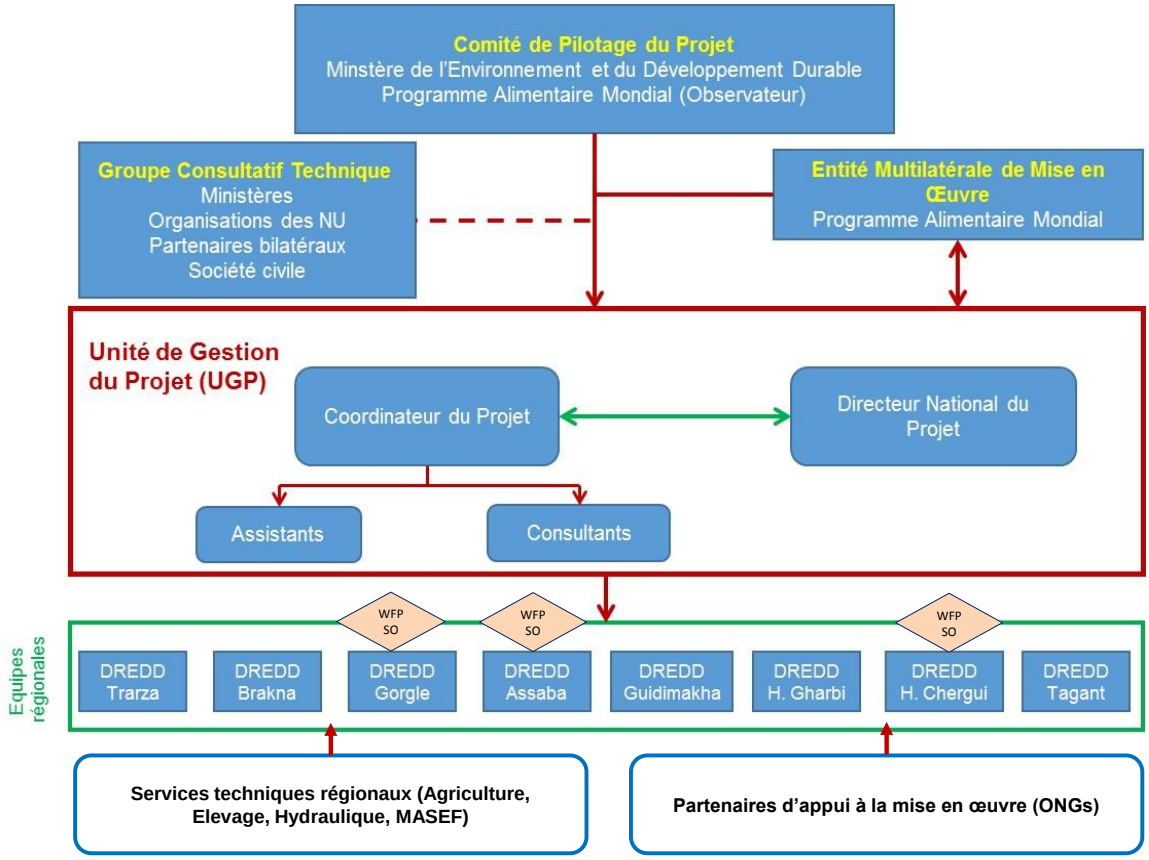

Figure 2: Project Implementation Structure - Source: PMU

II.11. Main activities

The project activities are structured around the three main components with 19 outputs distributed as follows (see Table 1 - Project results framework):

- 07 outputs for Component 1 in relation to institutional and technical capacity-building at the central, regional and community levels for participatory adaptation planning;
- 04 Natural resource management activities mainly dune fixing, community reforestation, conservation and water and soil conservation (WSC) work,
- 08 Activities focused on the IGAs promotion and innovations such as the promotion of poultry farming, beekeeping, market gardening and fruit plantations.

II.12. Funding

The total cost of PARSACC at the date of the agreement signature between the AF and the Government in July 2012 amounts to 7,803,605 USD, the equivalent of 2,294,259,870 MRO[2].

The Mauritanian government is contributing by a counterparty up to 731,400 USD.

The donation is granted by the AF after the approved and signed agreement with the Mauritanian government on July 12th, 2012.

[2] 1 U.S. Dollar ($US) = 294 Mauritanian Ouguiyas (MU), in July 2012.

Table 2: PARSACC Funding Structure

Description	Project Cost USD	Equivalent in MRO	%
Project Cost	7 225 561	2.124 341 934	**93**
Project Management Fee (WFP)	578 044	169 944 936	**7**
Total	**7 803 605**	**2 294 259 870**	**100**

1 US Dollar (US $) = 294 Mauritanian Ouguiyas (UM), 2012.

The breakdown of project costs by component is specified in Table 3.

Table 3: Project Cost Breakdown by Component

Component	Total Cost (USD)	Total Cost (MRO)	%
Component 1: Institutional and technical capacity building, at the regional and community levels, for participatory planning of adaptation programs.	1 679 665	493 821 510	**22**
Component 2: Implementation of adaptation measures to combat desertification and land degradation.	2 522 100	741 497 400	**32**
Component 3: Implementation of measures aimed at diversifying and strengthening community livelihoods	2 339 476	687 805 944	**30**
Cost of Project Implementation (Assessment Team)	684 320	201 190 080	**9**
Project management costs (MIE)	578 044	169 944 936	**7**
Total	**7 803 605**	**2 294 259 870**	**100**

Exchange rate used in 2012: 1 US $ = 294 UM

II.13. Monitoring and Evaluation System

The project has a monitoring and evaluation system with the assignment of a monitoring and evaluation officer as of October 2015. A baseline study was also prepared in October 2015.

Based on the information provided by the MEDD regional teams and the monitoring sheets prepared by the person responsible at the central level, the PMU publishes quarterly monitoring reports, which are periodically submitted to WFP.

III. PROJECT IMPLEMENTATION

The assignment of a monitoring and evaluation officer is carried out from October 2015, that is, one year after the start of the project. Recalling that an effective monitoring and evaluation system is a necessity in a project. The system should not be seen as a form of control but as a tool for management and decision-making. Although the financial monitoring and physical achievements of the project have been satisfactory, ecological monitoring, impacts and impacts

is in its infancy. Indicators for assessing the direct / indirect effects and impacts of achievements need to be improved. This problem has been well discussed with the PMU.

Consequently, evaluations of the cumulative results of the project and the CCAAPs developed with the beneficiaries have been limited for the time being to mainly qualitative assessments. The question remains about the need to improve the existing monitoring and evaluation system and to enrich it with useful data on the various effects and impacts of the project. The role of NGOs in this process is crucial as highlighted in the regional workshops scheduled within the framework of the mission.

The following assessments provide an analysis and discussion of the main activities and outcomes achieved by component and initial programming of targets and allocated resources.

III.1. Component 1: Support to the technical services and the communities they serve, to better understand climate risks, their impact on subsistence resources and food security, and to develop relevant, realistic adaptation plans (1,679,665 USD).

Performance: Satisfactory

Following the launch of the project in August 2014 and in continuity with the information and awareness-raising process initiated, regional workshops were carried out over two periods between March and June 2015, targeting the project teams and the associated partners of the 8 Wilayas. These workshops have made it possible to widely disseminate the content of the project and the mobilization of the various partners.

