RÉPUBLIQUE DU SÉNÉGAL

UN PEUPLE – UN BUT – UNE FOI

MINISTERE DE L'ÉCOLOGIE ET DE LA PROTECTION DE LA NATURE

DIRECTION DES EAUX, FORÊTS ET CHASSE
ET DE LA CONSERVATION DES SOLS

Groundnut Basin Soil Management and Regeneration Project

TERMINAL EVALUATION

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LIST OF ACRONYMS

ADT/GERT	Association for the Development of Technologies and Local Management of Land and Resources (*Association pour le Développement des Technologies et la Gestion de l'Espace et des Ressources des Terroirs)*
AFM	Administrative and Financial Manager
ANCAR	National Agency for Agricultural and Rural Support (*Agence Nationale de Conseil Agricole et Rural*)
ARD	Regional Development Agency (*Agence Régionale de Développement*)
AWP	Annual Work Plan
BCI	Investment Consolidated Budget (*Budget Consolidé d'Investissement*)
BV	*Banc Villageois*
CADL	Centre for Local Development (*Centre d'Appui au Développement Local*)
CAP	Support Unit for the Implementation of Projects and Programmes (*Cellule d'Appui à la mise en œuvre des Projets et Programmes*)
CAURIE MF	Autonomous Cooperative for Strengthening Economic Initiatives through Microfinance (*Coopérative Autonome pour le Renforcement des Initiatives Économiques par la Microfinance*)
CBD	Convention for Biological Diversity
CBO	Community Base Organization
CDR	Combined Delivery Report
CEV	Ecologically sustainable field (*Champ Écologiquement Viable*)
CIV	Intervillage committee (*Comité Inter-Villageois)*
CIVD	Inter-village development committee (*Comité Inter-villageois de Développement*)
CNCR	National Council for Rural Dialogue and Cooperation (*Conseil National de Concertation et de Coopération des Ruraux*)
CNRF	National Research Centre for Forestry (*Centre National de Recherches en Foresterie*)
CQG	Gender Quality Circles (*Cercles de Qualité Genre*)
CRD	Regional Development Committee (*Comité Régional de Développement*)
CSE	Water and Soil Conservation (*Conservation des Eaux et des Sols*)
STC	Scientific and Technical Committee (*Comité Scientifique et Technique*)
CVD	Village Development Committee (*Comité Villageois de Développement*)
DCEF	Department of Economic and Financial Cooperation (*Direction de la Coopération Économique et Financière*)
DEEC	Department of Environment and Classified Installations (*Direction de l'Environnement et des Établissements Classés*)
DEFCCS	Department of Water, Forests, Hunting and Soil Conservation (*Direction des Eaux, Forêts, Chasse et de la Conservation des Sols*)
DPN	National Planning Department (*Direction de la Planification Nationale*)
DRDR	Regional Directorate of Rural Development (*Direction Régionale de Développement Rural*)
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIE	Economic Interest Group (*Groupement d'Intérêt Économique*)
GIS	Geographical Information System
GPF	Group for the Advancement of Women (*Groupement de Promotion Féminine*)
IGA	Income Generating Activity
INP	National Institute of Pedology (*Institut National de Pédologie*)
IREF	Regional Inspection for Water and Forests (*Inspection Régionale des Eaux et Forêts*)
ISE	Institute of Environmental Sciences (*Institut des Sciences de l'Environnement*)
ISRA	Senegalese Institute of Agricultural Research (*Institut Sénégalais de Recherches Agricoles*)
LADA	Land Degradation Assessment in Drylands
LF	Logical Framework
M&E	Monitoring and evaluation
MED	Exclosure (*Mise en défens*)
MEDD	Ministry of the Environment and Sustainable Development (*Ministère de l'Environnement et du Développement Durable*)
MEF	Ministry of Economy and Finance
MEPN	Ministry of Environment and Protection of Nature
MfDR	Managing for Development Results
MTE	Mid-Term Evaluation
NAP/CD	National Action Plan for Combating Desertification

NASA	National Aeronautics and Space Administration (USA)
NDVI	Normalized Difference Vegetation Index
NEPAD	New Partnership for African Development
NEX	National Execution
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration (USA)
NRM	Natural Resource Management
OP	Operational Program
PAPEL	Project livestock support (*Projet d'Appui à l'Élevage*)
PCU	Project Coordination Unit
PDF	Project Document Facility
PGIES	Project for Integrated Management of Ecosystems of Senegal (*Projet de Gestion Intégrée des Écosystèmes du Sénégal*)
PIM	Individual Mixed Loan (*Prêt Individuel Mixte*)
PIR	Project Implementation Review
PLD	Local Development Plan (*Plan Local de Développement*)
PLU	Project Local Unit
PNDL	National Program for Local Development (*Programme National de Développement Local*)
PRDI	Regional Plan for Integrated Development (*Plan Régional de Développement Intégré*)
PROGERT	Groundnut Basin Soil Management and Restauration Project (*Projet de Gestion et de Restauration des Terres Dégradées du Bassin Arachidier*)
RBM	Result-Based Management
RC	Rural Council
RNA	Assisted Natural Regeneration (*Régénération Naturelle Assistée*)
SC	Steering Committee
SLM	Sustainable Land Management
SMART	Specific, Measurable, Applicable and Accountable, Relevant and Realistic, Time-bound, Tractable and Targeted
SNRM	Sustainable Natural Resource Management
SRADL	Regional Service for Local Development (*Service Régional d'Appui au Développement Local*)
SYSRI	System for monitoring results and impact (*SYstème de Suivi des Résultats et de l'Impact*)
TE	Terminal Evaluation
UNDP	United Nations Development Program
UP	Pastoral Unit

EXECUTIVE SUMMARY

The Groundnut Basin Soil Management and Regeneration Project – PROGERT – is a demonstration project that sought a variety of technical solutions to various anthropogenic and climatic causes of land degradation in different ecosystems of the the Groundnut Basin and which has implemented them following the landscape approach by raising awareness and mobilizing resource users, particularly women, to participate in the restoration and better management of land and natural resources, while putting in place the conditions to enable them to benefit economically from it.

Issues addressed by the project. The Groundnut Basin is an agricultural and pastoral important area which covers almost a quarter of the area of Senegal, and is home to nearly 40% of the country's population, where poverty is prevalent, particularly in the rural areas. Lower yields during the decade prior to the project is due to the loss of soil fertility, degradation of cropland by erosion, compaction and salinization, lack of quality seeds, low market prices and reduced government subsidies. Productivity of agricultural soils declined continuously due to mismanagement, inappropriate agricultural practices (shifting cultivation, reduced fallow periods, and uncontrolled bush fires) and the degradation of natural ecosystems exacerbated by climate change and nearly four decades of drought.

Development and immediate objectives and intended outcomes.

The overall objective of the project is to contribute to the sustainable development of the rural sector in Senegal and to the preservation of the integrity and stability of ecosystems to ensure the sustainability of their functions and services.

The project is structured into five outcomes to which 22 intended outputs are contributing.

Results

The progress achieved towards the immediate objective and intended results includes the following achievements:

Immediate Objective: Catalyze sustainable land management at the landscape level with the goal of combating land degradation and reducing poverty. **S**

The yields of groundnuts, millet, maize and beans measured during the project are almost twice as high as measured before the start of the project except for the 2011 production that decreased somewhat due to severe and sustained drought conditions while remaining above the reference production.

Management plans for three classified forests (1249.5 ha) and nine community forests (1108.5 ha) were adopted and their implementation allowed to stop agricultural encroachment on forests.

Project interventions have enabled the restoration of 5981.5 ha of degraded land in forest formations, rangelands, salt flats and farm fields, representing 0.13% of the total area of the Groundnut Basin and less than 0, 6% of degraded lands as they are estimated over a million hectares. The effectiveness and efficiency of technologies and management methods applied allowed a restoration of the vegetal cover, of habitats and of biodiversity, which allows inferring the impacts in terms of restoration of the soil productive capacity.

Thanks to awareness actions made during workshops and through Gender Quality Circles, Rural Councils have adopted deliberations for the granting of good quality and well-located land to women groups.

The partnership with Caurie-Microfinance brought vision, expertise, and continuous coaching to communities which will foster the success and sustainability of the development of IGAs beyond the project period.

Women's groups have demonstrated ownership and creative integration of microfinance. They have an enhanced vision of the possibilities to grow their assets from loans and small grants and of potential benefits to eventually meet their daily needs.

Outcome 1. Cropland fertility increased through upscaling innovative, adapted technologies in the Groundnut Basin **HS**

The project introduced adapted varieties of cassava, maize, cowpea, hibiscus and watermelon in the CEVs. Varieties have been selected to meet the needs of communities, based on revenue potential taking into account the local markets, and with a view to spread the harvests on a greater part of the year.

The aspects of land restoration and increased yields are presented to document progress toward the specific goal.

With the active involvement of the concerned rural communities and technical support of consulting firms, eleven PLD have been updated to incorporate environmental and sustainable land management dimensions, which ensures their inclusion in the Local Investment Plan and in the Annual Investments Plan. The PLDs and environmental action plans (if any) are now referred to by CR to collaborate with their partners, which will contribute to their implementation.

Over 130,000 plants were produced in community nurseries established with support from the project (43,294 Diourbel, 44,120 in Thies, 31,949 in Louga, and 20,350 in Kaolack). Cultivated species are selected based on the needs and can include vegetables for gardening, fruit trees, species of Acacia, soumpe (*Balanites aegyptiaca* - medicinal plant) to support a processing forest fruits IGA, to enrich areas under RNA, or reforest restored land.

Outcome 2: Rationalized forest and pasture use through upscaling of best practices **HS**

Conventions for 5 pastoral units of a total area of 95,000 ha have been developed, translated into local languages and disseminated to the populations. A hundred or so relay farmers within 25 committees organized in an association have been supported for the constitution of fodder reserves and multiplied the activity for the benefit of 275 other farmer members.

The elaboration of management plans and rules for the use of forests and pastures through pastoral units have promoted a wide dissemination and adoption of best practices for the rational use and protection of resources. 12 simplified participatory management plans covering 3604 ha simplified for four lassified forests and eight community forests have been developed and validated, thereby covering all classified and community forests which did not have one in the Groundnut Basin. The project helped to demonstrate the benefits of sustainable forest management: as environmental conditions improve and forest formations are reconstituted, forage resources grow and constitute a source of income for populations.

46 village committees to combat bushfires have been informed, sensitized, trained and equipped for the clearing and maintenance of firebreaks and constitute a network. 471 km of firebreak were cleared mechanically and manually and maintained under service contracts. Project interventions (awareness and firebreak) led to a virtual elimination of bushfires previously recorded in the regions of Louga and Kaffrine.

30 relay people (women) were trained on the use of improved stoves and techniques for efficient use of wood-energy. 30 solar ovens and 107 improved stoves were made available to populations by the project as grants. Since 2010, more than 426 stoves have been distributed or sold to 30 GPF showing that the GPF have seized the opportunity offered by the project.

Outcome 3: Policies and local partnerships are harmonized and capacities are strengthened for integrated land management following a landscape approach **MS**

A convention has been established between the project and the savings and credit cooperative Caurie-Microfinance which mission is to contribute to sustainable economic and social advancement of poor microentrepreneurs, mainly women, by providing appropriate financial products and services. The agreement enabled the opening of a credit line of 42.381 million FCFA for Caurie-MF to provide loans to individuals, groups or organizations beneficiaries of the PROGERT to enable the development of IGAs related to SLM and based on resources valorisation following an integrated approach. As of 30 September 2012, 593 customers located in rural areas of Louga, Thies, Fatick, Kaolack and Diourbel region enjoyed these credit services.

The project supported the process for the revision of the Forest Code, particularly on two points, the legal recognition of local conventions and contracts of culture. The adoption of the proposed amendments would help to secure the huge investment in time, effort and financial resources provided by the communities in this project - and related gains.

Capacity building has been designed to promote systemic involvement and accountability the actors concerned by the sustainable management of land and natural resource management at all levels. The participation of the media in disseminating information on sustainable land management includes the production of numerous articles in newspapers and over 19 reports on community radios and national television networks. The information provided and trainings are likely to have improved the understanding of issues of environmental sustainability of local decision makers who were involved in the project interventions.

12 local advisory committees, the Gender Quality Circles, have successfully played an important role: to conduct advocacy with Rural Councils to allow women access to land. However, the operation of consultation frameworks is not assured because of weak leadership to conduct the necessary initiatives.

The formulation of the component as a whole is ambiguous in that "integrated management of land following the landscape approach" is not clearly defined in the project document. There are no clearly defined criteria for training, to perform the revision of a PLD following landscape approach, or to perform a self-assessment of compliance of departmental practices to this approach. Examination of the results of the component shows a series of seemingly disconnected achievements that do not contribute to the implementation of the extensive network of dialogue for SLM as was originally designed.

Outcome 4: Income Generating Activities made compatible with the principles of Natural Resources Management and Sustainable Land Management **HS**

The impact of project interventions in terms of changes in poverty rates and income levels in the Groundnut Basin or within interventions sites has not been documented, and neither the profitability of income-generating activities developed through "bancs villageois" and mixed individual loans, and their economic impact.

However, according to numerous testimonies of beneficiaries, land and natural resources sustainable management activities generated income for involved individuals and communities, whether through better management of forests and grazing areas, soil restoration using techniques such as RNA, enclosures and restoration of salinized soils, or the development of IGAs consistent with the objectives of land and natural resources sustainable management.

The partnership with Caurie-Microfinance helped develop income-generating activities for 12 groups for the advancement of women through loans to "*bancs villageois*" (groups consisting solely of women) (nurseries, gardening, harvesting forage, fattening goats, forest fruit processing and transformation of peanuts) and for 5 economic interest groups consisting of women and men, through 5 Individual mixed Loans (beekeeping, cattle fattening, and processing of forest fruits).

According to the evidence given by women, income enabled them to share the responsibility of their household, to cover the costs of tuition, to purchase medicines, clothing for children, school supplies, seeds and food for the transition period, to establish a small herd that serves as risk insurance, and to set up tontines to make individual loans for solidarity/support to other women in their group who do not already have access to credit.

Outcome 5: Adapted management from lessons learned and the monitoring system **MS**

The project conducted a diagnostic study of existing cooperation frameworks in the area of intervention, the Gender Quality Circles, to be able to revitalize them in a sustainable way and to support their operation. These platforms have been established at the regional and national levels and act as advisory committees composed of elected officials, technical services, women's groups and NGOs, and their mission is to advocate with local officials to integrate women into decision making. The mandate was expanded to include issues of access to land and women's involvement in NRM activities.

The project supported consultation processes at the local and regional levels but did not create a unit for management coordination and for monitoring and evaluation involving all stakeholders in the Groundnut Basin.

An overall assessment of the design and implementation of the project according to the GEF criteria and of the level of achievement of the project objective and results is summarized in the following table:

Summary of the assessment of immediate objective and outcomes

Result level	GEF Criteria			Global per outcome
	Relevance	Effectiveness	Efficiency	
Objective	**S**	**S**	**S**	**S**
Outcome 1	**HS**	**HS**	**HS**	**HS**
Outcome 2	**HS**	**HS**	**HS**	**HS**
Outcome 3	**MS**	**S**	not assessed	**MS**
Outcome 4	**HS**	**HS**	**HS**	**HS**
Outcome 5	**MS**	**MS**	**MS**	**MS**
Global assessment	**S**	**S**	**S**	**S**

The relevance of the immediate objective and of outcomes, i.e. the extent to which these reflect key national priorities and receive support from key partners, is rated satisfactory (S). The outcomes 1, 2, and 4 are highly relevant while outcomes 3 and 5, as formulated, are less coherent. The project still made appropriate interventions within these components, including the partnership with Caurie-MF.