The training of DREDD technicians and other technical partners, that is 80 participants in addition to Village Management Committee (VMC) members and representatives of the partner communities in the 84 villages approached (80% of the project target). This awareness-raising work at the grassroots level facilitated the development of the CCAAPs at the level of 84 villages and the creation of the VMC. Similarly, and in April 2016, the 08 DREDDs were trained in monitoring and evaluation.

This initial investment required almost 8 months of work before the fieldwork began. The development of the capacities of the field teams and their equipment by working means, have greatly facilitated the implementation of the programmed activities. Indeed, of the 10 vehicles acquired by the project, 08 are assigned to the DREDD field crews, that is to say one car per Wilaya.

Initial field investigations and analysis of other experiences in the country led the project team to readjust its initial intervention strategy, based on the constitution of 20 inter village associations (clusters of 5 to 6 villages per association). The option chosen consisted in working with all the target villages with the creation of VMC and / or the dynamization of the existing structures of the population organization, such as cooperative unions. The social heterogeneity and the difficulties of communication between the villages far from each other, advocated in favor of this approach. In fact, the project has found itself in a logic of following up and working with a large number of villages (84 villages, with 9 to 16 villages per Wilaya) and with increasing difficulties in mentoring and monitoring.

In response to the increasingly intense workload of the DREDD teams to implement the project activities and the support of the 84 communities who are the project partners, the PMU recently used the support of NGOs operating in its area of intervention. After training 60 NGOs, the

commitment of 10 of them is in the process of being implemented (scheduled for March 2017). The intervention of selected NGOs will begin during the first quarter of 2017. This initiative requires close monitoring for effective intervention and sustained support. In this regard, the mission recommends to be confined to the villages already affected by the project that is 87 villages, where efforts must concentrate in order to have visible impacts.

At mid-term, disbursements on Component 1 are relatively small and amount to 430,826 USD, or 26% of the total project cost. The acquisition of the 10 Vehicles and the office automation equipment are carried out relatively in time (March 2015) and made available to the field teams and the PMU. Training courses for more than 115 technicians at the central and regional level coming from the wide array of the technical services (Environment, Agriculture, Livestock, Hydraulics, Social Affairs, NGOs, etc.) were carried out during the period from March to July 2016. However, the decision to strengthen eight regional and local radio stations is on the verge of being finalized. An amount of 274,450 USD is foreseen, after budgetary revision, to finance this activity, which is 16% of the total budget of the component. This thoughtful option will begin in the course of 2017 as the first lessons begin to become visible.
Already, a first contact with the national radio and the regional and local branches are made. Consultations are well advanced and a commitment is being made. It is important, however, to take into account certain measures that ensure the success of this collaborative activity, such as: (i) providing the necessary training for those concerned on aspects related to climate change and adaptation measures, food security and role of communities and organizational structures at the grassroots level; (Ii) being aware of the reality on the ground and visiting the project's achievements and (iii) supporting the necessary equipment.

Overall, out of the 07 interventions scheduled in component 1 of the project, 06 are committed and 02 actions are lagging behind in implementation (Community radios in addition to the implementation of an early warning system (EWS)). An initiative for setting up an EWS is under way with several partners. The project, for reasons of efficiency and synergy, must be part of this initiative and contacts are already established.

III.2. Component 2: Design and implementation of concrete adaptation measures identified through community-based adaptation planning to combat desertification and land degradation. (2,522,100 USD)

Performance: Moderately Satisfactory

As of today, the achievements under this component 2 are highly contrasted and include: (i) 310 ha of dune-fixing work, representing 15% of the work originally planned by the project; (Ii) 950 ha for protection of vulnerable areas (63% of project forecasts); (Iii) 177 ha of village reforestation (12% of project forecasts) and (iv) 280 ha of water and soil conservation work, site studies completed and tender launched 42% of project forecasts. All these developments are decided and carried out with the participation and the involvement of the populations of the concerned villages. With the experience gained by both the project team and the partner communities, the pace of implementation will accelerate from the current year onwards.

It should be noted that the village plantations are delicate and that the choice of sites must be meticulously conducted to avoid failures of success of the plants and respect the exploitation regulations. The analysis of the experiences of other initiatives should be considered in order to minimize the slippage. These fears partly explain the low mid-term completion rate of this activity programmed by the project. Its start-up, in parallel with the construction of the improved stoves, is useful with the support of a process of awareness and supervision.

The planning of water and soil conservation works on certain wildfire fighting and plantations ensures a better integration of the installations undertaken and would make the achievements more effective. The cumulative achievements compared to the project forecasts are illustrated in the following figure:

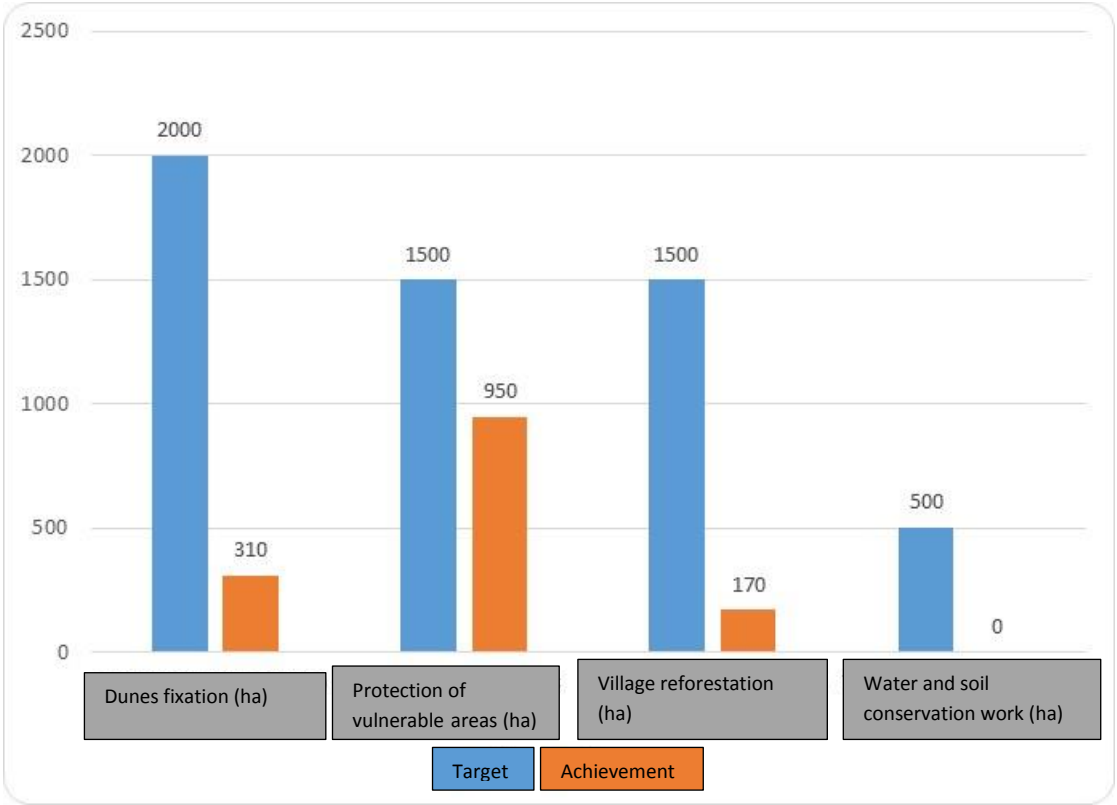

Figure 3. Status of accomplishment of component 2 activities

Moreover, during the two years of implementation, the project supported the creation of at least 51 flying nurseries that allowed the production of more than 474,000 plants with a very satisfactory average success rate of 73 to 83%. Planting, irrigation and regular maintenance of the nurseries affected 619 households or 371 beneficiaries, spread over 51 villages. More than 36,497 working days are generated by this activity in addition to the distribution of 41.5 tons of wheat, 3.3 tons of legumes and 1.9 tons of oil. This is in addition to the 22,000 beneficiaries of the work undertaken to carry out other dune fixing work, community reforestation and protection through the degraded areas protection

For natural resource management interventions and over two years of implementation, an amount of 64,839,566 MRO, (196,500 USD) was spent in paid work days and generated additional income for 3,600 households spread out over 3 to 5 Months on average. Food was also distributed during the first year, which makes 180.7 tons of wheat, 14 tons of legume and 9 tons of oil. The impact of these interventions on household food security in the project area is clear. The well-considered programming of these interventions, avoiding the periods of ordinary occupation of the communities (work after floods and harvests). As a result, there is an average reduction in the lean period of 2 to 3 months per year, almost 50% of the total duration.

Disbursement on this component is the largest with disbursements of 800411 USD (48% of project forecasts). In addition, unit costs for dune-fixing work are largely under-estimated (cost of over US $ 1,200 / ha compared to 234 USD as foreseen by the project). The reality on the ground (inter-village distance), the cost breakdown per expenditure item and experience in other projects (over 3,000 USD/ ha for the Green Belt project) call for an upward revision of the Unit cost of this intervention to the tune of 1300 US $ / ha. The same reasoning could be applied to soil and water conservation work, which has a relatively low unit cost (close to 1,349 US ha / ha) and which the results of the examination of the tenders are being analyzed in detail.

At this stage of the project, all activities are undertaken with satisfactory disbursement and a visible impact on the protection of natural resources and their improved resilience to climate change. Henceforth, a know-how is well developed at the level of beneficiary communities. The working days generated by these activities also contributed to the improvement of the food security level of the beneficiaries of the project activities for over 3,700 households, which is nearly 12% of the target households of the project. Gender equality is respected and women are well represented with rates in most cases exceeding 50% in all achievements. The vegetation cover has improved by increasing the protected areas of more than 1437 ha, an increase of 0.04%. Similarly, the production means of the populations are diversified and stabilized (land protection).

III.3. Component 3: Implementation of measures aiming to diversify and reinforce community livelihoods (2,339,476 USD).

Performance: Satisfactory

Out of the 08 activities planned, 02 activities have not yet started. These include the installation of improved stoves and the creation of village cereal banks. This last intervention has not yet started for reasons related to the feasibility study and the fears of mismanagement highlighted by the MEDD and certain regional officials. However, past experiences with WFP and other operators still support these achievements in the programming of new operations related to rural food security aspects (IFAD / Agriculture and Food Security Program). Faced with the demand,

tested with certain communities visited (Tichoutine, Ghoueisbou), it is recommended to the PMU to properly target the zones of creation of these cereal banks taking into consideration: (i) criteria for accessibility of sites to be selected ; (ii) the need expressed by the communities and (iii) the choice of favorable sites with dynamic and social cohesion

In the case of IGAs (micro projects), support for the promotion of beekeeping activity remains an innovation of the project. It is a highly valued part both by the affected communities and by the managers and the MEDD policy makers. After an initial training for 72 potential participants / micro-entrepreneurs, (among whom 49% were women), located at 08 sites, 27 groups of 03 beneficiaries on average are formed, with the distribution of equipment, in the initial phase of apiary school, with five full hives and one working kit per site, which is 40 hives. In total, 432 beneficiaries (43% of the project target) received the first production by the end of April 2017 and towards the end of October for the second period. Based on a quick calculation, this action will generate an annual income per beneficiary of 20 000 MRO or around 55 USD.

The awareness-raising work, carried out by a specialist consultant and the teams of the DREDD, dispelled the psychological blockage in the populations with regard to the bees breeding. Let us not forget that beekeeping is a very worthwhile and at the same time, a sensitive activity, which requires close monitoring and good behavior (risk of disease, transhumance and / or supplementation during periods of lack of flowering). With good management and rigorous management (reserves for the lean season of almost 6 months per year), an average production per hive of 12 kg and an income approaching 108 000 MRO is expected, that is nearly 296 USD.

With regard to poultry farming, the project provided training for 500 participants, 80% of whom were women. 3000 beneficiaries are affected and the project has supported the creation of 50 poultry houses (40 traditional and 10 semi-intensive chicken coops), spread over 50 villages / sites. Productions are intended for the self-consumption and sale of surplus in the neighboring villages. In the case of semi-intensive poultry farming, this activity created momentum in the affected communities with an immediate additional income per beneficiary and per farm (1.5 months after the establishment of the poultry houses) of 30,000 to 40,000 MRO. Five production batteries are feasible per year, which is nearly 7.5 months of production.

Training in agricultural and animal husbandry techniques involved the training and equipment of 40 veterinary assistants and 4172 community producers, 76% of whom were women in the field of fruit and vegetable gardening. 25 032 beneficiaries are affected and distributed across 46 sites. In addition, 82 rural market gardening producers were trained in cooperative management. The collaboration agreement with the Boghé Rural Producers Training Center (CFPR), signed in November 2016, helped to provide extension services and monitoring of the 47 market gardening sites. 12 Basic Extension Agents (BEA) are deployed during the market gardening campaign (November-February) to accompany the producers at the rate of 3 visits per month. The evaluation of the collaboration with the center for the 2016/2017 campaign will make it possible to decide on the continuation of the support, by means of adjustments of the tasks to be accomplished (fertilization, vegetable conservation, water saving, treatment of diseases , Nutrition, etc.)

Furthermore, the use of CNRADA expertise will strengthen the work undertaken by the installation of 500 fruit trees in 150 households with 3 trees per household in Hodh El Chergui. A planting program of 10,300 trees is underway in 19 sites for the benefit of 3166 households,

which is 18,770 beneficiaries. Plantations will also concern local species of agroforestry or so-called multi-use (Cactus, jujube trees, Acacia Senegal and Balanites).

In practice, all the activities, programmed under component 3, slightly started behind the creation of a village cereal bank and the installation of improved stoves. The delay is mainly due to the mobilization of the national consultants, trainers / attendant and the collaboration agreement signature with the CNRADA. However, the project targets remain overestimated and require revision, taking into account the available budget and implementation capacities (for example, the young people training in the construction and maintenance of improved stoves). In addition, it should be noted, the fruitful collaboration with the Training Center for Rural Farmers of Boghé (CFPR), which provided the necessary technical training in the cooperatives management and organization as well as veterinary auxiliaries. Mobilizing Base Extension Agents (BEA) ensured the close supervision of the beneficiaries of the market gardening activity. This work should continue with a redeployment and close monitoring.

At this stage, disbursements of 14% on the component are low and normally should improve substantially from 2017 with the NGO involvement. The encouraging results of the first operations of the promoted IGAs will also increase the adhesion and the demand of the communities. The support for other types of micro projects remains possible, such as community shops, fattening, rural mills, etc. The NGOs role in the diversification and promotion of IGAs is expected for the remaining period of implementation of the adaptation action plans.