The effectiveness in reaching the immediate objective and outcomes is rated satisfactory (S) on the basis of the evidence presented in the tables 2 to 7 of the sections 3.2 and 3.3 which shows that, overall, objectives and intended outcomes were met with small shortcomings.

The efficiency in reaching the immediate objective and outcomes is rated satisfactory (S). The approach adopted by the project, especially for components 1, 2 and 4, is based on peasants' demands and on information, awareness and capacity building to empower and mobilize resource users. In addition, the *faire-faire* approach and contracting with NGOs, CBOs, technical services and the private sector have led to a considerable reduction in the costs of outputs.

Sustainability

Summary of the assessment of aspects of sustainability for each outcome

Outcome	Financial	Socio-political	Governance / institutional	Environmental
1. Technologies to improve cropland fertility	**ML**	**L**	**MU**	**L**
2. Rationalized forest and pasture use	**L**	**L**	**ML**	**L**
3. Partnerships and capacities for SLM and landscape approach	**MU**	**ML**	**ML**	n.a.
4. IGA compatible with NRM and SLM principles	**L**	**L**	**ML**	**ML**
5. Adapted management from lessons learned and the monitoring system	**MU**	**MU**	**ML**	n.a.

Sustainability is rated through an assessment of four dimensions of the risks that are likely to affect the persistence of project outcomes: i) financial, ii) socio-political, iii) institutional and governance, and iv) environmental. Institutional vulnerability of project achievements is mainly due to the uncertainty about the institutional supervision of soil conservation (Environment versus Agriculture) and the lack of coordination between the institutions involved in SLM and NRM. The most significant financial risks are related to the fact that State services lack, at present, the financial resources needed to perpetuate and expand the models for intervention developed by the project. The State finances are precarious and do not guarantee the continuation of transportation for supervision and monitoring, exchange visits, travel allowances, nurseries and provision of equipment.

Contribution to building national capacity.

This project has contributed to develop and strengthen national capacities for land sustainable management and restoration at the systematic, institutional and individual levels.

Systemic capacities. Systemic capacities developed to guide stakeholders in SLM and NRM include local conventions for pastoral units, management plans of classified forests and community forests, management rules for enclosures (MED), the decisions adopted in favor of women's groups access to plots of land, local development plans updated to incorporate NRM and SLM concerns, and the revision of the forest Code (not yet adopted) to secure local communities' investments in SLM.

Institutional capacities. Institutional capacity development includes providing vehicles and a GIS-linked database to DNEFCS, the development of a new financial product and adding environmental criteria into Caurie-MF operations, making it a pioneer in the field of microfinance in Senegal, knowledge development for scientific institutions through action-research, strengthening Local Collectivities' role for planning, and systematizing the process for integrating NRM and SLM in the development and updating of local development plans.

Individual capacities. The project helped to develop individual capacities and autonomy of local populations by involving them in the identification of land degradation issues and of potential solutions and to decision-making about the implementation of concrete initiatives. Populations where the project took place are now aware of the need to protect and restore their environment. Women's groups have developed new practices through training and exchange visits, and developed organizational, financial and management skills, as well as the reflex of saving and reinvesting through the coaching by Caurie MF and experience in BV and PIM. The staff of the Department of Water and Forestry has benefited from training, exchange visits and practical experience which helped experiment with new SLM techniques and learn more about microfinance. Personnel of scientific institutions had the opportunity to develop skills through practical experience and opportunities to test and validate new technologies. Finally, the project staff has received training in SLM, NRM, GIS, thematic trainings offered by the CAP, and especially gained the practical experience from implementing the project.

Monitoring and evaluation

M&E plan. Adequate procedures and M&E plan have been designed and included the establishment of a GIS linked to an environmental and socio-economic database to track the indicators of the logical framework and the targets set by the project. The budget was adequate with the exception of the amount allocated to achieve the mid-term review which seemed insufficient.

Indicators. The main observations on the formulation and monitoring of indicators noted that i) the project does not keep track of the indicator but only of the numerical target, ii) the wording of the indicator is ambiguous and thus difficult to measure, and iii) the baseline refers to the situation but does not relate directly to the indicator. The M & E system of the project seeked to monitor the actions performed and the products to the detriment of monitoring their effects in terms of development results.

While the outcome indicators in the logical framework document the effects of the project in terms of land restoration, no indicator is used to evaluate the project's contribution to poverty reduction despite the fact that tangible results had been achieved by the end of the project. An additional set of relevant outcome

indicators were measured at the beginning of the project but were not measured at the end of the project.

Potential for replication

Project interventions have enabled the restoration of 5981.5 ha of degraded land in forest areas, rangelands, agricultural fields and salt flats. Given the extent of the process of land degradation in the Groundnut Basin (over one million hectares) in the Groundnut Basin (46,367 km^2 or 4,636,700 ha), the scope of the project is very modest since it affects only 0.13% of the total area of the Groundnut Basin and less than 0.6% of degraded lands. The potential for replication of achievements is all the more important.

The driving force behind replication within the project sites has been the demonstration of the feasibility and of the tangible benefits provided by the solutions proposed by the project in terms of agricultural and forage production, restoration of degraded lands and of the environment, and for generating income through IGAs. Most solutions adopted and tested by the project under components 1, 2 and 4 have a high demonstrative value and are applicable at a large scale.

However, the project has not sufficiently documented the various methodologies and approaches developed, tested and validated. Together with a cost-benefit analysis, each of these experiences could have been presented succinctly, including the context, approach, main steps and technical considerations, the specific challenges and environmental and socioeconomic effects, to be disseminated to all instances likely to benefit, including state services and projects involved in SLM and NRM.

Processes affecting the attainment of project results

Country ownership The project concept was developed in accordance with national environmental and development interests, and its results are still consistent with current national priorities. The PROGERT is in line with national action plans developed under environmental conventions and MDGs and with sectoral strategies and laws.

The strong involvement of stakeholders, namely the Government, is a demonstration of their support to this project's development objectives. Several departments of the ministries of Environment, Finances, Agriculture, and Livestock and structures of civil society (ADT-GERT and Green Senegal NGOs, CAURIE MF and Association for Environmental Protection) were involved in the design and implementation of the project. The Government's cash and in-kind contribution represents 132 % of the contribution planned in the project document and is a demonstration of the government support for the successful implementation of this project.

The project supported the process for the revision of the Forest Code, particularly on two amendments that would help to secure the huge investment in time, effort and financial resources provided by the communities in this project - and related gains.

Participation The PROGERT is one of the pioneering projects land degradation, distinguished by the fact that it was more focused on people's needs, especially women, regarding the selected crops, and more focused on agricultural potentiality for the benefit of farmers. One specific feature of this project lies in its its systemic approach to participation: the project took into account all stakeholders likely to have stake in the issues of restoration of land and natural resources, starting with village communities who use resources. The project has engaged them in the reflection process so they felt involved in identifying problems and implementing solutions.

Participation et promotion des femmes The project worked with women by removing constraints that limit their participation in SLM activities as regards access to land, technical training and equipment, and access to credit and its management. Commitment and perseverance of women will have been critical success factors in achieving significant and tangible results. Awareness and advocacy done through CQG has opened the door for women to speak and to their participation in decision-making, and the granting of parcels of land for groups of women. The development of IGAs through microcredit supervised by

Caurie-MF increased their cohesion and solidarity, developed the saving reflex savings and income allowed them to take part in the management of their household.

Financial planning and co-financing The project total cost is 14,717,649 USD. Total contributions are 10% lower when compared to the expected contributions as stated in the project document. GEF contributions represent 30.2% of the total cost, and cofinancing, 69.8%, while the estimates were 27.2% and 72.8%. The difference is mainly due to lower contributions from the private sector and projects. Cash and in-kind contributions from the Government amounted to 1,844,381 USD which corresponds to 132% of the pledged contribution. Contributions of local collectivities, in particular from rural communities, are much higher than expected (more than six times the amount expected) and demonstrate the strong commitment of local governments to the project objectives. In-kind contributions from local communities have been estimated to reflect the investment of beneficiaries in project activities, without which most of the project results would not be achieved. This amount reached 546,770 USD, more than 4% of the total invested.

Lessons learned

L 1: One innovative aspect of this project is its **strong institutional base** and **horizontal management** (coordination rather than direction) adopted by the project coordinator, which allowed Water and Forestry officers at all levels to fully play their role in the proposed models of intervention. For instance, in the awarding of contracts to NGOs, contracts were signed by the Inspector on behalf of the project and the coordinator was only stamping it. This strong base has certainly contributed to the magnitude of the project achievements as it allowed a close supervision and an efficient coordination of a variety of interventions. The cost of these achievements would have been much higher if they had been assigned to an external body. Anchoring the project in the technical services has presented definite advantages in terms of ownership of the proposed solutions and of associated successes, as well as in terms of capacity development, as many favorable conditions for the sustainability of project results.

L 2: The project has chosen to adopt an **approach driven by farmers' demands**. Responding to the needs expressed by the villagers has been an important motivation to involve and commit them to actions promoted by the project. Selected activities have led not only to rational and sustainable land management, but also to an improvement of the social (greater equity for women) and economic (improving revenues and means of production) situation of involved populations.

L 3: One outcome of the project is to have developed the sense of **responsibility of beneficiaries** towards the quality of the environment where they live and carry out their occupations by informing and educating people but also by entrusting the implementation of activities to them. As they have the full responsibility for the activities, people are in a position to take the full measure of the success (or failure) of interventions, but more importantly, to appropriate it and to do the related learnings. This sense of responsibility should favour the sustainability of the involvement and commitment of village populations.

L 4: The partnership with Caurie MF proved to be a wise choice to facilitate **access to microcredit** for rural populations for the development of IGAs. On the one hand, the mission of Caurie-MF (including targeted beneficiaries in rural areas) is fully consistent with the objectives of the project in terms of poverty reduction and the cooperative has agreed to integrate SLM and NRM criteria for the identification of IGAs it has supported. On the other hand, this partnership has avoided certain pitfalls sometimes encountered in development projects that engage in microfinance:

a) In some projects, financial mechanisms are developed with a view to be managed by CBOs established by the project which rarely have the competence required to pursue the management and services autonomously when support ends. Founded in 2005 and established as a savings and credit cooperative in January 2009, Caurie-MF experienced strong growth of its operations and credit portfolio (no credit risk). Thanks to its experience and quality of management, Caurie-MF obtained a rating of excellence for transparency and is the only African institution to achieve a B rating awarded by a global platform, the Microfinance Information Exchange.

b) The adventure of microcredit does not always live up to its promises of prosperity, especially when loans are used to finance activities that do not generate profits (it can be difficult to repay the value and accrued interest at the date of repayment of the loan) and when individuals borrow increasingly higher amounts from different institutions to repay loans (with interest) previously contracted with other institutions. Yet MF-Caurie only supports productive activities evaluated by feasibility studies and imposes a set of conditions that prevent farmers to get trapped in a debt spiral. In addition, Caurie-MF rests on the establishment of BVs consisting of solidarity groups in which women are bond to each other, thus ensuring a rigorous proximity monitoring.

L 5 As part of capacity building, the project organized **exchange visits** to enable populations, IREF and sector heads, farmers and herders to share the successful experiences carried out in other sites. These visits were an effective and efficient approach for capacity development and dissemination of best practices in SLM and NRM, by exploiting the demonstration effect of achievements and associated benefits to raise the motivation to adopt the same approaches, and through the exchange of technical knowledge among participants.

L 6 Dissemination of improved stoves. The project has adopted a strategy based on a sequence of actions that has proven effective to promote and disseminate improved stoves in rural areas while generating revenue incentives for GPF: i) raising awareness on energy saving and training women to use improved stoves ii) training artisans in the targeted villages for making stoves from material available in the region iii) giving responsibility to GPF for managing the sale of stoves and donation (grant) of improved stoves corresponding to 10% of households in the village iv) sale of stoves by those responsible at no profit for households in the village and use the revenue to make new orders to meet the demands within the village, v) promotion and sale of stoves in the neighbouring villages with profit.

Recommendations

Recommendations include actions to contribute to the sustainability of the project results and for improving or facilitating the execution of similar projects in the future. Depending on issues, the recommendations are addressed to the DEFCCS as the institution in charge of soil conservation in the government of Senegal, to institutions and projects working in the field of SLM, as well as UNDP and the CAP.

R 1 Transfer of assigned resources. It is recommended to UNDP and/or DEFCCS to see to the transfer of funds under "assigned resources" to Caurie-MF at project closure, and it is recommended to Caurie-MF to maintain a partnership with DEFCCS to ensure the technical supervision of the IGAs related to SLM and NRM developed in the framework of BVs and PIMs.

R 2 Securing investments of local populations in SLM. It is recommended that the DEFCCS, the National Council for Dialogue and Cooperation for Rural, RCs, environmental NGOs and village associations look into the terms and conditions of contracts, conventions or other forms of agreement that define the rights and obligations of the parties in NRM to ensure that the investment of local populations (in-kind and financial) are secure or fairly compensated in the event of changes in the use of lands they have contributed to improve and that would affect their access to cultivable land of good quality and natural resources.

R 3 Given the large variations in selling prices of natural resources (eg fodder) from one place to another and in order to maximize profits of village communities, it is recommended to projects and technical services to support them in the commercialization and marketing of products derived from the rational use of natural resources, particularly for determining fair and equitable selling prices on the basis of **continuous information about regional and national markets**.

R 4 It is recommended that institutions and projects working in the field of SLM, conservation and NRM add the **drought index as an indicator of impact**. Indeed, the severity of a drought can be evaluated by measuring the deviation of NDVI from its long-term average. The difference between the average NDVI for a given month in a given year and the average NDVI for the same month in recent years is called the anomaly of NDVI. In most climates, plant growth is a good indicator of vegetation stress due to

drought and degradation. Today, researchers from NASA and NOAA have NDVI data over three decades on the globe. Comparison of NDVI data of a given month or year with the average over a large number of years will reveal whether plant growth in a specific region is typical or significantly more or less productive and is used as an index drought.

R 5 When Water and Forests services are informed of carbonization or other illegal activities in classified forests by members of village communities who survey these forests, they often do not have the means to enforce regulations and intervene with offenders. This is a serious disincentive for villagers who are involved in the management of these forests. In order to overcome - *in part* - the problem of staffing and inadequate logistical means in the forestry services, including for the monitoring of forests which is now done on an informal basis by the communities that are involved in their management, it is recommended to DEFCCS to recruit **ecoguards** from communities as auxiliaries to the Forest Service, in accordance with the provisions of Article L57 of the Forestry Code. Issues of recruitment, devolved responsibilities, compensation and institutional authority to which they should report (communities or departments) should be carefully considered.

Project management recommendations

R 6 Communication plan. It is recommended that projects adopt a format for a strategic communications plan structured according to its practical implementation to effectively guide and coordinate the actions of communication and follow-up. Such a plan should include objectives, notably in terms of information, project internal communication, and external communication with national and international partners, identification of target groups, key messages that should be sent to them, preferred means of communication to reach them and frequency of messages. The plan should also include a list of addresses, where appropriate, a timetable for communication and identification of resources and facilities required to implement the plan.

R 7 Training on MfDR and SMART criteria. It is recommended that the CAP and UNDP organize trainings on the concepts of managing for development results, on the development of consistent M&E frameworks through the formulation of results and indicators that meet the SMART criteria, and on the importance of establishing baselines for all indicators and targets directly related to the indicators.