III.4. Budgetary Expenditures and Disbursement Status on the AF

At mid-term and after two years of achievement, the investments are differentiated from one component to another. It is expected that the pace of execution will improve from the 3rd year with accumulated experience. The following figure provides a general overview of the budgetary expenditures made.

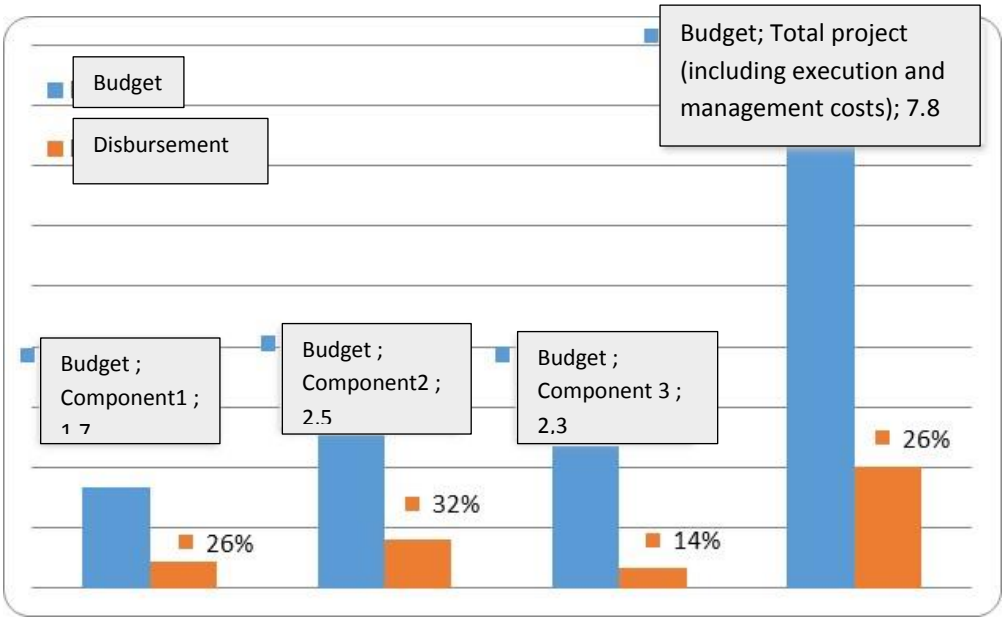

Figure 4. Statement of cumulative disbursements by component.

At mid-term, funds transferred by the AF amount to 3,930,312, USD or 50% of the total amount of the project, while the cumulative disbursements made after two years of implementation are of the order of 2 020 605 US $. This represents 51% of the amounts transferred and only 26% of

the total project budget. At this rate of disbursement and project implementation capacities, it is strongly recommended to consider a revision of the initial disbursement schedule and the duration of project implementation

At the level of the overall achievements of the project, it is necessary to emphasize the importance given to training at different levels. The training has covered aspects related to climate change and vulnerability to this phenomenon as well as the technical aspects of production and improvement of poor households. More than 4 thousand Community producers are trained in agricultural techniques, especially market gardening. Approximately 5000 beneficiaries have received training in poultry farming, 80% of whom are women and 72 participants in apiculture training, 47% of whom are women. The training also involved senior executives from MEDD and partners for more than 115 people.

These training sessions enabled the members of the VMC and the households of the 84 village partners of the project to become informed and to be actively involved in the development of the VCAs and the implementation of the programmed activities. This component is very important and crucial in that it provides an overview of protection and production measures for the various ecosystems that are fragile and vulnerable to climate change. Some interventions have shown their importance in improving and increasing household production and incomes in the short term, such as the poultry farming promotion and market gardening in particular.

During these years of implementation, the project affected almost 9284 households (30% of the total households) distributed throughout the 84 villages in the 08 Wilayas of PARSACC intervention. Details of the achievements, broken down by village and the number of affected households, are shown in the following table:

Table 4. Distribution of Project Achievements by Village, Site and Number of Households Affected (August 2014-End of August 2016)

N°	Business Scope	Achievements	Number of villages/Sites	Number of affected households
1.	Dunes fixation	310 ha	32	2197
2.	Wildfire fighting	950 ha	24	176
3.	Nurseries and plant production	51 nurseries	51	619
4.	Village reforestation	177 ha	27	708
6.	Fruit farming	500 trees	150	150
7	Market gardening	75 ha	46	4172
8.	Traditional and semi-intensive poultry farming	50 units	50	500
9.	Apiculture	08 units	8	72
10.	Agricultural tec. training	Participant	46	276
11.	Veterinary auxiliaries Training	Participant	35	210
12.	Cooperative management training	Participant	80	480
		Totals	**559 sites**	**9560 households**

Note: By considering 31,389 households in the 84 villages affected by PARSACC, the project affected 30% of the target households and deployed on 559 intervention sites.

IV. REVIEW OF RESULTS AND PROJECT EVALUATION

IV.1. Project Performance

Evaluation of the project relevance

Overall, we can say that PARSACC's objectives were very relevant to the country's strategic orientations in natural resource management, poverty reduction and adaptation to climate change. The project aligns and directly contributes to the objectives of key government strategies, policies and programs aimed at achieving sustainable growth and adaptation to the impacts of climate change

The project contributes directly, particularly through its components 1 and 2, to solving the problems identified at the level of the Strategic Poverty Reduction Framework in Mauritania 2005-2010, which emphasizes that the environment and natural resources have continued to deteriorate due to climate change, socio-economic development and population growth. It also highlights the ecosystems decline, which has particularly affected the rural population and the reduction of biodiversity has considerably limited their income-generating potential particularly of the poorest communities

As regards the Poverty Reduction Strategy Paper for Mauritania (PRSP III) 2011-2015, the project fits perfectly into two of its five main priorities, in this case, access to basic food and the productive use of a healthy natural environment. The second axis envisages the integration of natural resources into the productive fabric of the national economy. The approach explicitly links environmental sustainability and growth to the benefit of the poor. The natural capital promotion strategy focuses on empowering the poor through improved use of natural resources. This priority is addressed in both components 2 and 3 of the project

PRSP III is as explicit as the fight against climate change and the sustainable management of the environment. Specific objectives in this regard include climate risks integration and sustainable management of land and natural resources into development strategies and programs, improved environmental governance at decentralized levels, and national capacity building in monitoring the effects of climate change. These priorities fit perfectly into component 1 of the project

Compared to the National Adaptation Plan of Action of Mauritania (PANA-2004), most of the project activities are linked to those put in priority by this plan, including water and soil conservation, agricultural techniques and community forest firewood plantations.

The project is also aligned with four of the major strategic axes of the National Sustainable Development Strategy (SNDD) 200-62016. The following table shows the relationship between the relevant components and strategic axes of the SNDD:

SNDD Strategic axes	Component 1	Component 2	Component 3
Axis 1: Strengthen institutional and			

political structures to more effectively manage the environment and natural resources			
Priority 2: Promote sustainable access to basic services as a means of poverty reduction;			
Axis 3: Promoting integrated and participatory management with a view to more efficient use of natural resources			
Axis 4 : Local and national environmental management in accordance with international conventions			

Compared to the **National Environmental Action Plan PANE II** (**2012-2016**), which was developed in the light of the lessons learned from the NAPE I (2007-2011), this Plan aims to provide Mauritania with a coherent framework in order to improve the environmental governance to which the Project contributes through its component 1; And to fight the degradation of natural resources, to which the project contributes through its Component 2.

Finally, although **the National Adaptation Planning** Process **(NAP)** did not really start in Mauritania, when it was one of the priorities of the Cooperation between the German Technical Cooperation and the MEDD, within the framework of the Project 'Adaptation to Climate Change in Rural Areas' (ACCMR), the observation that one can make is that the PARSACC project, since it started, has already laid foundations contributing directly and indirectly to the 3 elements of the NAP process. The following table shows at what level of the structure of the project these contributions are visible and can contribute later, once Mauritania launches its NAP process, to its realization:

Component		Component 1							Component 2				Component 3							
Element of NAP Process	Output	Output 1.1	Output 1.2	Output 1.3	Output 1.4	Output 1.5	Output 1.6	Output 1.7	Output 2.1	Output 2.2	Output 2.3	Output 2.4	Output 3.1	Output 3.2	Output 3.3	Output 3.4	Output 3.5	Output 3.6	Output 3.7	Output 3.8
A. Lay the basis and fill in the gaps																				
Assessment: identification of available information on climate change impact, vulnerability, adaptation and assessment and environmental gap needs conducive to NAP process.																				
Address capacities and weaknesses in the NAP process																				
Exhaustive and iterative assessment of development needs and climate vulnerability																				
B. Preparatory elements																				
Analysis of the current climate and scenarios of future climate change																				
Assess climate vulnerability and identify adaptation options at sectoral, sub-national, national and other levels																				
Compile and communicate national adaptation plans																				
Integrate climate change adaptation into national and sub-national development and sectoral planning																				
C. Implementation strategy																				
Prioritize climate change adaptation into national planning																				
Develop the planning and implementation capacity																				
Promote coordination and synergy at the regional level with other multilateral environmental agreements																				
Develop a long- term national strategy for the implementation of adaptation																				

In light of the needs of poor rural households, the most vulnerable, lacking their means of production and fragile and precarious community structuring, the project concept and design were relevant given the process of decentralization of development Resources and in relation to the needs of the target groups.

The project was initiated in a context marked by a rural Mauritanian population still dependent on more than 25% of agriculture and particularly livestock, by self-consumption of food products and income generated by cash or cash crops or agricultural work. The effects of climate change on levels of production have caused reduced yields. The project as designed thus contributes to meeting a real and urgent need of vulnerable rural populations. The targeted 08 Wilaya are ranked among the most disadvantaged.

PARSACC, in its conception, opted for a participatory and partnership approach and the households considered the poorest and most vulnerable were targeted. The beneficiary selection criteria were: (i) large households, (ii) farmers, and (iii) households without monetary income. The communities involvement of in the choice of the beneficiaries, the capacity building strategy of the stakeholders and the support to the establishment of the GCS implementation have played an important role in the project management.

The evaluation mission was able to confirm with many testimonies the transparent process of identification and implementation of the components and activities of the project.

Although the design of the project was highly relevant, the volume of interventions in relation to the implementation capacities of the execution structure was disproportionate and was not in line

with the actual capacities for the implementation of both the management structures and the targeted VMC.

Finally, the mission's discussions with the various stakeholders of the project, in particular on the basis of the cumulative achievements, made it possible to reconfirm the high degree of ownership of the project by the Mauritanian authorities at all levels (central, local and beneficiaries). They also validated the increased relevance of the project's development objective and the participatory approach applied in mitigating social vulnerability and managing natural resources in the face of the effects of climate change. The project approach highlighted issues of community participation, inclusion of vulnerable groups (unemployed women and youth), creation of economic opportunities and jobs, particularly in disadvantaged rural areas Resilience and food security of the most vulnerable groups.

In summary, PARSACC was very relevant to the context of the country, the priorities / fields of intervention of the MEDD and the priority needs of the target groups. The choice of partners, particularly NGOs, the decentralized services of the MEDD proved to be very strategic. In addition, targeting and selecting the strategy to promote the broader partnership (communities and other partners) have been relevant by promoting the transparent participation and accountability of beneficiaries, including the poorest.

The inadequacy is particularly noticeable at the level of interventions that are somewhat scattered and which should be corrected by mobilizing the interventions of the other partners. Thus, the evaluation mission attributes to this aspect of the project a satisfactory assessment.

The effectiveness and efficiency of the project are satisfactory, given the level of achievement of project objectives and results and the budget allocated. The project was able to overcome the limitations in the resources available, the time required for the mobilization of partners and field teams and the wider field of intervention (08 Wilayas and 84 affected villages, which represents 48% of the national territory and 65 % of the country's population). Although the project has opted for a community-based, time-consuming and capacity-building approach, the implementation process has proceeded without major constraints with the above-mentioned successful methodological adjustments.

Gender aspect. In the project area, women are now represented in community structures and village committees (more than 50% in the VGS). Women are among the priority beneficiaries of project activities, particularly for IGAs where rates are between 50% and 75%. Women, with a remarkable participation in the training sessions, express themselves more and more freely in meetings and do not hesitate to defend their interests. Currently, they participate in the choice of beneficiaries, settlement of various community conflicts and meetings of the GTC. In addition, women leaders mediate at the household level of the village.

For example, during the field visits, the mission interviewed 276 members of the 10 communities contacted, 65% of them women (with the participation of 179 women) (see Appendix 2).

Impacts and sustainability. As stated above, the main objective of the project is to support national strategies for adaptation to climate change in order to improve the resilience of vulnerable communities in targeted areas and their food security to the impacts of climate change.

More generally, the mission was able to note the enthusiasm of the VMC members for the participative approach used by the project and their desire to see it continue. Concrete signs of

their enthusiasm and drive are exemplified in their involvement in the CCAAPs development and implementation. At the level of certain sites, the contribution of the communities to the costs of the projects is equivalent to the total investments assumed by the project. Thus, we recorded the contribution in the financing of certain projects (fight against desertification, planting) and a participation between 08 and 12% of the investment cost for micro (henhouses installation). The extension of market gardening areas in certain sites (Guiguih in particular in Assaba) indicates that the communities are taking ownership of the action. The presence of women in management boards is an additional argument in favor of sustainability.

The increase in vegetation cover and the reduction of the phenomenon of water and wind erosion is hardly perceptible at the moment but remains confirmed by the immediate effects of appropriation of the achievements by the populations. Current estimates are 0.04% increase in vegetation cover in the affected areas.

The sustainability of PARSACC's institutional achievements is strongly linked to maintaining the stability and motivation of the technical staff of the DREDD and the other technical departments involved. The methodological tools and local planning of the adaptation measures developed are to be disseminated for appropriation by the permanent structures of the state. The issue remains on the agenda and still needs support. Regarding the 84 VMC, promoted by the project and which are still fragile, we should continue the support and capacity development while seeking to formalize these basic structures with the support of committed NGOs, develop broader partnerships with other national and international operators (in the case of the SGP). In terms of physical achievements in the field, their relevance and quality were considered generally satisfactory and their sustainability is likely given the levels of care and safeguard observed.

The fruitful contacts made with funding and technical cooperation partners, including the World Bank, UNDP / SGP, GIZ and the European Union have shown a predisposition for cooperation and synergy in the overlapping regions. This is the case of projects that start or under preparation, such as Regional Project in Pastoralism in the Sahel (PRAPS) and the Regional Project to Support the Initiative for irrigation in the Sahel (PARIIS), Two projects funded by the World Bank. It was even suggested to establish a co-operation agreement / arrangement and systematize exchange and information-sharing meetings.