Documentation of project experience

R 8 Cost-benefit analysis and economic impact. The Mid-term review had recommended the project to document the costs and benefits associated with all types of restoration intervention and sustainable land management. Unfortunately, this recommendation has not been followed. It is here repeated for the Ministry in charge of managing natural resources, the DEFCCS and future SLM projects as this information is essential to support the replication of approaches and techniques developed in the project. In addition, the economic benefits of the project interventions could have been evaluated to document the impact of the project in terms of poverty reduction since this aspect is one of the specific objectives of the project

R 9 Popularized technical sheets. To support technical training, disclose and disseminate technologies and approaches validated in the field with farmers in the Groundnut Basin and other regions of Senegal who could benefit, it is recommended to develop illustrated educational materials, accessible to farmers, available in local languages and printed in a page on a durable material.

R 10 Thematic brochures. Numerous experiences of components 1, 2 and 4 of the project are worthy of being documented and shared, such as participatory approaches to the development of management plans for community forests and classified forests, the integration of NRM and SLM concerns in the participatory process for updating PLDs, the various experiences of MED, RNA, CES/DRS and their effects, the experience of BVs and development of IGAs, and the dissemination of improved stoves.

It is recommended to present replicable experiences in a succinct manner (4 pages brochure illustrated with graphs, tables, diagrams and photographs), together with a cost-benefit analysis, including the context, approach, main steps and technical considerations, specific challenges and environmental and socioeconomic effects, to be disseminated to all instances likely to benefit from it, including decentralized services and projects involved in SLM and NRM.

R 11 Compilations The project was designed recognizing that many efforts had already been invested in the field of SLM in Senegal and in similar areas and that solutions were readily available to be adapted and replicated. In the two documents published on the CEV and restoration of salinized lands, a short review of previous experiences is presented. It would have been useful, however, for the project to publish an analytical compilation of the best SLM techniques and approaches that have been experimented in Senegal with an analysis of their applicability to the project sites. This document could have been useful for the entire scientific and technical community concerned with SLM and NRM and provided the basis for the publication of another document at the end of the project and that could have included an assessment of project experiences, a cost benefit analysis of techniques and approaches experimented and recommendations for adaptation and replication of efficient and effective solutions.

1 INTRODUCTION

1.1 Purpose of the terminal evaluation

In conformity with GEF-UNDP policies and procedures related to monitoring and evaluation, all medium and full size projects must be subjected to an independent terminal evaluation (TE) upon completion. The project was officially launched in October 2007 and was implemented over 5 years. The terminal evaluation took place in October - November 2012 as the project has successfully achieved its objectives and closure is expected at the end of 2012.

The terminal evaluation provides a comprehensive and systematic account of the performance of a completed project by assessing its design, relevance, process of implementation, and achievements vis-à-vis project objectives endorsed by the GEF, UNDP and the Government of Senegal, including any changes in the intended results, as agreed during project implementation. The purposes of the TE are namely to promote accountability and transparency, to assess and disclose levels of project achievement, and synthesize lessons that may help improve the selection, design, and implementation of future activities. The results of this evaluation also contribute to the GEF Evaluation Office database to report on the effectiveness of GEF operations in achieving global environmental benefits. A project TE is a learning exercise and an integral part of the project monitoring and evaluation cycle that supports accountability, informed decision-making, and learning from experience.

1.2 Methodology of the evaluation

The TE was planned according to the ToRs (Appendix 3) and latest GEF[1]guidelines for project terminal evaluations. The following aspects were documented:

Results. The TE analyzes the project achievements and progress towards its objectives and intended results as stated in the project document or revised during implementation, while considering the factors which might have facilitated or hampered their attainment. Project results are assessed for their relevance (to country priorities and GEF/UNDP programs), effectiveness (in relation to intended results) and efficiency (relatively to the inputs required to produce the results) and rated according the following scale:

Highly satisfactory	**HS**	The project had no shortcomings in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.
Satisfactory	**S**	Only minor shortcomings were detected
Moderately satisfactory	**MS**	Moderate shortcomings were detected
Moderately unsatisfactory	**MU**	The project had significant shortcomings
Unsatisfactory	**U**	The project had major shortcomings
Highly unsatisfactory	**HU**	The project had severe shortcomings

Sustainability. The first indications of potential impacts and of the sustainability of outcomes are examined as well as the contribution to capacity development and global environmental goals. Sustainability is understood as the likelihood of continued benefits after the project ends. This is achieved through an assessment of four dimensions of the risks that are likely to affect the persistence of project outcomes: i) financial, ii) socio-political, iii) institutional and governance, and iv) environmental. These risks will be rated according to this scale: likely (L), moderately likely (ML), moderately unlikely (MU), and unlikely (U).

Replication. The replication or catalytic effect of the project is described but not rated.

[1] Global Environment Facility Evaluation Office. 2008. *Guidelines for GEF Agencies in Conducting Terminal Evaluations.* Evaluation Document No. 3

Monitoring and Evaluation. The TE assesses the design (plan, indicators and studies), actual implementation (including reporting), and budgeting/funding of the monitoring and evaluation plan. This analysis also reviews the set of indicators defined and revised during the project implementation and used in the periodic combined reports to UNDP and GEF (PIR). The contribution of the project to implementing long-term monitoring system is presented. Quality of M&E design and of M&E implementation is rated following the same scale used to rate the results.

Highly satisfactory	**HS**	There were no shortcomings in the project M&E system.
Satisfactory	**S**	There were minor shortcomings in the project M&E system.
Moderately satisfactory	**MS**	There were moderate shortcomings in the project M&E system
Moderately unsatisfactory	**MU**	There were significant shortcomings in the project M&E system
Unsatisfactory	**U**	There were major shortcomings in the project M&E system
Highly unsatisfactory	**HU**	The project had no M&E system

Processes affecting attainment of project results. These include i) preparation, ii) institutional implementation framework and mechanisms for guidance, coordination and advice, iii) country ownership, iv) stakeholder involvement and establishment of synergies with other interventions in the same domain, v) communication (plan, implementation and effects, vi) work planning, vii) financial planning and co-financing, and viii) UNDP's supervision and backstopping as the GEF agency. This section of the evaluation also reviews the cross-cutting issues of fairness and equality for women. These aspects are documented (but not rated) through the review of the various reports produced throughout the project (Steering Committee and Scientific and Technical Committee reports), annual and quarterly reports, and through the information collected directly with beneficiaries and partners.

Lessons and Recommendations. Based on findings, the evaluation presents lessons learned through the project experience and makes recommendations, notably on factors that contributed to foster or hinder the sustainability of the project achievements, as well as lessons learnt which may help guiding future interventions in similar contexts.

Conduct of the evaluation. The assessment was based on the information acquired throughout the following tasks:

- Project document review, including progress and technical reports produced by the project – the list of consulted documents is provided in Section 10;
- Meeting with the Project Coordination Unit, the National Project Director within the ministry in charge of Environment and with UNDP representative in charge of supervising the project for collecting information to appraise aspects related to the project preparation, implementation (including financial and administrative management) and achievements;
- An 8-day visit to the project intervention sites, to meet Local Project Units (LPU), project partners and beneficiaries within the local communities, as well as for seeing tangible achievements and project impacts. The field visit itinerary is given in Appendix 5. The list of people met is provided in Appendix 4.
- Questions have been prepared to guide semi-structured interviews and ensure the systematic collection of relevant information on performance indicators (outcomes and impacts) and management issues (Appendix 6).
- Meetings with institutional partners in Dakar to get their assessment of the implementation of the project and its achievements - the List of people interviewed is presented in Annex 4.
- Analysis of collected information and drafting the report. Submission of the draft and integration of comments for preparing the final version and translating it in English.

The mission lasted 13 days between 29 October and 10 November 2012. The assessment was performed by an independent national consultant, Dr Antoine Mbengue, and an international consultant, Dr Dominique Roby.

1.3 Structure of the evaluation report

The evaluation presents the project and the context that led to its development (Section 2), and the findings related to results (Section 3), sustainability (Section 4), monitoring and evaluation (Section 5), project replication potential (Section 6), and processes affecting attainment of project results (Section 7). Lessons learned and recommendations are presented in the sections 8 and 9. Literature and documents reviewed are given in section 10. Detailed information to document or complement different aspects of the evaluation is given in the Appendices.

2 THE PROJECT AND ITS DEVELOPMENT CONTEXT

2.1 Project start and its duration

The UNDP/GEF Project Document was approved by the Government of Senegal in September 2007 and the project was officially launched in Dakar in October 2007[2]. The project was implemented over 5 years and ceased its activities since September 2012. Previously, from June 2005 to September 2007, Senegal had received a PDF B funding from the GEF to develop the project document.

2.2 Context and issues addressed by the project

Global significance

To ensure food security at the global level, the importance of rehabilitation of farmland is particularly important in arid regions where water shortage problem is likely to be exacerbated by global warming.

At the global level, the project was developed to contribute to the key indicator for the Land Degradation Focal Area by promoting sustainable land management and rehabilitating 46,367 km² of land. The expected effects of the sustainable management and restoration of land are:

- reduction in rate and extent of land degradation;
- preservation and restoration of natural habitats contributing to ecosystem stability;
- preservation of the integrity of agro-forest ecosystems and their functions;
- creation of a protectrice barrier against the desertification process;
- increase in carbon storage in rehabilitated areas and improved biodiversity preservation;
- reduction of sedimentation in rivers and streams.

National significance

The Groundnut Basin, the project intervention area, covers 46,367 Km^2, almost a quarter of the area of Senegal, and is home to nearly 40% of the country's population, with more than 100 inhabitants per km^2, the highest rural density in the country. The total population is estimated at more than 5 million inhabitants and population growth is one of the highest (2.5%) in the country. Poverty is prevalent in the country – 54%[3] of the population lives below the poverty line – and even more particularly in the rural areas of the Groundnut Basin where poor households represented from 59.2% (Louga) to 81.4% (Fatick) in 2005[4].

At the time of developing the project, Senegal's economy depended mainly on an agriculture dominated by groundnut and representing more than 19% of the Gross Domestic Product (GDP). Today still, although agriculture only represents 15.4%[5] of the GDP, groundnut dominates agricultural production (followed by millet, corn, sorghum and others) and is the 2nd export product in the country[6]. The socio-

[2] UNDP-Government of Senegal. 2007. Project Document.
[3] [3] CIA 2012. The World Factbook. Senegal. Available from this site : https://www.cia.gov/library/publications/the-world-factbook/geos/sg.html (2001 estimation)
[4] UNDP-Government of Senegal. 2007. Project Document.
[5] CIA 2012. (2011 estimation)
[6] Id.

economic importance of agriculture is mainly due to the fact that it concentrates 77.5%[7] of the labor force of the country. Despite large fluctuations in groundnut production ranging from over a million tonnes in 2000 to 260,000 tonnes in 2002[8], a decline in yields was clearly observed during the decade preceding the project. The reasons include the loss of soil fertility, degradation of arable land, lack of quality seeds, low market prices and the reduction of government subsidies in the context of structural adjustment.

The Groundnut Basin is also an area of pastoral importance, a transhumance corridor and a refuge area for herds experiencing severe stress. The different uses such as agriculture, livestock and forestry are in competition. Among the eco-geographical zones of the country, the Groundnut Basin is one of the most seriously exposed to degradation due to a significant decline in vegetation and to soil degradation through erosion, compaction and salinization. This deterioration is mainly due to human actions (deforestation for the development of groundnut monoculture promoted by national policies of the 60s and overexploitation of wood resources for household energy) exacerbated by climate change, notably by nearly four decades of drought.

Issues/challenges.

The main causes of land degradation are anthropogenic and related to poverty. Productivity of agricultural soils is continuously declining due to improper management, inappropriate farming practices (shifting cultivation, reduced fallow periods, and uncontrolled bush fires) and degradation of natural ecosystems.

Land degradation reduces cultivable areas, their yields, crop quality, and pasture and livestock productivity. This situation leads to overexploitation of scarce resources and the expansion of agricultural land at the expense of natural areas such as forests. Overharvesting of fuelwood, livestock pressure and land degradation affect the balance of ecosystems and consequently the habitats, flora and fauna, pastures and tree cover.

The reduction in rainfall observed during the years preceding the project has led to a dessication of the soil, reducing its ability to absorb nutrients which are then leached, and decreased rates of degradation of organic matter. Loss of soil cohesion increases its vulnerability to wind erosion (especially in the north of the basin) and water erosion (west, south central and southern basin). Soil salinizationwhich is more pronounced the Sine Saloum region, is caused by the intrusion of marine waters from the Sine and Saloum rivers due to successives droughts exacerbated by climate change.

In this context, increasing cultivable areas can only be considered by restoring degraded soils. To meet the food and economic requirements of a growing population, combat poverty and reduce rural exodus, the strategy is to diversify crops, use varieties resistant to arid conditions and spread production throughout the year[9].

Pressure from livestock, although tolerable in winter, greatly exceeds the carrying capacity of the environment in the dry season. Breeders compensate a little by using crop residues as fodder, but these residues are also used as building material for the needs of households, while it would be preferable that they be left in place to remineralize the fields.

Due to poor harvests and difficulties in obtaining credit, it has been estimated that in the late '80s, about a third of producers in the Groundnut Basin could not obtain seed supplies for the next season.

2.3 Project strategy of intervention

To ensure food security for a growing population, we must intensify agricultural production, produce more on less land, making agriculture more sustainable, while maintaining ecosystem services such as water supply, soil fertility, and carbon sequestration provided by forests and other ecosystems. A landscape

[7] Id. (2007 estimation)
[8] KOUADIO 2007.
[9] In Senegal, groundnut cultivation spreads from June to November-December according to spatial and temporal variability of rainfall.

approach has the potential to meet the full range of essential functions for both supply (food, fiber, energy, etc.) and the maintenance of healthy ecosystems.

Landscape management includes all activities, investments and policies made by land and resources managers at all levels. Unlike previous regional planning and integrated rural development models in the 1970s and 1980s when one organization was in charge of developing and funding a plan following a top-down approach and for a definite period, landscape initiatives are developed by local actors (even when externally supported), moving towards a common long-term vision based on shared governance, responsibilities and benefits.

The landscape approach examines larger areas to better recognize the status and trends of natural resources, natural and human influences, and potential for conservation, restoration and development of resources with the objective to optimize productivity, improve livelihoods and reduce negative environmental impacts upstream and downstream. This scale identifies important ecological values and environmental changes that are not easily perceived locally. The landscape approach also provides an important basis for management coordination with partner organizations and stakeholders.

The project has thus adopted the "landscape approach" as an intervention strategy. This participatory approach allowed integrating i) various agricultural, forestry and pastoral activities, ii) the various stakeholders through the development of joint programs and partnerships, with special attention to women and youth, iii) large and small scale producers, and iv) the different agro-silvopastoral zones in the intervention area and in the country in relation to the central position of the Groundnut Basin and its interrelations with other eco-geographical zones. The approach also rested on promoting contractual and consultation frameworks, local know-how and expertise, capacity building and the promotion of gender to reflect the specific needs of women, youth and the most vulnerable.

2.4 Project objectives and intended outcomes

Project development objective:

Contribute to the sustainable development of Senegal's rural sector and preservation of ecosystem integrity, stability, functions and services.

Project immediate objective:

Catalyze sustainable land management at the landscape level with the goal of combating land degradation and reducing poverty.

Intended outcomes and outputs:

The project was structured into five outcomes under which intended results have been identified:

Table 1. Project's intended outcomes and outputs

Outcomes	Intended outputs
1: Cropland fertility increased through upscaling innovative, adapted technologies in the Groundnut Basin	**1.1** The rural space in managed rationally in order to combat the massive loss of vegetation cover
	1.2 Sustainable agricultural intensification systems are replicated (French version in the prodoc: disseminated / made accessible
	1.3 Increased capacity to adapt to climate change
	1.4 Reclamation of salinized lands
	1.5 Reclamation of farmers fields through integrated fertility management, agroforestry, and soil and water conservation
2: Rationalized forest and pasture use through upscaling of best practices	**2.1** Agro-pastoralists and transhumants adopt sustainable techniques and rules for rangeland use
	2.2 Negotiate and establish corridors for access by livestock to water and pasture through farmland

Outcomes	Intended outputs
	2.3 Participatory management plans for village forests and "scheduled"(gazetted) forest
	2.4 Improved agro-pastoral practices for sustainable intensification of livestock production and energy needs (hay, fodder production, field manuring, tree plantations (for fodder and fuel), sustainable browse harvesting, etc)
	2.5 Improved energy efficiency for rural consumption of charcoal and fuelwood
	2.6 Communities maintain a network of firebreaks, through enhancing greater organization (firefighting groups), training and equipment
3: Policies and local partnerships are harmonized and capacities are strengthened for integrated land management following a landscape approach.	**3.1** Training needs at the individual, institutional and systemic levels are identified
	3.2 Key actors' capacities (local elected officials, technical services, CBOs, project team) are strengthened
	3.3 A network of journalists for environment involved in identifying and disseminating best practices for greater upscaling effect
	3.4 Training on legal provisions on decentralisation
	3.5 Agreements with local financial institutions for developing sustainable financial mechanisms for land management
	3.6 Local decision makers and judicial system is trained to better address land conflicts using landscape approach
	3.7 Local advisory committees are functional and ensure real community participation and conflict management
	3.8 National Steering Committee and Scientific Technical Committee provide timely guidance to project implementation
4: Income Generating Activities made compatible with the principles of Natural Resources Management and Sustainable Land Management.	**4.1** Income generating activities that are compatible with sustainable natural resource management and SLM principles are developed (English version of the prodoc: transfered and upscaled)
	4.2 The private sector and small enterprises are motivated to promote sustainable land management
5: Adapted management from lessons learned and the monitoring system.	**5.1** A management and monitoring & evaluation unit involving all actors working within the Groundnut Basin is created and functional

2.5 Main stakeholders (partners)

Relevant stakeholders are all those who have been or are likely to be affected by the project or activity, those who have participated in or contributed to the project, and those who in other ways have a stake in the outcomes of the project or activity.[10]

In the context of the PROGERT, main partners are:

- Resource user communities: village (CV) and inter-village (CIV) committees, groups for the promotion of women (GPF), economic interest groups (GIE), private operators (namely CEV owners);
- Authorities and representatives of local collectivities (rural councils and regional councils), the Regional Development Agencies (ARD), Regional Development Committees (CRD)
- Government agencies:
  - Technical ministries: Environment and Protection of Nature, Agriculture, Livestock, Hydraulics, Decentralization,
  - Ministry of Economy and Finance (MEF), namely CAP;

[10] GEF EO 2008.

  - National Agency for Rural Agricultural Council (ANCAR) ;
  - Technical services: IREF, Water and Forests *Secteurs* and *Brigades*, Regional Departments of Rural Development (DRDR), Regional Livestock Services, Regional Services and Support Centers for Local Development (SRADL et CADL) ;
- UNDP, as GEF implementing agency;
- Scientific and research institutions: Centre for Ecological Monitoring (CSE), Scientific Institute for Agricultural Research (ISRA), National Institute of Pedology (INP), Institute of Environmental Sciences (ISE), National Research Centre for Forestry (CNRF);
- Projects involved in NRM such as the Ecosystems Integrated Management Project in Senegal (PGIES) and the Integrated Forestry Development Project (PRODEFI) ;
- Local organizations: Green Sénégal and ADTGert NGOs, Associations for Local Development and community radio stations;
- The Autonomous Cooperative for Strengthening Economic Initiatives through Microfinance (CAURIE-MF). Founded in 2005 as a Limited Liability Company and constituted in a savings and credit cooperative in January 2009, CAURIE-MF's mission is to contribute to the sustainable economic and social advancement of poor micro-entrepreneurs, especially women, by providing appropriate financial products and services.
- Private firms: BECI Consult, CEDEN, SEFCO, SAFEC.

3 RESULTS

Results achieved by the project are presented and evaluated with regard to the immediate objective (section 3.2) and intended outcomes (section 3.3), on the basis of the indicators used for reporting annually on the project progress (PIRs) and on findings of the TE. The reference level varies from one indicator to another and may correspond to the preparatory period of the project (2005-2007), or the first year of implementation. Since the observations of the evaluation mission only cover a portion of the the project intervention sites, the results presented in the last annual report submitted to UNDP and GEF are also presented. As this project has produced tangible results which impact (contribution to the development objective) can already be seen, they are briefly presented (section 3.1).

3.1 Contribution to the achievement of the Development Objective

Development objective: *Contribute to the sustainable development of Senegal's rural sector and preservation of ecosystem integrity, stability, functions and services.*

The PROGERT is a demonstration project that sought a variety of technical solutions to various causes of land degradation in different ecosystems of the the Groundnut Basin and which has implemented them by raising awareness and mobilizing resource users, particularly women, to participate in the restoration and better management of land and natural resources, while putting in place the conditions to enable them to benefit economically from it.

Through site visits and interviews with beneficiaries in rural communities, the field mission has allowed collecting qualitative indications of the enhancement or stability of services / functions and goods provided by the ecosystems covered. Ecosystem services are classified as support services, procurement of goods and services, regulating services and cultural services.

Support services, such as primary production, soil formation / availability of arable land, freshwater supply, biodiversity, support quantity of goods and services that benefit humans:

- **Soils:** Plant coverage and biomass have grown considerably following the actions of salinized land restoration, conservation of water and soil, assisted natural regeneration of agroforestry systems, development of environmentally sustainable fields and is an indicator of the undeniable revitalization of the productive capacity of the soil.

- **Biodiversity:** Protection and the voluntary adoption of practices of sustainable use of natural resources have led to the regeneration of ecosystems with or without introduction of tree or pasture species - community members observe the spontaneous return of flora and fauna which had disappeared from their environment including several species of birds, reptiles and mammals.
- **Water:** Efforts to stabilize the soil and reduce runoff on the plateau Thies will eventually contribute to improve freshwater supply in the watershed taking its source on the plateau. Although this effect could not be observed nor measured in the project, it is possible to observe the growth of herbaceous, shrubs and even arborescent vegetation at the location of soil stabilization works, which clearly indicates that water seeps into the ground in these areas. Reduced runoff and the infiltration of rainwater will eventually contribute to groundwater recharge in the watershed.

Procurement of goods and services provided by ecosystems in the project intervention sites include food from harvesting wild fruits and other products, which contribute to improving food security, fuel wood, timber and other building materials, fodder, medicinal plants, pasture for pastoral activities and agricultural plots.

Regulating services include benefits provided by the regulation of natural processes such as carbon sequestration, regulation of local climate (as evidenced by the communities) and of water supply (increased water level in wells near sites that benefited from reforestation efforts), protection against natural hazards such as drought, air and water purification, erosion control, and pollination (by the introduction of hives in forests). The various project interventions helped to stabilize and improve all of these services.

Cultural services are related to the fact that some habitats, such as community and classified forests are traditionally a setting associated with spiritual and religious practices of local communities. Interventions in the project helped to preserve or improve the condition of these environments.

3.2 Immediate objective – Assessment of progress, relevance, effectiveness and efficiency

Table 2. Project progress with regard to the immediate objective and assessment

<table>
<tr><th>Indicator</th><th>Baseline</th><th>Targets</th><th>Results from PIR 2012</th><th>Observations of the terminal evaluation</th></tr>
<tr><td colspan="5">Immediate Objective: Catalyze sustainable land management at the landscape level with the goal of combating land degradation and reducing poverty.</td></tr>
<tr><td rowspan="7">1. Average yields for millet and groundnut in 5 sites (by restoring arable land fertility in the landscape through intensification)</td><td rowspan="7">Lower yields for millet and groundnut crops, respectively 1.34% to 3%.</td><td rowspan="7">Increase yields by 10% in the 5 sites in Year 5.</td><td rowspan="7">Compared to other sites in the same year, the growth is about 10 to 15 % depending to the type of agriculture. In 2012: Cassava 8.7 tons/ha (the average in Louga région is 6 tons/ha), Onion 38 t/ha (30 t/ha in the region). Millet 836 Kg/ha, Groundnut 650 Kg/ha, Bean 353 Kg/ha.</td><td>The following table shows a general improvement in yields measured during the project except for production in 2011 (data from the PIR 2012 - annual yields presented correspond to production yields obtained in the previous year). The year 2011 saw severe and sustained drought conditions which are reflected in production (data in 2012) although it remains higher than the reference production. Although varieties resistant to drought have been selected, only the production of millet appears to have continued to grow under the difficult conditions of 2011.</td></tr>
<tr><td>
<table>
<tr><td></td><td>ref.[11]</td><td colspan="4">Annual yields in kg/ha based on PIR[12]</td></tr>
<tr><td></td><td>2005-07</td><td>2009</td><td>2010</td><td>2011</td><td>2012</td></tr>
<tr><td>groundnut</td><td>406</td><td>700</td><td>800</td><td>888</td><td>650</td></tr>
<tr><td>mil</td><td>358</td><td>650</td><td>750</td><td>745</td><td>836</td></tr>
<tr><td>corn</td><td>645</td><td>800</td><td>800</td><td>1500</td><td>---</td></tr>
<tr><td>bean</td><td>274</td><td>--</td><td>--</td><td>466</td><td>353</td></tr>
</table>
</td></tr>
<tr><td>Agricultural expansion in the forests and grazing land in the 5 sites.</td><td>Increased average in cultivable areas of 19.68% since the 1980s.</td><td>Stabilize the cultivable areas in Year 4.</td><td>No measurement of this indicator in the PIR</td><td>Management plans for three classified forests (1249.5 ha) and nine community forests (1108.5 ha) were adopted and supported. These plans were developed by consensus by bringing together representatives of all villages which use resources within an inter-village development committee (CIVD). These management plans indicate prohibited activities and conditions for the exclosure to ensure environmental protection and sustainable use of resources that can be exploited. The participatory and inclusive approach to the identification of these rules promotes compliance.
These rules have allowed stopping agricultural encroachment (in the sites visited). However, cultivation contracts are awarded to local communities within the boundaries of forests and herders graze their animals there when there is no other option; use by livestock is prohibited, but it was be observed that farmers defy these rules when the opportunity arises (no closing an lower surveillance), which is a potential source of conflict with other members of the community who comply with the plans and invest in the sustainable management of these forests.</td></tr>
<tr><td>Number of hectares of degraded land rehabilitated in 5 sites.</td><td>Over one million hectares of forest formations and rangeland</td><td>Restore 60,000 ha of rangeland and forest by Year</td><td>Compared with the targets of the project, the results were reached and even exceeded for certain components. In terms of</td><td>Project interventions have enabled the restoration of 5981.5 ha of degraded land in forest formations, in pastoral lands, in salt flats and farm fields, representing 0.13% of the total area of the Groundnut Basin, the project area of intervention, which covers 46,367 km^2 or 4,636,700 hectares and less than 0.6% of degraded</td></tr>
</table>

[11] The baseline corresponds to the yields in the Groundnut Basin as reported in the project SYSRI.
[12] Note: these values have been reported in the PIRs and only the values of 2011 are consistent with the values reported in the SYSRI.

	are degraded in the Groundnut Basin.	4.	agricultural intensification, the outputs were increased with more than 10% in the zones of concentration in particular on the level of the ecologically viable fields. The levers of a durable restoration were set up in more 95,000 ha of grounds pastoral and forest is 160%.	lands if they are estimated over a million hectares. Commitment and perseverance of women has been a critical success factor in achieving significant and tangible results
(Additional indicator) Number of barriers lifted concerning the development of livelihoods based on sustainable development of land and natural resources	Women have no access to land or have access only to low-quality plots	-	-	Through awareness made during workshops and through Gender Quality Circles (CQG), the CR adopted deliberations for granting good quality and well-located land to women's groups.
	Difficult access to microcredit Lack of awareness about savings Limited options in terms of IGAs	-	-	The partnership with Caurie-Microfinance brought vision, expertise, and continuous coaching for communities that will foster the success and sustainability of the development of IGAs beyond the project period. Women's groups have demonstrated ownership and creative integration of microfinance. They have a greater vision of the opportunities to grow their assets from loans and small grants and of expected benefits to eventually meet their daily needs. With the support of the project, communities benefit from a diversification of IGA opportunities compatible with SNRM and SLM
Assessment of achievement of the immediate objective				**S**
Assessment of relevance				**S**
Assessment of effectiveness				**S**
Assessment of efficiency				**S**

*Note: The project relevance, effectiveness and efficiency are rated according to the following indices: **HS** - highly satisfactory, **S** - satisfactory, **MS** - marginally satisfactory, **MU** - marginally unsatisfactory, **U** - unsatisfactory, **HU** - highly unsatisfactory*

3.3 Outcomes and outputs – Assessment of progress, relevance, effectiveness and efficiency

Table 3. Project progress with regard to intended outcome 1 and assessment

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
Outcome 1: Cropland fertility increased through upscaling innovative, adapted technologies in the Groundnut Basin				
Increased yields and diversification of production.	Establishment of baseline situation of single-crop farming from the first year.	Increase diversification of average production per household by 50% by Year 5.	Consolidation of 210 ha under intensification in 60 dispersed plots.	The project introduced adapted varieties of cassava, maize, cowpea, hibiscus (white and red sorrel) and watermelon in the CEV. Varieties proposed by the project for diversification have been selected to meet the needs of communities, based on potential revenue taking into account the local markets, and in order to spread the harvest over a larger portion of the year. This diversification is likely to reduce the vulnerability of farmers to fluctuations in the peanut market and can spread their income over the year.
	Lowered fertility and low yields for the two main crops: - Groundnut: 1.34%/year - Millet: 3%/year	Increase yields for millet and groundnut by 10% by Year 5.	This result was entirely reached concerning the diversification of the speculations in the sites of concentration like for the increase of 10% of the production of the principal cultures millet and groundnuts compared to rest of the zone.	According to the table presented for the specific purpose of the project, millet yields have grown continuously for the duration of the project, despite fluctuations in climatic conditions. Peanut yields which had presented a good increase were however affected by the severe drought conditions of 2011. The data presented in SYSRI compare the average yields in the project intervention sites with average yields measured across the Groundnut Basin for the years 2008 to 2010. While in 2008, the yields observed within the project sites were lower for all analyzed crops, in 2009, yields were higher by 13% and 15% for cowpea and maize (but lower for groundnuts and millet), and in 2010 yields were highly superior for corn (116%), higher for millet and cowpea (9% and 5%) and 10% lower for peanuts.
Output 1.1. The rural space in managed rationally in order to combat the massive loss of vegetation cover				
Number of agro-pastoralists having adopted and applied the new regulations for land use and field preparation.	Incoherence and incompatibility in the use of space in most local collectivities.	Ensure the implementation of 15 local development plans (LDP) developed in rural communities by Year 4 accepted by at least 150 agro-pastoralists	All the requests expressed by the communities were satisfied but with the intervention of other projects like the local Development program, there did not exist any more expression of needs in the zones for intervention for the project. The whole of the rural communities having Local plans of development. Broadly the achievements amount to 73% of the set objectives is 11 Local local Development Plans approuved by collectivities and populations.	The LDP is a planning document for the as required by CR the State and accompanied by an investment program developed to guide development efforts of a grouping of several villages in a same terroir. Developing or updating a PLD follow the following steps: i) inter-village meeting for awareness and information, ii) participatory diagnosis, iii) identification of required actions, iv) assessment of costs and identification of partners and v) prioritization. The decentralization policy of the State of 1996 transferred nine areas of competencies to local collectivities of which planning, to enable them to take better care of the concerns of the grassroots. Resource users are consulted at various stages of validation, through the councilors who represent the villages of the rural community during these meetings. Project support to develop or update the PLD helped CR to assume the role assigned to them under this policy. With the active involvement of the concerned rural communities and technical support of consulting firms, eleven PLD have been updated to incorporate the environmental dimension and sustainable land management, which ensures its inclusion in the local investment plan and in the annual investments plan. The PLDs and environmental action plans (if any) are now referred to by CR to collaborate with their partners, which will contribute to their implementation. The project helped systematize the integration of the environmental dimension in the process of developing/updating PLDs, which is anticipating the requirements of the ARD under the National Programme for Local Development which emphasizes this dimension.