Similarly, it is expected that WFP will strengthen its support for PARSACC with a greater involvement of its regional representations working in the project area. As regards to the collaboration with the German Technical Cooperation (GIZ), synergies are possible between PARSACC and the Adaptation to Climate Change in Rural (ACCMR) projects and the Global Alliance against Climate Change (GCCA) program. The project could also benefit from the support of the GSP funds through the newly engaged NGOs and the future village management committees to be formalized.

The participation of representatives of WFP regional offices and the interview with the GSP national coordinator brought closer cooperation points of view. WFP could strengthen its response by taking ownership of achievements and sustaining them. Similarly, the support of the GSP to the programs developed by the project ensures a better integration of the activities and the sustainability of the achievements. There are obvious complementarities, particularly in the fields of solar energy, water saving, soil fertility improvement and yields, as well as the

development of the capacity of young structures for the organization of the population promoted by the project.

IV.2. Impact on rural poverty and food security.

The influence of the project on the policies of the Government deserves to be highlighted with a very satisfactory rating. The main impacts of PARSACC are summarized in the following points:

Income and living conditions of households. The available data clearly indicate that the main productive actions of the project (IGAs, seedling production, community planting and market gardening) have increased household incomes over time with improved food security. However, as the project implementation period is relatively short, a number of the production projects have not yet reached their full development, particularly in arboriculture. On the other hand, simple calculations suggest that other income-generating activities undertaken by women (market gardening, creation of henhouses, beekeeping, fruit plantations etc.) are also profitable. Even when self-generated, the productions generated nevertheless constitute savings in family expenses. The completion report will illustrate the types and amounts of revenue attributable to the project and will estimate an economic rate of return for the project as a whole.

Food security and agricultural production. It is very difficult to attribute the project's share in improving food security and agricultural production. However, the mission notes that the project has made a significant contribution to increasing agricultural production (market gardening) and improving food security in the affected villages. This has resulted in food availability and access by affected households. Households now have 1 to 2 months of fresh vegetables.

Field visits (report in Annex 2) and direct contacts with the populations and beneficiaries of the market gardening activity showed strong support with the strengthening of collective work, especially among women. In some sites, spontaneous extensions of the areas are carried out (case of the village of Guiguih in Assaba). The collective work is strengthened and collaboration and outreach to other villages is possible. This activity is currently supervised by Basic Extension Agents (BEA), whose motivation has been demonstrated. The continuation of this support is to be maintained with technical improvements to be introduced in order to ensure better yields (use of organic fertilizer) and prevention and treatment of diseases.

Recipients' statements indicate a reduction in the cost of purchasing fresh vegetables by almost 50%, from 600 UM to less than 300 UM / kg currently (village of Tichoutine in Brakna). On the other hand, the production of semi-intensive poultry farms, after only 45 days of driving, contributes significantly to the meat nutrition of the villages concerned with an affordable selling price of 1500 to 2000 UM per kg of meat (village Ndjadjebeni Gorgol).

Semi-intensive poultry farming remains one of the best ways to equip the rural poor with local production capacity and ensure sustained incomes. This can only be achieved if housing conditions, prophylaxis and transport are under control, and this type of poultry farming receives the necessary support and supervision. For a 45-day band, the first productions in the project sites yielded a profit of 409, 130 MRO, (US $ 1150) or a profit of 40, 913 MRO, (US $ 115) per woman, a daily profit of 1364 MRO, (US $ 3.8).

The beekeeping activity, which has just started in 08 sites / village is very promising, by good behavior of apiaries. On the basis of a reasonable projection of 15 kg of honey by apiary and for a community group of 27 beneficiaries who received 05 hives, a profit of more than 20,000 MRO or 55 US $ per person is expected.

The impact on rural poverty is also rated satisfactorily, taking into account the benefits to target groups (especially women and young people) in terms of improved incomes, food security, agricultural production and resource management environmental. In addition, the project's strong influence on centralized and decentralized institutions and government policies and strategies should be highlighted and supported by the project. The project is increasingly taking an "inspirational" position for other initiatives in the country.

Similarly, the impact of the various activities undertaken by the project significantly reduced the lean season. Progress margins are possible, through better programming of activities and inputs for the conservation of surplus production for market gardening and the IGAs diversification. Once again, the role and input of NGOs are expected. The following chart summarizes this perspective and alternatives for improving household food security in the project area.

Figure 4. Impact of project interventions on food security (during the soudure).

N°	Business Scope	April	May	June	July	August	September
1.	Market gardening						
2.	Semi-intensive poultry farming						
3.	Traditional poultry farming						
4.	Dune fixation work, reforestation, wildfire fighting and establishment of nurseries						

1. Production of fresh vegetables with possibility of sale of surplus and its conservation

2. Batteries of 45 days intercalated two weeks and break during the period of high heat.

3. Continuous production with a decrease during the heat season (May-August)

4. Paid manual work, programmed outside the winter and the crop period.

V. KEY- RECOMMENDATIONS AND CONCLUSIONS

The overall objective of the project is to "support national strategies for adaptation to climate change in order to improve the resilience of vulnerable communities in targeted areas to the impacts of climate change". The evaluation concludes that the project has contributed significantly to restoring a solid foundation for fruitful collaboration with the various stakeholders involved in Natural Resource Management (NRM), taking into account the adverse effects of climate change and the needs of Communities most vulnerable and most affected by this phenomenon.

V.1. Diversification of sources of income

The incomes and living conditions of the poorest households in the project area have improved and their food insecurity has declined. Targeted vulnerable households have resumed or increased the diversification of their production activities. Support for the promotion of IGAs has created momentum among targeted households and affected communities. The success of this component, directly linked to the urgent needs of the poor populations (especially IGAs), has indirectly contributed to reducing the pressure on fragile natural resources and to develop the spirit of protection for the users.

The increase in household incomes is particularly attributed to the impact of IGAs, nursery production, reforestation and mechanical and biological dune fixation. Village plantations and the installation of water and soil conservation facilities are expected to contribute to improving the means of production. The resumption of agricultural activities and improved agricultural productivity will contribute to the availability and access of food to targeted households. This is particularly the case for home gardens and agroforestry afforestation.

Women are now well represented in community structures (more than 50% in the VMC). Women's participation in these structures strengthens social cohesion and community mobilization on the rights of women, children and youth.

V.2. Organization and management arrangements

The success of the project can be attributed to certain factors, the most important of which are summarized in: (i) the flexibility in the design of the interventions which made it possible to adapt the project to the implementation context by giving it the pilot character; (ii) the role of civil society support structures such as NGOs and VMCs. Another decisive factor in the success of the project is the quality of applied management (well-developed database and flexibility).

Organizationally and in terms of implementation, PARSACC is a model for project management. With the creation of a very rich and well-organized database, the PMU ensures regular programming and monitoring of work at different levels.

There is a real transparency in the management of the project and an influence on the other initiatives within and outside the MEDD. The project is also supported by a steering committee (SC) and a technical advisory group. In order to speed up strategic decision-making and to develop synergy with other operations within the framework of partnership, it is recommended to maintain the frequency of meetings of its structures.

V.3. Implementation process and capacity development.

The project has contributed significantly to capacity building in the planning and management of climate change adaptation and production activities by initiating a community-based, participatory and inclusive approach. This work is reinforced by the support given to the community structuring, the planning process and the revitalization of the regional technical services of MEDD, agriculture, livestock and water in their role of supervision and Monitoring of Community development activities. The demand for a revitalization of the regional technical committee (RTC) with a broad representativeness of the various actors (MASEF, MEF) often returned to the debates during the workshops organized during the mission. Particular attention should be paid to this aspect, and to the involvement of local authorities and local authorities in this process.