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
				The number of agropastoralists affected by these PLDs (the indicator of outcome) is not specified in the SYSRI or in the progress reports.
Output 1.2. Sustainable agricultural intensification systems are replicated (French version in the prodoc: disseminated / made accessible)				
Number of agro-pastoralists having applied sustainable intensification techniques related to the environment. (CEV)	Trend toward agricultural mining in the Groundnut Basin and low levels of restoration of the soil's mineral and organic nutrients.	Guide 10% of agro-pastoralists in applying sustainable intensification techniques through extension services on 20 sites covering approximately 200 ha.	The results reached exceeded 100%. The fertility of more than 210 ha of grounds is currently in restorations within the framework as of ecologically viable fields.	The CEV is a mixed system where adapted crop varieties (eg groundnut, millet, cowpea, maize), crops with high added value (hibiscus, okra) in alternating strips, fruit trees and catch crops (as watermelon) are integrated within plots that are protected from straying livestock and wind erosion by hedges, windbreaks and wire fencing. Organic content of the soil is improved using organic fertilizers and pest control made using organic pesticides. CEV models have been developed since 2008 in partnership with ISRA and the technical services of the Ministry of Agriculture. Some relay farmers were trained by the project, but the number of agropastoralists having applied the technique of CEV (the outcome indicator) covering more than 210 ha is not specified. Communities have so well integrated knowledge disclosed by the project that they pursue the work by themselves. Producers have appropriated this type of culture since the results were conclusive. In areas such as Ngoundiane (Thies), beneficiaries distributed cuttings for the farmers to extend the diversification, following the principles of the farmers field school. The CEVs allow to meet the needs of the household and sell the surplus, to provide fuelwood and non-timber forest products (fruits, fodder), which improves farmers livelihoods and reduced their tasks. Farmers are creative in adapting soil amendment and irrigation techniques they learned during exchange visits. A document was published in December 2009 to guide the implementation of CEVs on the basis of the experience gained by the project in the Groundnut Basin.
Output 1.3. Increased capacity to adapt to climate change				
Number of farmers having adopted drought-resistant agricultural techniques (zero labor) as a means for adaptation to climate change.	Not specified	Guide 10% of producers to adopt new practices for adaptation to climate change by Year 4 in the selected sites.	53% of the objectives were carried out. 84 producers in which 74 supported through adapted climate changes inputs. This relatively average level of attack of the target is explained by the fact why in the course of execution, he was considered adapted more to combine the implementation of the activities of adaptation to the climate changes with the realization of the ecologically viable fields.	84 producers received inputs of which 74 through the CEV. The total number of farmers in the project area is not known and it is therefore difficult to estimate the rate of achievement of the identified target (10% of farmers). Adapted varieties used in the CEVs were identified with the help of ISRA and survival rate varies from 80 to 90%. Through diversification of crop types within a single field, the selection of adapted varieties, soil enrichment and the use of arboriculture, CEVs reduce vulnerability to climate change. Two hectares were treated with Polyter, a hydro retaining biodegradable fertilizer. The project did not present results of tests performed using this product. It is not obvious that this product is easily accessible to farmers, either in terms of distribution, neither in terms of affordabilityand thus that it could constitute a repeatable solution to scale.
Output 1.4. Reclamation of salinized lands				
Number of	389,500 ha of	Participatory defense of	This result is reached to 98% (by taking account of the	In the regions of Kaolack and Fatick, soil salinization results from the accumulation of salts due to land dessication and clearing for agriculture. Barren land after harvest does

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
hectares of cultivable salt land	salt land.	389,500 ha and restoration of 600 ha of salt land by Year 4.	review of the targets of the logical framework of the project approved by the Steering committee following the recommendation of the evaluation with put course). That is to say 587 ha of salted area out of 600 ha under restoration through ploughing and peanut Shell use. The pertinance of these actions is raised by the local populations compared to the exploitation of salt (another alternative to the level as of stripped salted zones or spots) often carried out by the private ones.	not absorb rainwater and drought causes an upwelling of water rich in salts which settle on the surface. High concentrations of salts in the soil reduce the ability of plants to absorb water and nutrients, which exposes plants to drought conditions. Salinized soils are thus unsuitable for the growth of most plants and their low structural stability makes them vulnerable to erosion. Techniques that promote leaching of salts can fight against soil salinization, such as the replacement of the sodium ion (Na +) by calcium (Ca + +) which buffers the substrate. Now the peanut shell is rich in calcium ions. At a dose of two to four tonnes / ha on clay and eight to ten tons / ha on sandy soils, the peanut shell can help to improve the structure and fertility of the soil. After the burial of peanut shells, when the grass starts growing, trees are planted and crops of millet, sorghum and hibiscus can then be introduced after two or three years. Tests conducted from 2006 to 2008 on demonstration plots have highlighted the effect of the amendment of salinized land with peanut shells: in comparison with the unamended plots, millet production was increased tenfold (925 % to 1278%) and maize production almost tripled (from 222% to 347%) in amended plots. The project helped to restore and cultivate (in part) 587 acres of land salinized, over two-thirds being located in two rural communities in Kaolack and the rest in two rural communities in Fatick. Rehabilitation of saline lands in these areas has been facilitated by the involvement of people who attach great importance to the restoration of saline lands. The involvement of women was especially crucial in the two regions. The treatments adopted include the use of peanut shell with or without tillage, exclosure with fences and hedgerows, foldyard manuring (organic enrichment) and planting of halophilous forest species. Halophilic species selection focused on local species that exist in village lands and are valued by the people: *Acacia senegal*, *Acacia nilotica* and *Zizyphus mauritiana*. The exploitation of non-timber products allow farmers to derive significant revenues. With a view to enable local collectivities to benefit from the impact of the sale of carbon as part of afforestation / reforestation activities of the Clean Development Mechanism, a baseline was established and projections of sequestration were simulated using a model (TARAM : *Tool for Afforestation Reforestation Approved Methodologies*) according to the project scenarios.
Output 1.5. Reclamation of farmers fields through integrated fertility management, agroforestry, and soil and water conservation				
Number of hectares of restored cultivable land.	not specified	Support 10% of farmers in applying restoration techniques covering at least 5000 ha by Year 5.	This result was reached to 72% is 3,604 ha restored by technics of Naturally Assisted Regeneration.	Agroforestry refers to land use systems and practices in which trees are integrated with crops and / or livestock for a variety of benefits and services. These systems are characterized by the diversity of tree species, the variety of products and of their uses (fruit, fodder, etc.). They create favorable microclimates by providing shade and moisture retention, moderate extreme conditions by acting as windbreaks, and contribute to food security and income generation for many local populations. These effects were all reported by women during meetings in the villages. The project has used the assisted natural regeneration (RNA) and the conservation of water and soil (CES). **RNA** applied in the project consisted of identifying and protecting seedlings that settled naturally, while enriching the environment with seedlings produced in a nursery,

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
				especially with trees of the genus *Acacia* whose roots are fixing nodules of atmospheric nitrogen that can restore soil fertility in the short term. The efficiency of RNA is that it does not require enrichment since this approach is to foster the growth of species that grow naturally. In Khokhé, a fenced area of 5 ha, a donation by four older producers who ceded their land, in addition to an unfenced area of 15 ha, were used for the protection of seedlings and the constitution of fodder reserves in anticipation of the dry season. The fodder was distributed free in the village but sold 5,000 FCFA per cart, allowing variable revenues, about 60,000 FCFA in 2011 and 150,000 FCFA in 2012. These revenues are used to cover travel expenses for meetings and renewal of small material and equipment for the nursery. Tall grass is also sold to build fences around homes. The producers who have applied the RNA have also protected in particular rare, endangered or high economic value species. **Nurseries** Over 130,000 plants were produced in community nurseries established with support from the project (43,294 Diourbel, 44,120 in Thies, 31,949 in Louga, and 20,350 in Kaolack). Cultivated species are selected based on the needs and can include vegetables for gardening, fruit trees, species of *Acacia*, soumpe (*Balanites aegyptiaca* - medicinal plant) to support a processing forest fruits IGA, to enrich areas under RNA, or reforest restored land. Women maintain nurseries under annual contracts with production targets. Seedlings are distributed free in the same village for gardening and RNA, in the villages of neighboring localities and to public institutions. In Ndiongue Fall, trees were planted along the road to reduce sand encroachment and mark the area. Success rate of plantations vary from one place to another: 70-80% in Khokhé, more than 60% in Thiékène Ndiaye, 55% for the first year in Keur Bame but increased to 100% following training on the plantation. **CES** Management for the CES consists in stabilizing the soil to reduce erosion and promote infiltration of water to allow the growth of vegetation that will help stabilize and improve the soil. These works consisted of barriers across the slope (bunds, stone bunds, vegetative strips to reduce the speed of runoff and soil loss) and micro-catchments (holes, pits, ponds for harvesting water runoff). Such work has been carried out on 101 ha on the plateau of Thies and allowed the regeneration of herbaceous and shrub vegetation on formerly bare surfaces. In Diourbel and Louga, 8.76 ha of massive planting and 19,323 km of linear plantings were made.
Overall assessment of outcome 1				**HS**
Assessment of relevance				**HS**
Assessment of effectiveness				**HS**
Assessment of efficiency				**HS**

*Note: The project relevance, effectiveness and efficiency are rated according to the following indices: **HS** - highly satisfactory, **S** - satisfactory, **MS** - marginally satisfactory, **MU** - marginally unsatisfactory, **U** - unsatisfactory, **HU** - highly unsatisfactory*

The overall assessment of the component as well as for each of the criteria is highly satisfactory since the fertility of the land was effectively improved by the development of appropriate technologies despite the fact that the areas for which the project has been so successful remain relatively limited compared to the extent of degraded land in the Groundnut Basin. Taking advantage of previous experience of Senegal in the field

of SLM, appropriate approaches based on mobilizing villagers have been developed and applied adequately to have a convincing and tangible demonstration effect which should contribute to their replication and adoption at a larger scale.

Choice of species for reforestation. It was noted that eucalyptus seedlings were also used to assist the RNA, in order to produce poles. Eucalyptus, originating in Australia, are fast-growing trees perfectly adapted to drought conditions, and soil poverty and acidity. However, the leaves and roots of Eucalyptus produce a substance that destroys grasses and soil bacteria, thus reducing the biodegradability of organic matter, leading to a depletion of soil nitrogen and calcium[13], an acceleration of soil acidification and thus a reduction in biodiversity. One study showed that a plantation of eucalyptus of 15 years of age contains less than half the number of plant species than a plantation of oak or chestnut trees of the same age[14]. The choice of eucalyptus had also been discouraged by the UNDP program officer during his visit of sites in 2010 because of its tendency to capture all available water (due to its high growth rate).

[13] Poore and Fries. 1986.
[14] Bassou 2003.

Table 4. Project progress with regard to the intended outcome 2 and assessment

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
Outcome 2: Rationalized forest and pasture use through upscaling of best practices				
Degree of the utilization of codes of conduct. Number of land use plans developed and finalized.	Existence of codes of conduct inadequately applied or that do not commit all parties	Support the management of 60,000 ha of rangeland and forest formations on a community basis by Year 4.	On the whole 95,457 ha of pastoral units were installation and delimited either a going beyond the objective. This situation is explained by the need for taking account of coherences spaciales and socio-economic realities of ground in the erection of the pastoral units.	Conventions for 5 pastoral units of a total area of 95,000 ha have been developed, translated into local languages and disseminated to the populations. The elaboration of management plans and rules for the use of forests and pastures through pastoral units have promoted a wide dissemination and adoption of best practices for the rational use and protection of resources. The project helped to demonstrate the benefits of sustainable forest management: while the state of the environment improves and forest formations are reconstituted, fodder resources develop and constitute a source of income for populations. Project interventions (awareness and firebreak) led to a virtual elimination of bushfires previously recorded in the regions of Louga and Kaffrine.
Output 2.1. Agro-pastoralists and transhumants adopt sustainable techniques and rules for rangeland use				
Number of hectares of pastoral land that is delineated and managed according to consensual regulations based on pastoral or traditional pastoral reserves.	Existence of partially applied regulations for managing land disputes.	Support communities in the delineation and management of 20,000 ha by Year 5 through consensual regulations ; Develop and adopt 5 codes of conduct in rangeland use, protected by a network of 200 km of firebreak; 800 pieces of equipment.	95 457 ha of pastoral unit, that is to say one (rate of execution of 159%. These units are equipped with codes of conduct which are consensual rules approved by the various recipients and guaranteeing management durable of the fodder resources, the access to water etc	Management plans of pastoral units (UP) (protection of ponds, materialization of livestock transhumance corridors, equipment, dissemination of clauses of local conventions, opening firebreaks etc..) have been developed and implemented by revitalized management committees for 5 UP in agro- and forestry-pastoral areas covering a total area of 95,457 ha, of which 60% in the region of Louga. Local conventions developed with the assistance of the project were validated by the CR and approved by the Deputy prefect as the State representative. Two UP have been provided with information panels. Two UP have been provided with information panels. The project facilitated exchanges between farmers, herders and village leaders, improved their ability to interact with each other to discuss issues of transhumance and increased their ability to manage at their level conflicts between farmers and herders, notably with regard to the problem of straying. Before the intervention of the project, the management of these conflicts required the intervention of local and administrative authorities. Implementation of UP action plans has allowed a wide dissemination of rules of rational use of forests and pastures. This pastoral land management has reduced conflicts with farmers. 5 models of local convention were disseminated and local conventions were translated into local language (Wolof and Pulaar).
Output 2.2. Negotiate and establish corridors for access by livestock to water and pasture through farmland				
Number of hectares of delineated and enriched land.	not specified	Support setting up 2000 ha (or 200 km) of inter-community corridors.	On the whole 85% of the set objectives were reached. These achievements are associated with the pastoral Units and make it possible to make the junction between the zones of	200 km of corridors have been identified in a consensual manner with populations and partners through the mapping of transhumance routes produced with the assistance of CSE. Firebreaks also provide corridors and pathways for cattle. The development of the course includes the planting of tree fodder species and herbaceous species palatable to livestock and management of ponds. According

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
			course.	to the SYSRI, 85 km has been improved the regions of Louga and Kaffrine. The total area delineated and enriched is not clearly indicated. The banks of two ponds were renaturalized to protect against runoff and erosion by wind and water, reduce the risk of intense evaporation of the water and favor the regeneration of wildlife habitat. The conservation of ponds facilitates watering livestock. Delineation and materialization of corridors, resulting from a participatory approach with local authorities and the populations concerned, has facilitated the movement of herds to agglomerations and to develop security around vaccination pens, livestock markets and gathering points.
Output 2.3 Participatory management plans for village forests and "scheduled"(gazetted) forest				
Number of hectares of villages and community forests having adopted the land-use plans and applied the codes of conduct.	41% of natural forests are degraded	Protect at least 7500 ha of natural forests.	Management plans covering 3122 ha of gazetted and community forests elaborated that is to say 52% of completion rate. The emphasis was more placed on quality and the appropriation by the populations of the elaborate plans; what required more dialogues and of level of approval.	12 participatory management plans covering 3604 ha simplified for four classified forests (2665 ha) and eight community forests have been developed and validatedso that participatory management plans exist for all forests classified and community which did not have one in the Groundnut Basin. The participatory process that leads to the development of these plans involves the following steps: after deliberation for the protection of the forest, an inter-village committee is set up to gather representatives from the villages that use resources. The committee then decides by consensus the activities that will be permitted in the forest with the support of Water and Forests services and the project. The local convention that results from it is validated by the Rural Council and approved by the Deputyprefect. Village forests have been protected and management plans are partially implemented. Gardening activities are carried out by women in the peripheral fields.
Output 2.4 Improved agro-pastoral practices for sustainable intensification of livestock production and energy needs (hay, fodder production, field manuring, tree plantations (for fodder and fuel), sustainable browse harvesting, etc)				
Number of livestock farmers having adopted sustainable intensification practices.	Existence of examples of best practices on a small scale.	Support at least 100 livestock farmers or herders to adopt at least one new practice by Year 3.	Training for 100 livestock farmers. The objectives appearing in the framework logical and relating to the number of stockbreeders having adopted durable practices of intensification are exceeded.	A hundred or so relay farmers within 25 committees organized in an association have been supported for the constitution of fodder reserves and multiplied the activity for the benefit of 275 other farmer members. The herders' community of the Louga region must amount to thousands. The proportion of herders affected by this result is thus relatively low. However, the demonstrative value of project results, especially with regard to accountability and mobilization of communities and local authorities should facilitate replication. The presence to the north of the project area of the Great Green Wall, a large regional project (from Senegal to Djibouti), offers opportunities in this direction.
Output 2.5 Improved energy efficiency for rural consumption of charcoal and fuelwood				
Number of rural populations having adopted at least one energy-saving technique.	Predominance of techniques causing wasted energy and, consequently, ligneous resources.	Support 30% of farmers (men and women) in adopting techniques for efficient use of wood energy by Year 4.	137 famers trained. The objectives relating to the number of rural having adopted at least a technique of energy saving were largely exceeded within the framework of the implementation of the project.	30 relay people (women) were trained in the use of improved stoves and techniques for efficient use of wood energy. 30 solar ovens and 107 stoves in six different models (metal or metal / clay and wood or coal) were made available to populations by the project as grants. In every village, a committee was set up to manage the sale of improved stoves. A number of stoves corresponding to 10% of households have been provided by the project as a grant. Successive orders were placed with revenues from previous sales until, in some villages, all

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
				households were equipped with an improved stove. Sales were sometimes extended to neighboring villages, thus becoming a source of income for the GPF. In one village, one of the women had brought a stove to the weekly market as a demonstration and increase demands. Since 2010, more than 426 stoves have been distributed / sold to 30 GPF showing that the GPF have seized the opportunity offered by the project. Women say they have developed self-confidence through this activity. A total of 261 farmers (121 in Kaolack, 90 and 45 Louga Diourbel) have benefited from the scaling up of the training. In all intervention sites, artisans were trained on the manufacturing standards for stoves and solar ovens. In total, more than 10 artisans were trained by region. In general, people have a preference for stoves composed of a part of clay, which raises the question of the availability of clay in the region (only available in Kaolack).
Output 2.6. Communities maintain a network of firebreaks, through enhancing greater organization (firefighting groups), training and equipment				
Number of village committees belonging to the network.	not specified	Support and equip at least 45 village committees to combat fires by Year 5.	This objective was exceeded. 46 village committes supllied with small equipment and and trained for fire fighting (102%) .283 km of mechanical and manual fire station-wagon network set (142%). These achievements made it possible to reduce in a substantial way the width of fires in the targeted zones.	The project has developed capacities in terms of preventive and active fire control. 46 village committees are part of the network against bushfires. They have been revitalized: informed, sensitized, trained and equipped for the clearing and maintenance of firebreaks. According to the SYSRI, 471 km of firebreak were cleared mechanically and manually and maintained under service contracts.
Overall assessment of outcome 2				**HS**
Assessment of relevance				**HS**
Assessment of effectiveness				**HS**
Assessment of efficiency				**HS**

Note: The project relevance, effectiveness and efficiency are rated according to the following indices: HS - highly satisfactory, S - satisfactory, MS - marginally satisfactory, MU - marginally unsatisfactory, U - unsatisfactory, HU - highly unsatisfactory

The overall results of this component contribute to generate many environmental benefits that have generated multiple benefits for village communities in terms of economic and quality of life.

One flagship result of this component, the **development of participatory management plans for classified forests and village forests (2.3)** and their implementation by communities, had beneficial effects for the environment and the ecosystem services it provides, and these services have enabled communities to derive economic and quality of life benefits. A community is so convinced of the importance of environmental benefits provided by the forest; it does not exploit it to preserve it for generations to come:

The participatory planning process has fostered awareness of environmental and economic benefits provided by the efficient use of resources within their forests by local people. It also promotes greater cohesion between the involved villages and the benefits help to counter the rural exodus. The participatory planning process has fostered awareness of environmental and economic benefits provided by the efficient use of resources within their forests by local people. It also promotes greater cohesion between the villages involved and the benefits help to counter the rural exodus. Species that had disappeared from the area reappeared in the MED, including medicinal plants. Women report that the climate is cooler, the soil is better inside than outside MED, that improving the retention of water in the pond attracts new species of birds and deer, warthogs with numerous litters, hares, hyenas and many monkeys. The preservation of these forests can also provide less obvious benefits as some of these forests appear to be of spiritual character or sacred to people. At Keur Bame, villagers met say that their main responsibility of the MED is to preserve the forest and its resources for future generations and even wish to increase the area to 100 ha.

Revenues. Picking committees are established for each exploited species and the exploitation is being rationalized to avoid picking fruit before maturity. At Keur Bame, each member pays 250 FCFA for 4 months to be able to pick forest fruits. These contributions are deposited in an account and used to fund the management activities of the MED. Jujube fruits are sold at 2500 FCFA per basin and those of soumpe at 2500-3000 FCFA per basin. Some forest fruits were picked before maturity resulting in important waste of the crops. Control of the picking increases sale revenues. Collection of straw around the MED (firebreak) provides revenues of 250 FCFA per cart sold to residents of the two concerned villages and 750 FCFA outside the two villages.

At Keur Soumbou Yoro, collecting forest fruits (more than 30 basins per day collected by 10 to 30 women), baobab leaves, medicinal plants and collection of dead wood provide incomes that ensure the daily expenditure. The forest is like a reserve to meet their needs. Exploited resources are used primarily for domestic consumption and the surplus is sold up to Kaloack because the quantities are significant. Revenues are used to purchase school supplies, clothing for children, medicines, household equipment and animals for fattening. Straw, previously burned by bushfires is now sold in part and used to feed livestock. In addition, all livestock including those of the transhumants, eat and drink in the MED. The villagers have noted the return of many species of birds, reptiles and mammals, forest species and precious woods (*Khaya* sp.).

In Koutal, the fruit trees not being yet old enough to produce, the exploitation of the MED essentially concerns the straw used to feed livestock and building huts. Income from this activity (i.e. 2000 F per cart) are for the maintenance and protection of the MED. Until June 2012, the management of this activity was entrusted to herders who divided benefits among themselves, also the GPF from Koutal recently decided to remove their responsibility and to entrust it to women.

Another great outcome of this component, the **improvement of the firebreak network through a better organization of committees against bush fires (2.6)**, had environmental effects that ultimately benefit the herding communities and motivate them to pursue and even increase their involvement.

Effects: It has not been possible to compare the statistics on the number, area and duration of bushfires but the information gathered during the interviews highlight the real impact of project interventions, especially in preventing fires:

- According to IREF in Louga, in 2005-2006, 72 fires were reported for the Louga region, covering an area of 72,000 ha. In 2011-2012, 15 fires were reported throughout the region, including areas where the project does not occur, affecting an area of 9000 ha.
- The members of the CR of Keur Momar Sarr (Louga region) reported that following the project interventions in the fight against bush fires, there are no more fires, with the exception of one in 2011, while the fires were previously very common.

According to representatives of the same CR, the almost complete reduction of the frequency and extent of bushfires led to improved forest conditions, increased number of trees, and a good preservation of the fodder potential for livestock thus improving its condition and reducing the need for transhumance.

The increase in the fodder potential also follows the interventions of **sustainable intensification of pastoral production under the result 2.4** and has positive effects in improving the condition of the livestock which allows better milk production which surpluses are sold in the market, thereby generating income, and the sale of fodder that generates income for the CVD and the population. The availability of forage reduces the need for transhumance and ensuing sedentarization facilitates children's schooling and access to health care (as reported by herders). The money previously invested in livestock feed is now used for other purposes, including food, pilgrimage, increasing herd size and health care.

Another result which contributes to the efficient use of resources in forests is the reduction (rather than improvement) of the **use and consumption of wood energy (2.5)** by the use of improved stoves that allow an economy in coal and wood. The stoves with a part in clay allow fuel economy of 45% and those made of metal only allow a saving of 40 to 45%. The women interviewed reported that their use reduces cooking time, smoke emission, risk of inflammation by sparks and burns for children. The use of these stoves thus offers advantages in terms of safety and health, in addition to environmental benefits due to reduced logging in the forests which is now prohibited by virtue of the management plans. The fuel economy reduces the task of collecting dead wood which is usually a chore for women and youth. For stoves using coal, fuel economy is 75% which reduces the daily expenditure accordingly.

Table 5. Project progress with regard to the intended outcome 3 and assessment

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
Outcome 3: Policies and local partnerships are harmonized and capacities are strengthened for integrated land management following a landscape approach.				
Number of integrated land management plans developed and implemented that strengthen the capacity of local systems to adapt to climate change and drought.	The local collectivities have little involvement in the design of projects and programs, site selection and definition of intervention strategies.	Integrate the landscape approach into at least 15 local development plans at Year 3. At least 10 villages have formally adopted sectoral application plans and protocols (foreseeing motivations and penalties) by Year 5.	The project stopped with a completion rate of 73% for this result. 11 Local Development Plans approuved by collectivities and populations. Indeed, with the intervention of room development projects like the PNDL, all the communities were covered. The development and the reactualization of Local plans of fascinating development of account durable dimension management of the grounds was buckled fault of new requests of the elected officials in the zone of the project.	11 PLDs integrate concerns of sustainable management of land and natural resources- This result is already discussed under the result 1.1. In addition to integrating the environmental dimension into the PLD, the Rural Council of Ndiafate took the initiative to develop an environmental action plan. 8 local conventions have been adopted by the population in the project intervention sites
Number of private/public partnerships through the landscape approach.	Compartmentalization in interventions.	Establish at least 5 public/private partnerships for sustainable land management by Year 4.	No measurement of this indicator in the PIR	A convention has been established between the project and Caurie-MF. Founded in 2005 as a Limited Liability Society and established as a savings and credit cooperative in January 2009, CAURIE-MF mission is to contribute to sustainable economic and social advancement of poor microentrepreneurs, mainly women, by providing appropriate financial products and services.
Number of transparent, participatory and collaborative self-evaluations and incentive policies by the involved Ministries using the landscape approach.	Reports of the unsustainability of solutions derived from previously adopted strategies.	Evaluate at least two current strategies and propose appropriate reforms by Year 3.	No measurement of this indicator in the PIR	Project reporting documents make no reference to a transparent, participatory and collaborative self-assessment exercise and of incentive policies using the landscape approach by the concerned Ministries neither to activities that have been carried out to that effect. The project supported the process for the revision of the Forest Code, particularly on the legal recognition of local conventions. The adoption of the proposed amendments would help to secure the huge investment in time, effort and financial resources provided by the communities in this project - and related gains. Local conventions for NRM in UP are codes of conduct established by consensus and validated by the Sub-prefect, making them legitimate but not legal. The project supported a national consultation and an amendment proposal was formulated and submitted. Due to the change of government, the proposal has not been adopted yet. Some projects, including PROGERT, involve communities in the implementation of the classified forest management plan through cultivation contracts. These contracts to enrich forests or reforest with valuable species are established between the Water and Forests Department and local collectivities, and the terms for awarding are defined by

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
				decree (Article L15 of the Forest Code). In accordance with Articles L8 and L16 of the Forest Code, local governments may in turn designate persons or entities (villages, groups or individuals) and entrust them with the implementation of work on allocated plots through cultivation contracts. Now, under Article L17 of the Forest Code, these contracts have a limited period of maximum 3 years. The fact that investments in labor and resources of village communities are not secured on public lands makes the communities benefits more precarious in the event of development pressures or any other pressure that would change the vocation of this land. Defining the terms and conditions of contracts between the local governments and populations should consider these risks and protect the interests of the populations. Workshops were held for the formulation of the new code.
Number of local decision makers who have improved understanding of the problems of sustainable environment.	not specified	Guide at least 100 local decision makers in gaining improved understanding by Year 3.	No measurement of this indicator in the PIR	This indicator is not documented in the SYSRI nor in the progress reports. However, the approach adopted by the project to promote systemic involvement and accountability of stakeholders in SLM and NRM at all levels, information disseminated and training provided likely had the effect of improving the understanding of issues of environmental sustainability for all local decision-makers who were involved in the project interventions.
Output 3.1 Training needs at the individual, institutional and systemic levels are identified				
Training plan set up around categories of actors for detailed strategy to strengthen capacity.	Numerous training programs developed without any links to actors' actual needs.	Develop a training strategy for each of the 5 project sites from Year 1.	A training strategy was elaborated and developed after one year of the project implementation. The curriculum adopted in the five project local units for gender training, accounting for income generating activites, technical aspects of SLM, management and decision making, is based on the capacity buiilding needs of grassroot actors. Training is the main entry point of the project intervention specially for gender and income generating activities issues in order to enable local actors to master those questions and to ensure the durability and a good appropriation of the conducted actions.	The training strategy was designed to strengthen the technical capacity of the project key stakeholders to improve their participation in the design and implementation of activities, to ensure accountability and develop the autonomy of beneficiary actors by giving them the means to act and to take initiative. Trainings focused on NRM (roles and responsibilities, degradation of the natural resources), decentralization, the landscape approach, participatory communication, organization and management, and gender issues. Training beneficiaries include officers within Waters and Forests deconcentrated structures, villagers and their CBOs, local collectivities representatives, PROGERT staff, and representatives of key partners. Trainings have taken the form of workshops and exchange visits about successful experiences.
Output 3.2 Key actors' capacities (local elected officials, technical services, CBOs, project team) are strengthened				
Number of	Inadequate means	Organize 40	60% of the formations were	Monitoring by the project does not provide information on the capabilities developed by