Based on a participatory, inclusive and partnership approach, PARSACC has laid the foundations for local governance of development and strengthened the process of decentralization (participation of different sections of the population, elected representatives and women). The project succeeded in circumventing the spirit of wait-and-see and paternalism (donation culture, gratuity) in disadvantaged rural areas, through community ownership and leadership.

Particular attention should be paid to the promotion and institutionalization of the participatory and partnership approach within the framework of decentralization. The mission stresses the importance of continuing efforts to strengthen the process of local and regional development in the process of being implemented. In particular, the promotion and institutionalization of

partnership with other development actors at local and regional level should be strengthened. This would make it possible to develop and implement CCAAPs that federate and integrate all development and natural resource management actions in the face of the effects of climate change. Such a process will make it possible to better meet the needs of the populations and create the necessary synergies between stakeholders and investments.

V.4. Achievements.

The current state of implementation of the project is somewhat delayed, largely attributed to the initial investment in awareness-raising, capacity development and participatory development of CCAs. Successful achievement of development objectives depends on accelerating the pace of implementation, the necessary adjustments in the consistency of planned activities and resources, and the need to extend the implementation period. Thus, the overall performance of the project is deemed satisfactory and requires the need to continue the ongoing efforts. This would accelerate the implementation of PARSACC in order to respond more quickly and more adequately to the expressed needs of the populations targeted and recorded in the CCAAPs developed and validated.

V.5. Programming.

The initial programming of the project activities and the monitoring reports produced by the PMU confirmed the contrasting achievements, particularly at the level of components 2 and 3. Dune fixing, fruit plantations, community reforestation and some AGRs are behind schedule. Others have not yet started (community radio and cereal banks, SAP). Outcome indicators that refer to physical achievements are, on that date and for certain activities, below the mid-term project implementation date. This has had an impact on disbursement levels (see Annex 1). The NGOS commitment scheduled to begin in March 2017 and the 2017 annual program, will accelerate the pace of implementation, thus helping to reduce some of this backlog.

The reality on the ground has revealed false estimates of budgets and targets for certain activities such as dune fixation, forest plantations and protection of vulnerable areas. For example, unit costs for dune fixation were estimated at 312 USD/ ha for a project end-point of 1500-2000 ha. The actual costs calculated after two years of implementation of the project give a unit cost per hectare of around 1,280 USD, which is 4 times higher. Adjustments are therefore necessary in terms of budgets and targets for certain products that the project must operate and which will make it more coherent with reality.

V.6. Reproduction and dissemination of achievements and good practices

The project has developed a large amount of information and manages a dynamic and very rich database. Numerous methodological and technical successes have accumulated and can serve as models for other initiatives. The contacts with the various partners revealed a predisposition for collaboration and capitalization of acquired knowledge with a continuous exchange of information. PARSACC is called upon to strengthen its communication capacities and to allocate resources and means for dissemination and sharing of knowledge and skills.

The WFP office has a communication unit that could help in this direction, as well as collaborations to be pursued and concretized with other partners. This is the case of GIZ projects that operate with a similar methodology and interventions in the same areas of PARSACC sometimes. Also, the project will try to take advantage of the launch of community radios to strengthen its communication and dissemination process.

V.7. Partner's Performance

The Project document (Prodoc) was of good quality apart from target estimates and unit costing of some activities that are either over-estimated or under-estimated. However, this core document reflects national priorities and its design has been participatory with input from the technical departments of the relevant ministries.

Project partners at various levels (List of partners contacted in Annex 8) highly appreciate PARSACC's performance, largely due to good management, the technical quality of the PMU staff and its operational adaptability. Direct supervision of WFP has positively influenced the implementation of the project and SC recommendations have been well followed.

The M & E unit generated monitoring data and reports with analyzes relevant to the management and implementation of intervention programs and beneficiary learning. The knowledge sharing has facilitated the good collaboration and involvement of the various partners involved.

Although weaknesses in the design of PARSACC were noted (scatter / dilution of interventions), the project invested heavily in mitigating and successfully rectifying these shortcomings. The project has demonstrated flexibility in the implementation of its field interventions. Its positive role led the evaluation mission to give this performance a very satisfactory rating.

In addition, the Government was involved in the PARSACC design through the sustained involvement of the MEDD. It provided the necessary conditions for a successful start-up of the project and ensured the involvement and participation of the various partners of the other Ministries. The contribution of SC and the Technical Advisory Committee (although not meeting regularly) facilitated interdepartmental collaboration. This collaboration between WFP is considered satisfactory as a whole.

In conclusion, the main recommendations of the evaluation could be summarized as follows:

V.8. Strategy and modality of implementation.

From the outset, the project adopted an implementation strategy, based on institutional and technical capacity building. This approach should normally lead to community-based and participatory planning that allows analysis of the vulnerability of village territories and target groups and leads to the development of VACs. In a second step, the implementation of these plans begins with concrete measures facilitating the communities access to supplies and means of production, technical assistance and training.

Based on the experience of the decentralized natural resources management project (Pro GRN I and II), the project's approach consisted of considering the clusters of 5 to 6 villages as the organizational unit at the grass-roots level and local planning With the formation of 20 local village associations. However, the reality on the ground has shown difficulties of communication between villages (isolation and remoteness) and often the lack of social cohesion. This has led to work with the villages, which has resulted in increased workload and increased leadership and coaching efforts.

Currently, the project is working with 87 villages (84 villages at mid-term). In order to avoid "technical" suicide, it is absolutely necessary to stop any increase in the number of villages in the future and be limited to the current number of 87 villages approached.

84 CCAAPs are developed with the communities and have been implemented since 2015. Improvements in their content prove to be useful and committed NGOs are called upon to update

their local planning tools. It will be ensured by integrating indicators of the reference situation of the communities and the territories of the villages concerned, supported by a map. An attempt will also be made to include a set of participatory monitoring indicators.

The integration component of the activities is a concern to keep in view. The PMU is called upon to select 1 to 2 villages by Wilaya in order to concentrate the inputs of the project and ensure close monitoring. This would allow giving more visibility to the achievements of the project and would serve as point of radiation. This work should be accompanied by the search for synergies with other ongoing and / or programmed operations (WFP, PRAPS, PARIS, UNDP / SGP).

Lastly, and with a view to sustainability, the PMU is called upon to engage, with the support of NGOs, in the process of formalizing the VMC.

V.9. Technical adjustments in natural resources management and adaptation to the effects of climate change.

The project combines experiences and identifies success stories that can be very useful for other initiatives at MEDD or elsewhere. The mission recommends that the project team prepare a data sheet for each activity (sample sheet in Annex 3). In a second step, it is recommended that the project team develop a technical reference framework and continue the innovation work undertaken (Apiculture, cactus, valorisation of local products etc.).

The project team, with the support of resource persons and taking into account past successful experiences, should also consider the development of management plans or regulations for the exploitation of areas under protection or protected areas and community plantations. The fodder biomass available following the rest period could constitute a forage reserve for the lean season.

V.10. Adjustment of objectives and budgets.