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
initiatives to regenerate developed land by actors.	made available to local collectivities despite the importance of their responsibility in SLM; Low level of means for technical services for their interventions.	training sessions on sustainable land management aimed at beneficiaries by Year 3. Organize at least 12 inter-village visits by Year 3.	carried out are 23 sessions organised. Workshops Co-were organized in keeping with the cell of environmental education and Follow-up of the Ministry for ecology.	key stakeholders or the number of land rehabilitation initiatives developed by the actors (outcome indicator). On the other hand, discussions with community members receiving training - particularly inter-village exchange visits - have expressed great satisfaction in terms of acquired knowledge and learning new practices. These exchange visits seem to have been a great source of motivation and inspiration in the adoption and adaptation of new SLM practices. The baseline of the result reported on the lack of resources available to the State services and local collectivities to play their role in SLM and this situation unfortunately has not evolved in the context of the project.
Output 3.3 A network of journalists for environment involved in identifying and disseminating best practices for greater upscaling effect				
Number of publications from journalists.	Low involvement of the network of journalists in sustainable land management.	Publish at least 5 reports (radio, TV, video, internet) per year.	The achievements went beyond the objective with 20 radio and television carryforwards produced.20 radio and television carryforwards produced.	Achievements of the project include the production of articles, the establishment of partnership protocols with community radio stations, television producers and with associations. More than 19 reports and many written articles were completed over the project duration. The topics covered in the articles published in major print media include project activities (launching of activities, information on achievements) and management of natural resources. Educated urban public is the main target. A collaboration protocol with the Environment Research Group and Press was established in 2008. Partnerships have been established with three community radios and television producers to broadcast nationally. Each of these stations cover part of the project area and the topics covered are land degradation, activities and results of the project. Programmes generally last 45 minutes and allow for interactive discussions in local languages (Wolof, Serer and Peul depending on the area). Populations in the project intervention area, particularly the actors involved, are the target audience. Television media have broadcast information nationwide in French or Wolof on the project, its activities and results, for the authorities, partners and citizens.
Output 3.4 Training on legal provisions on decentralisation				
Number agents for popularization and rural officers that are trained.	Agents for popularization and rural officers are not well versed in decentralization policy.	Organize 8 training sessions on applying decentralization statutes to reach at least 160 participants by Year 4.	The goal is achieved to 90%. 144 room authorities trained one applying decentralization and SLM.	No additional observation.
Output 3.5 Agreements with local financial institutions for developing sustainable financial mechanisms for land management				
Protocols for granting credit targeting	Inexistence of links between granting credit	Establish at least 1 protocol at the level of each site	The goal was entirely achieved. 1 protocol signed with CAURIE Microfinance Cooperative. After	In September 2009, following a meeting organized by the CAP with several microfinance institutions, a partnership was established between Caurie-MF and the PROGERT and formalized by a contract and a convention drafted with the help of the CAP. The

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
sustainable land management.	and sustainable land management.	by Year 2.	a study was undertaken to assess the potential of financing SLM	agreement enabled the opening of a credit line of 42.381 million FCFA for Caurie-MF to provide loans to individuals, groups or organizations beneficiaries of the PROGERT to enable the development of IGAs related to SLM and based on resources valorisation following an integrated approach. This partnership has made possible to finance 12 GPFs through "village benches" and 5 Individual Mixed Loans (PIM) groups. As of 30 September 2012, 593 customers located in rural areas of Louga, Thies, Fatick, Kaolack and Diourbel region enjoyed the credit services of Caurie-MF.
Output 3.6 Local decision makers and judicial system is trained to better address land conflicts using landscape approach				
Nb of people in charge of handling disputes who are familiarized with sustainable land management and environmental issues.	not specified	Train at least 10 people to be in charge of handling disputes by Year 3.	The achievements exceeded to 150% the set objectives. 30 responsible for decision-making trained one Land tenure and forest code.	Exchange and advocacy workshops were organized on the allocation of land to women. A national workshop on the Forest Code and Land conflict management was organized in collaboration with the Division of Protection of Forests in DEFCCS. A national workshop on the management of land conflicts was organized with the legal department of the DEF on local conventions and management of land disputes.
Output 3.7 Local advisory committees are functional and ensure real community participation and conflict management				
Number of local consultation committees created or revitalized.	Existence of numerous local committees without means to ensure functioning on a human, methodological and material level.	Make 5 consultation committees operational by Year 1.	The objective was exceeded. 7 operationnal local Consultation commited suppoted by the project (6 Gender quality Circle set in the project sites).	According to the SYSRI, 12 local advisory committees are operational. However, their contribution to conflict management is not documented. Advisory committees have successfully played another important role: to conduct advocacy with Rural Councils to allow women access to land. However, the operation of consultation frameworks is not assured because of weak leadership to conduct the necessary initiatives. In addition, the resources required to ensure the operations are not guaranteed either. Their sustainability requires regular monitoring and support over the short or medium term.
Output 3.8 National Steering Committee and Scientific Technical Committee provide timely guidance to project implementation				
Number of committee meetings having reached decisions.	not specified	Organize at least 2 STC meetings and 1 SC meeting per year	More than 100% of realization was recorded. 15 meeting organised. More than 6 meetings of the SC organised and the rest with the STC	The supervision of the implementation of the project is not a development result and should not be part of a logical framework. 15 meetings of the SC and STC were held, including seven in 2008.
Overall assessment of outcome 3				**MS** (lack of consistency of the component)
Assessment of relevance				**MS**
Assessment of effectiveness				**S**
Assessment of efficiency				**not assessed**

*Note: The project relevance, effectiveness and efficiency are rated according to the following indices: **HS** - highly satisfactory, **S** - satisfactory, **MS** - marginally satisfactory, **MU** - marginally unsatisfactory, **U** - unsatisfactory, **HU** - highly unsatisfactory*

The formulation of the component as a whole is ambiguous in that "integrated management of land following the landscape approach" is not clearly defined in the project document. There are no clearly defined criteria for training, to perform the revision of a PLD following *landscape approach*, or to perform a self-assessment of compliance of departmental practices to this approach. It is consequently difficult to design appropriate interventions while having a concern to avoid creating redundant structures and consultative processes. Examination of the results of the component shows a series of seemingly disconnected achievements that do not contribute to the implementation of the extensive network of dialogue for SLM that was originally designed.

Training sessions and exchange visits are not results but interventions. One should rather seeks to measure changes brought about through these trainings and visits in terms of capacities developed (if they can be measured), of achievements made possible thanks to capacities developed or changes in the ways of doing and behaviors.

The expected result 3.8 is a management activity and not a development result and it is not appropriate to include it in the logical framework of the project.

The effectiveness of the component is also marginally satisfactory, but due to the establishment of a partnership with Caurie-MF which proved successful, the assessment is considered satisfactory.

Efficiency has not been evaluated since, after reflection, the information appeared insufficient to base an informed reflection on this aspect.

Table 6. Project progress with regard to the intended outcome 4 and assessment

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
Outcome 4: Income Generating Activities made compatible with the principles of Natural Resources Management and Sustainable Land Management.				
Average income per inhabitant (poverty level).	The percentage of poor households is 59.2% in Louga, 65.3% in Diourbel, 68.4% in Thiés, 75.7% in Kaolack and 81.4% in Fatick (PROGERT Scientific Review, 2005). 40% of households in the Groundnut Basin have monthly incomes below 59,000 FCFA.	Develop IGAs linked to NRM to reduce poverty by 10% in the different project sites at Year 5.	The set objectives were reached overall	The impact of project interventions in terms of changes in poverty rates and income levels in the Groundnut Basin or within interventions sites has not been documented, and neither the profitability of IGAs developed through BVs and PIMs, and their economic impact. It seems that a beekeeping project implemented with the help of the project (Mbamane) is not profitable. The reasons given by the community are many, but the prospects for improvement appear to be relatively limited. The observation of such a situation at the end of the project is worrying. However, according to numerous testimonies, SLM and SNRM activities generated income for the individuals and communities involved, whether through better management of forests and grazing areas, soil restoration using techniques such as RNA, enclosures and restoration of salinized soils, or the development of IGAs consistent with the objectives of SNRM and SLM. According to the evidence given by women, income enabled them to share the responsibility of their household, to cover the costs of tuition, to purchase medicines, clothing for children, school supplies, seeds and food for the transition period, to establish a small herd (Tock Ngol) that serves as risk insurance, and set up tontines to make individual loans for solidarity/support to other women in their group who do not already have access to credit.
Output 4.1 Income generating activities that are compatible with sustainable natural resource management and SLM principles are developed (English version of the prodoc: transfered and upscaled)				
Number of persons having benefited from project support for developing income generating activities compatible with sustainable land management.	Small-scale income generating activities using many natural resources and generating little income.	Support at least 70 persons to engage in IGAs linked to SSM by year 5.	The objectives were largely exceeded. The co-financing brought by CAURIE MF made it possible to touch one plus a large number of recipients. The cumulated credit award is 2,897 for 736 beneficiaries. From 2011: 333 micro IGA NRM-related underway (2008: 40 agr, 2009: 196 agr, 2010: 97 agr) - the estimate of income per capita provided from july 2011	According to the results of the analysis of the overall supply of financial products and services in Senegal, the project has concluded an agreement with MF-Caurie whereby a credit fund is entrusted to Caurie-MF to facilitate access to credit for poor populations in the project intervention areas to finance IGAs related to SLM. It is expected that the credit fund remains property of the PROGERT for the duration of the protocol. The project partnership with Caurie-MF helped develop IGAs for 12 GPFs through loans to "*bancs villageois*" (groups consisting solely of women) and 5 GIE (consisting of women and men) through 5 Individual mixed Loans (PIM). IGAs consistent with the objectives of SLM and SNRM developed through BVs include nurseries, gardening, harvesting forage, fattening goats, forest fruit processing and transformation of peanuts. IGAs consistent with the objectives of SLM and SNRM and developed through PIMs include beekeeping, cattle fattening and processing of forest fruits. The supervision of BVs included training in organizational management and financial management (credit and loan management) by Caurie-MF and the project provided technical training to meet the requirements of the market. For each PIM, a feasibility study and a business plan are made for the whole value chain with the support of Caurie-MF since These projects concern products of high commercial value. Training in microenterprise and financial management was provided by the Service Régional de Développement Communautaire. Other IGAs have been developed through project grants to meritorious groups. For example, a mill was offered to GPF from Khokhé in recognition of their commitment

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
				and dynamism. The mill serves the entire village but also six neighboring villages. Revenues generated by the fees charged for its use are paid in part to a revolving fund for the maintenance of the mill and to pay wages for its operation. The other part is saved in an account with Caurie-MF, for the purchase of a mobile millet threshing machine. In two years, the GPF has saved 400,000 FCFA. The GPF anticipates that this equipment will help provide service to members whose fields are distant but also deliver services to neighboring villages to generate new revenues. It has not been possible to obtain the estimated per capita income that the project had calculated in 2011.
Output 4.2 The private sector and small enterprises are motivated to promote sustainable land management				
Credit lines opened for sustainable land management.	Low attractivity of the environment of natural resources management for the private sector causing low investments.	Facilitate access to micro-credit for 30 groups by opening credit lines in the Decentralized Funding Systems (DFSs) by Year 2.	The rate of attack of the objective is of 67%. 20 groups of recipients of credits have been organized, amounting to 400 people. The target was 30 groups reaching 70 people - the project worked with fewer groups but more individuals	According to the results of the analysis of the global offer of financial products and services in Senegal, the project has concluded an agreement with MF-Caurie whereby a credit fund is entrusted to Caurie-MF to facilitate access to credit for poor populations in the project intervention areas to finance IGAs related to SLM. It is expected that the credit fund remain the property of PROGERT for the duration of the protocol. This credit line of 42,381,000 FCFA made available to Caurie-MF allowed to grant loans to individuals, groups or organizations beneficiaries of the PROGERT to develop SLM-related IGAs based on an exploitation of resources following a integrated approach. The loans granted from the co-financing by Caurie-MF targeted poverty reduction while UNDP-GEF funds have associated the SLM / soil conservation condition. The project provided part of the costs for community approach (mission to identify groups, feasibility studies, creation of BV management committees, BV equipment and management costs support). For the 12 BVs, as of September 30th 2012[15]: ▪ 593 clients located in rural areas Louga, Thies, Fatick, Kaolack and Diourbel benefited from Caurie-MF credit services; ▪ 3091 loans had been granted for a total of 239,045,000 FCFA; ▪ The liabilities credit were at 49.25 million FCFA and savings amounted to 17,441,665 FCFA; ▪ 4,739,869 FCFA had been distributed as dividends. For the 5 PIMs, as of September 30, 2012: ▪ Five loans had been granted to GIE - CIV located in rural areas in Fatick, Kaolack and Louga regions for a total of 10,465,230 FCFA; ▪ More than 50% of the loans have been repaid but 4 of the 5 groups had arrears. In 4 of the 5 villages where BVs were met, the number of BV members had risen significantly since their establishment, as the other women from the village or neighboring villages became aware of the advantages they brought. In the village where the number of members has decreased (from 50 to 20 in four years), a successful tontine existed for a long time and offered more flexible and advantageous loan terms.
Overall assessment of outcome 4				**HS**

[15] CAURIE MICRO-FINANCE. 2012

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
Assessment of relevance				**HS**
Assessment of effectiveness				**HS**
Assessment of efficiency				**HS**

Note: The project relevance, effectiveness and efficiency are rated according to the following indices: ***HS*** *- highly satisfactory,* ***S*** *- satisfactory,* ***MS*** *- marginally satisfactory,* ***MU*** *- marginally unsatisfactory,* ***U*** *- unsatisfactory,* ***HU*** *- highly unsatisfactory*

The project was able to demonstrate that IGAs related to SLM could be profitable, which motivates Caurie-MF to continue and expand its support to the village populations, and communities to adhere more to the BVs and seek support, including from Caurie-MF, to multiply IGAs. All actors involved in the project have appreciated the successful outcome and benefits of this component. The fight against poverty especially for women is clearly a national priority, the successful partnership with Caurie-MF contributed greatly to the effectiveness of interventions; ownership of project proposals by the people and their creative motivation to multiply IGAs has increased its efficiency.

In addition to being a form of compensation for communities who bear the opportunity costs associated with the adoption of measures of SLM and SNRM, IGAs developed with the support of Caurie-MF have improved the quality of the mobilization of village communities in the activities proposed by the project and have developed a solidarity within the groups involved, and have developed in communities, especially for women, the sense of having better control over their quality of life.

Table 7. Project progress with regard to the intended outcome 5 and assessment

Indicator	Baseline	Targets	Results from PIR 2012	Observations of the terminal evaluation
Outcome 5: Adapted management from lessons learned and the monitoring system.				
Number of operational consultation frameworks.	Weak coordination between actors. Lack of motivation among actors. Lack of unifying programs.	Revitalize at least 10 consultation frameworks based on unifying programs and harmonized approaches linked to sustainable land management by Year 1.	The objective was exceeded as achievements reached 150%. 15 consultation frameworks created or supported by the project at local and National level	According to the project participation strategy (prodoc), consultation frameworks should enable an integrated approach to NRM through a concerted planning of actions to enable the creation of local synergies and the multiplication of results. It was expected that a framework among stakeholders for cooperation in NRM be implemented in each region under the steering of the IREF and in close relationship with the CR, and at the level of the groundnut basin, a transregional cooperation framework be established for consultation at the scale of the eco geographical area. Rather than setting up new structures whose mandate is linked to the limited lifespan of the PROGERT and possibly overlap with the structures already in place, the project has chosen to support local collectivities following a perspective of sustainability. The weak point of this choice is that these structures are political in nature and are therefore subject to change as a result of a change of Government. The project conducted a diagnostic study of existing cooperation frameworks in the area of intervention, the Gender Quality Circles, to be able to revitalize them in a sustainable way and to support their operation. These platforms have been established at the regional and national levels and act as advisory committees composed of elected officials, technical services, women's groups and NGOs, and their mission is to advocate with local officials to integrate women into decision making. The mandate was expanded to include issues of access to land and women's involvement in NRM activities. Through awareness raising conducted by the project through local workshops, radio and television programs broadcasted at the regional and local levels and advocacy done by CQG, women spoke in meetings and participated in decision making, which has allowed to take into account their demands in the budget and encouraged the adoption by CR of deliberations to grant land to groups of women.
Output 5.1. A management and monitoring & evaluation unit involving all actors working within the Groundnut Basin is created and functional				
Execution level for work plans approved.	n.a.	Ensure an execution rate of at least 60% per year, on average.	The objective was exceeded. The execution rate is more than 90%	With the support of the CSE, the project has developed a system for monitoring results and impact, the SYSRI, linked to a GIS to plan interventions on a spatial scale. The system was developed using ACCESS software and provides access to annual compilations of achievements at each site, as well as reports and technical products of the project. Monitoring and evaluation data of the project are housed at CSE but steps are underway to transfer the database to the state level, with the IT Development Agency of the State. National Geomatics Plan, through the services of Forestry, organizes, promotes and shares all the data produced by the project.
Overall assessment of outcome 5				**MS**
Assessment of relevance				**MS**
Assessment of effectiveness				**MS**
Assessment of efficiency				**MS**

Note: The project relevance, effectiveness and efficiency are rated according to the following indices: ***HS*** *- highly satisfactory,* ***S*** *- satisfactory,* ***MS*** *- marginally satisfactory,* ***MU*** *- marginally unsatisfactory,* ***U*** *- unsatisfactory,* ***HU*** *- highly unsatisfactory*

The fifth component "Adaptive management based on lessons learned and monitoring system" is likely integrated into the CL to ensure the adoption of an adaptive management approach by structures responsible for ensuring a concerted planning of SLM in the Groundnut Basin. However, it seems that this component has been interpreted rather as falling under the project management, and monitoring focused on the recognition of the SC and STC meetings and financial implementation rate. This confusion is apparently explained by the weak formulation of the result and indicator, ie non-specific and non-targeted, so we do not know what work plans are referred to. Participatory processes involving actors involved and the stakeholders at different levels, from the village to the Groundnut Basin, including the rural community and the region, require that appropriate capacity and leadership exist in each of these levels, and that well-established communication mechanisms exist between these levels to allow true transfer of concerns and priorities in both directions. Now the project supported consultation processes at the local and regional levels but did not create a unit for management coordination and for monitoring and evaluation involving all stakeholders in the groundnut basin while an execution rate of more than 90% is reported. The inappropriate formulation of the indicator likely contributed to confusion on the intended outcome for the 5th component although the description of the activities in the project document should have guided adequately the interventions.