The experience of two years of implementation of the field activities and monitoring of the Project's achievements, have shown, on one hand, differences, sometimes very considerable, between the initial unit costs recorded in the project document and the actual costs. In the other hand, the difficulty of programming areas as initially planned, like in the case of village reforestation due to land ownership, regulatory and social constraints.

Table 4. Initial Unit Costs vs. Actual Costs

Output	Unit costs ProDoc/ha	Objective	Actual average cost/ha
2.1 : 1500-2000 ha of fixed dunes	$329	1500-2000 ha	$1300
2.2 : 1000-1500 ha of protected vulnerable areas	$732	1000-1500 ha	$350
2.3 : 1000-1500 ha of forest for planted firewood	$703	1000-1500 ha	$834

Note: *The calculation of the initial unit costs is carried out based on the minimum targets.*

Taking into account these real unit costs calculated on the basis of expenditure incurred during the two years of implementation of the project, and considering potential targets in terms of village reforestation, adjustments are needed in objectives and budgets initially Which are as follows:

Table 5. Revised Objectives and Budgets

Output	ProDoc Budget	ProDoc Objective	ProDoc Unit Cost/ha	ProDoc Revised Unit Cost/ha	Revised Objectives	Revised Budget
2.1 : 1500-2000 ha of fixed dunes	$469 200	1500-2000 ha	$329	$1 300	900 ha	$1 170 000
2.2 : 1000-1500 ha of protected vulnerable areas	$703 500	1000-1500 ha	$732	$350	1000 ha	$350 000
2.3 : 1000-1500 ha of forest for planted firewood	$674 700	1000-1500 ha	$703	$834	400 ha	$333 600

These adjustments will certainly affect some other Component 3 products, including product 3.8 (2000 young people trained on the manufacture of improved stoves). This number of young people to be trained seems too overestimated. 500 young people (6 participants per village) is more reasonable. These young people can organize themselves into a microenterprise for the production of improved stoves and spread even beyond their village.

V.11. Specific institutional aspects

The project formulation took into consideration the contribution of the Mauritanian side to the financing of part of the project management costs. In addition to the operational logistics of the project (made available to the PMU), committed support and administrative staff (03 technical / administrative staff and 10 drivers) contributed significantly to the successful implementation of the project. However, the mobilization of the national counterparty is difficult and needs to be addressed in order to avoid disrupting the smooth functioning of the labor market.

At this stage of the development of the project and the expected increase in the workload, it is necessary to ensure that this support is maintained and motivated, and even strengthened. An annual budget of 45 to 50,000 US $ is to be insured for the payment of the 13 persons involved in the project.

There is a strong possibility that the need for specific expertise will increase in response to increased workload and requests for community support. It is advisable to maintain the support of poultry and beekeeping consultants and to provide for the mobilization of new expertise, in particular in natural resources management (management plan and exploitation regulations for the Monitoring evaluation and training of NGOs and VMC.

Collaboration and cooperation with other partners needs to be strengthened further. Revitalization of RTCs is an absolute necessity, as well as is municipalities involvement and local and regional authorities in PARSACC programs. The mobilization of a broader partnership with the various actors (UNDP / SGP, PRAPS and PARIIS / World Bank, GIZ) is a promising track to be realized as soon as possible. Already, the two projects, co-financed by the World Bank, were interested in collaboration and synergy, by signing a co-operation agreement / arrangement.

V.12. Contractual Arrangements

The participatory approach adopted by the project from the outset for the selection of intervention zones and the development of the CCAAPs is demanding in terms of investment and time. The project has invested heavily in training field teams and developing capacity at different levels.

Taking into consideration the reduced staff management and support team, the increasing capacity to implement annual intervention programs and the current low level of disbursement on the AF, the mission recommends that the Closure of the project from 08 to 12 months. This extension would make it possible to carry out the readjusted program and to ensure a reasonable period of support and training of the VMC.

V.13. Risk assessment and areas of focus

In comparing the risk assessment matrix established at the time of project preparation and the status of PARSACC implementation, the mission considers that some risks still exist and new risks have emerged (Annex 4. Updated matrix of risks). These include:

Stability and motivation of staff. Given the increase in workload from the 2017 campaign, the project team will be increasingly solicited and subject to greater pressure. The maintenance of the stability and motivation of the project staff, the contribution of the Government's contribution and the strengthening of the staff of the PMU by external support is a guarantee of the continuation of the work under good conditions.

Sustainability and formalization of VMC. The process of rural animation and organization of village communities is the key to the sustainability of the project's investments. The formalization of the VMC is a challenge to be faced by PARSAAC, given the relatively short project delays. Similarly, the integration of PAs in municipal programming (Communal Development Plans) is an additional challenge. The disinterestedness of the municipalities will be detrimental to the sustainability of the achievements of the project.

Social conflicts (successes and demands). The project has developed and / or revived certain activities directly affecting the means of production and the incomes of the underprivileged populations (market gardening, poultry farming and apiculture especially). The impact on households and their food security is evident in a very short period. There are fears of strong demands and even social conflicts for the choice of beneficiaries and the sharing of benefits. A work of animation and close supervision is to be considered.

VI. ADJUSTMENT OPTIONS FOR PROJECT IMPLEMENTING CONDITIONS

PARSACC is considered to be a first operation financed by the AF. Through the nature of its interventions, it constitutes a pilot operation to implement community adaptation action plans for the rational management of fragile resources in the face of the effects of climate change in Mauritania.

In order to better meet the pressing needs of the populations in the current context and to achieve the objectives of the project in a satisfactory manner, a number of adjustments are deemed necessary to initiate. In particular, consideration should be given to options for adjustments, summarized in the following points:

(i) Taking into account the methodological adjustment made and the increasing workload of the field teams to accompany and supervise the 87 villages promoted. It is recommended

to suspend any future extension of the number of villages and in no case to exceed the current total of 87 villages approached as target. Similarly, the integration of project activities at certain priority sites (2 sites by Wilaya) should be encouraged for greater visibility in the success and achievement of the objectives and expected results;

(ii) The pace of implementation will increase from the third year of implementation of the project. Particular attention should be given to strengthening the PMU staff with the support of resource persons and targeted expertise (regulations on reforestation and forest management, small livestock farming, water and soil conservation, monitoring of Effects and impact, in particular);

(iii) Take into account the time taken at the start of the project to prepare participatory PAAs and create the framework conditions for implementation. It is recommended to consider a possible extension of the project closing date from 8 to 12 months, taking into account the current disbursement level not exceeding 26% of the total amount allocated by the AF and 51% of the cumulative funds transferred At the mid-point of the project;

(iv) Need for urgent adjustment of unit costs and consequently targets and budgets for certain achievements (including dune fixing, village reforestation, protection of vulnerable areas, etc.) and a balanced breakdown of Budgetary resources according to the interventions specified in the PAAs;

(v) Strengthen the role of NGOs in supporting and developing the capacities of communities and VMCs to cover project investments and the sustainability of achievements. The role of NGOs in expanding and promoting IGAs is critical in increasing food security and household income.

(vi) Pay more attention to communication, boosting RTCs and using support to the PMU and DREDD through the engagement of certain necessary expertise / qualified resource persons.

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VIII. APPENDICES

Annex 1	Disbursement by Component
Annex 2	Report on field visits and list of participants / Persons met
Annex 3	Technical factsheet Model
Annex 4	Risk Assessment Matrix
Annex 5	Mission Program
Annex 6	Site-Visits Program
Annex 7	Terms of Reference
Annex 8	List of people and partners met at central level