To improve the coherence and complementarity of the project chain of results, this component could have been accompanied by a result concerning knowledge management, formulated as "Relevant and updated information on the status of targeted resources and habitats, on resource uses and associated benefits, are made available to all stakeholders to enable informed decision-making for planning, managing and evaluating SLM and NRM initiatives."

Sound knowledge form the basis of any conservation or sustainable use management, to support the development of relevant policies, and carry out outreach activities aimed at changing perceptions and behaviors. In the project, the products developed in this area include the database, the SYSRI, production of technical documents, knowledge dissemination through the media, workshops and conferences. New knowledge of great value acquired and validated through the project interventions deserve to be shared with all stakeholders in SLM in Senegal and in all countries that have to take up similar challenges.

Participatory processes involving relevant actors and stakeholders at different levels, from the village to the scale of the Groundnut Basin, including the rural community and the region, require appropriate capacity and leadership exist in each of these levels, and that well-established mechanisms of communication exist between these levels to allow reliable transfer of concerns and priorities in both directions.

Table 8. Summary of the assessment of the project immediate objective and outcomes

Result level	GEF Criteria			Outcome assessment
	Relevance	Effectiveness	Efficiency	
Immediate Objective	**S**	**S**	**S**	**S**
Outcome 1	**HS**	**HS**	**HS**	**HS**
Outcome 2	**HS**	**HS**	**HS**	**HS**
Outcome 3	**MS**	**S**	not evaluated	**MS**
Outcome 4	**HS**	**HS**	**HS**	**HS**
Outcome 5	**MS**	**MS**	**MS**	**MS**
Global Assessment	**S**	**S**	**S**	**S**

*Note: The project relevance, effectiveness and efficiency are rated according to the following indices: **HS** - highly satisfactory, **S** - satisfactory, **MS** - marginally satisfactory, **MU** - marginally unsatisfactory, **U** - unsatisfactory, **HU** - highly unsatisfactory*

The relevance of the immediate objective and of results, i.e. the extent to which these reflect national priorities and receive support from key partners, is rated satisfactory **(S).** The results are consistent with national priorities but deal at varying degrees of issues identified in the problem analysis. While components 1, 2 and 4 are very relevant, components 3 and 5, as stated, are less consistent. The project still made appropriate interventions within these components, including partnership with Caurie-MF.

The effectiveness of the immediate objective and of outcomes, i.e. the extent to which the development results are achieved through project interventions, is rated satisfactory **(S)** on the basis of the evidence presented in the tables 2 to 7 of the sections 3.2 and 3.3 which show that, overall, objectives and intended outcomes were met with minor shortcomings.

The efficiency of the immediate objective and of outcomes, i.e. the optimal transformation of inputs into outputs, is rated satisfactory **(S)**, which means that the project was cost effective and that resources have been used appropriately. The cost-effective approach adopted by the project explains the high efficiency of components 1, 2 and 4. This approach, first based on a demand-driven process where farmers seek support according on their needs, and secondly, on information, awareness and capacity building for change at public and private, national and local levels, allowed to empower and mobilize the participation of stakeholders, especially the village communities and resource users living within the ecosystems targeted by the project. In addition, the make-do and contracting with NGOs, CBOs, decentralized technical services and private sector have significantly reduced the costs of the achievements. This aspect is clear from Table 12 and discussed in Section 7.7.2.

4 SUSTAINABILITY

This section gives an appreciation of the extent to which the main impacts and benefits of the project are likely to continue, and the contribution to capacity development and global environmental goals, after assistance from UNDP and GEF or other external assistance has ended. The sustainability of the scheme put in place by the project may rely on various factors, incuding sustainable financing mechanism, changes to local communities and authorities' perceptions and attitudes, capacity development, socio-political context, institutional/governance framework, and environment.

Sustainability is rated through an assessment of four dimensions of the risks that are likely to affect the persistence of project outcomes: i) financial, ii) socio-political, iii) institutional and governance, and iv) environmental. These risks are rated according to the following scale:

Likely (L). There are no or negligible risks that affect this dimension of sustainability.

Moderately likely (ML). There are moderate risks that affect this dimension of sustainability.

Moderately unlikely (MU). There are significant risks that affect this dimension of sustainability.

Unlikely (U). There are severe risks that affect this dimension of sustainability.

4.1 Financial aspects of the sustainability of outcomes

This section assesses whether some financial risks are likely to jeopardize sustainability of project outcomes and the likelihood of financial and economic resources not being available once project assistance ends.

Overall, despite significant differences from one component to another and between the results in the same component, the financial sustainability of results is considered **moderately likely** (**ML**), which means that only moderate risks affect this dimension of sustainability.

Outcome		Assessment of the financial risks to sustainability
1: Upscaling innovative adapted technologies for increased cropland fertility	**ML**	Elaboration and implementation of PLD. The development of PLD is a choice of the State to provide this tool to every CR. The initiative is taken by the PCR who addresses the ARD which can seek funding from the PNDL or decentralized cooperation, when the CR does not have any. When resources are available, the ARD leads the process of developing or revising, using its staff, and regional and local technicians (working groups). Each step of the process is validated by the CR, in collaboration with the ARD. Finally, for implementing the PLD, the CR may appeal to the PNDL or decentralized cooperation and its own budget. (P) Dissemination of adapted cultivation and SLM methods. State services do not have, at present, the financial resources needed to perpetuate and expand the intervention models developed by the project. The State finances are precarious and do not guarantee the continuation of transportation for supervision and monitoring, exchange visits, travel allowances, nurseries, landscaping, and equipment. (U) DRS / CES works have been done by the project to fight against runoff and improve infiltration in the watershed, such as dikes, ditches and bunds along contour lines. Such work requires a lot of work but the materials are on site, they can be pursued by the populations beyond the project. Other works such as torrent control to fight against gullying and bank stabilization with consolidated gabion dams require far more resources and are beyond the reach of local populations and will not be pursued without external support. (ML) Other land restoration techniques (RNA, MED, agroforestry, rehabilitation of salinized land with peanut shells) require materials mostly available locally and populations have developed sources of income to be able to assume the cost of small equipment including that required for nurseries. (L)
2: Rational forest and pasture use through upscaling best practices	**L**	It is likely that the clearing and maintenance of the firebreaks will be maintained through *i*) the voluntary involvement and financial of the communities who understand the benefits and have developed a sense of responsibility in the fight against bush fires and *ii*) leadership of the presidents of UP who do fundraising every week to cover some of the costs for fuel and pay the driver of the grader for clearing firebreaks. The President of the Local Consultative Framework of Producer Organisations states that fundraising would be conducted at the village level in the event of rupture of funds for the maintenance of firebreaks The CR of Keur Momar Sarr has requested technical services and an ongoing project for support to continue the maintenance of firebreaks. (L) Development and management plans have been developed for over 3000 ha of classified forests and community forests and their implementation rapidly demonstrated environmental and economic benefits associated with the rational management of forest resources. With the exception of costly works like scouring ponds, the implementation of management plans will continue because of the demonstration of the profits generated - provided that the benefits are distributed equitably among communities who bear the opportunity costs related to the adoption of a rational management of resources and investment for sustainable forest management. (L)

3: Harmonized policies and local partnerships / capacities for integrated SLM following a landscape approach.	**ML**	The project supported the consolidation of existing consultative frameworks, the CQGs, by integrating the dimensions of SLM and NRM, but few activities identified through the consultative processes have been implemented due to lack of financial resources. However, the prominent result of the CQGs, the adoption of deliberations by the CR to grant parcels of land to groups of women, arises from a change in perception following awareness and advocacy actions whose durability is not likely to be affected by the lack of financial resources. (MU) Partnership One of the highly positive results of the project was the development of a partnership with the microfinance cooperative Caurie-MF which now offers adapted financial services accessible to all interventions areas of the project. This partnership has been beneficial to both local communities and to Caurie-MF which has just opened a point of service in Kaolack and has expressed its intention to continue to support and respond to new demands in the project sites. Since 2005, the cooperative has experienced very strong growth of its operations and credit portfolio (no credit risk), is present in 13 of the 14 regions of Senegal, receives a rating of excellence and transparency and is the only African institution to achieve a B grade awarded by a universal platform, the *Microfinance Information Exchange*[16] (L)
4: IGAs compatible with the principles of NRM and SLM	**L**	Benefits resulting from the development of IGAs consistent with NRM and SLM principles with support of Caurie-MF to local communities provide sufficient incentive for the activities to continue and expand. The incomes of IGAs are a real addition for the household economy and the prospects for sustainability are good particularly because of the coaching provided by Caurie-MF (feasibility studies, training, monitoring). The IGAs developed through BVs (fattening, small trade, poultry farming, and gardening) have good prospects for sustainability. The IGAs developed through PIM (beekeeping, cattle fattening, processing of forest fruits) which are loans of higher amounts and longer term, present variable performance but in the opinion of Caurie-MF, the PIMs are a promising innovative financial product. The approach of the cooperative is such that it will not maintain a less successful product at the expense of local populations.
5: Adapted management from lessons learned and the monitoring system.	n.a.	-

4.2 Socio-political aspects of the sustainability of outcomes

This section examines whether any social or political risks are likely to jeopardize the sustainability of project outcomes and the risk that the level of stakeholder ownership (including ownership by governments) will be insufficient to allow for the project outcomes/benefits to be sustained.

The socio-political aspects of the sustainability of outcomes are rated as **moderately likely (ML)** for all project sites, which means that only moderate risks are likely to affect this dimension of sustainability.

Outcome		Assessment of the social and politic risks to sustainability
1: Upscaling innovative adapted technologies for increased cropland fertility	**L**	Prospects for social and political sustainability of these two components are positive. The project has chosen to adopt an approach based on the demands of farmers (demand driven). Responding to the needs expressed by the villagers have been a sufficient motivation to involve and commit them to the actions proposed by the project. Selected activities have not only led to a rational and sustainable management of lands but also led to an improvement of the social (greater equity

[16] The Microfinance Information Exchange is a provider of reference information dedicated to strengthening the microfinance sector - www.themix.org

2: Rational forest and pasture use through upscaling best practices	**L**	for women) and economic (income and improving the means of production) situation of the populations involved.
3: Harmonized policies and local partnerships / capacities for integrated SLM following a landscape approach	**ML**	Consultation. Rather than establishing new structures whose mandate is linked to the limited lifespan of the PROGERT and possibly overlap with the structures already in place, the project has chosen to support local communities in a sustainable perspective. The weak point of this choice is that these structures are political in nature and are therefore subject to change as a result of a change of Government. (ML) Capacity development. The project helped to build capacity and empower local people and developed their accountability by involving them in the identification of problems and potential solutions, and the decision to implement concrete initiatives. Through technical training and exchange visits, participants increased their ability to adopt and adapt new solutions to restore and develop their lands.
4: IGAs compatible with the principles of NRM and SLM	**P**	Same rationale as for components 1 and 2.
5: Adapted management from lessons learned and the monitoring system.	**MU**	Uncertainty about the institutional supervision of soil conservation and insufficient institutional collaboration. The anchoring institution of the project, the Department of Water and Forests, Hunting and Soil Conservation, was split in two shortly before the government change, the administrative supervision of Waters, Forests and Hunting being entrusted to the Ministry of Environment, and that of Conservation of the soil, to the Ministry of Agriculture. Following the presidential elections, all of these mandates were merged again under the DEFCCS. It remains that SLM is a matter for many state services within several ministries: the Ministries of the Environment (DEFCCS, DEEC), Agriculture, Livestock, Spatial Planning and Local Collectivties, and Finance, and the mechanisms and that platforms for communication and consultation between the various entities that share the same issues in SLM and NRM are insufficient. (MU)

4.3 Governance / institutional aspects of the sustainability of outcomes

This section examines whether the legislative framework, policies, structures and governance processes in which the project operates pose risks that could jeopardize the sustainability of project benefits.

The sustainability of institutional framework and governance systems is considered **moderately likely** (**ML**), which means that, in general, moderate risk may affect this dimension of sustainability.

Outcome		Assessment of the institutional and governance risks to sustainability
1: Upscaling innovative adapted technologies for increased cropland fertility	**MU**	For the development and updating of PLDs, the project supplied the financial resources and was the driving force behind the participatory process. At the same time, some members of the encountered Rural Councils recognize the weaknesses in terms of organizational capacity, planning and follow-up actions on the ground. Such observations call into question the sustainability of this result but not necessarily apply equally to all rural councils where the project intervened. When questioned about this, the Rural Council of Ndiafate plans to solicit partnerships with NGOs and ARD to support future PLD updates and make representations to the relevant departments, the IREF, bilateral cooperation projects and decentralized cooperation to mobilize the resources needed to implement the PLD, indicating that, despite possible shortcomings, the CR is able to identify solutions and support within its reach. (ML) Instability of the composition of the staff of deconcentrated services. Following the change of government, many officials were transferred. Thus, in Thies, the entire team of Waters and Forests has been changed at the level of the region and

		department. These changes made for political reasons reduce the project's impact on the development of capacity within institutions. (MU) Uncertainty about the institutional supervision of soil conservation and insufficient institutional coordination. This aspect was discussed in the assessment of social and political risks. (MU)
2: Rational forest and pasture use through upscaling best practices	**ML**	The target for clearing firebreaks was reached quickly thanks to a partnership between Local Collectivities, the Department of Waters and Forests and the project. Local Collectivities have provided cofinancing to bring the results beyond the targets set in the project. The President of the Local Consultative Framework of Producer Organisations is himself involved as a volunteer for opening firebreaks for the benefit of the community. With the development of capacities to fight against bush fires and against drought, and awareness of the need to get together to fight fires, members of the local communities say that they are *now able to cope*. The Rural Council of Keur Momar Sarr has already requested the necessary support from partners to be able to continue the work. The Local Collectivities leadership will ensure the sustainability of this result in terms of its governance. (L) Implementation of forest management plans. In the public forest estate, the Waters and Forests Department establishes management rules, prepares development plans, and executes them either under direct supervision or through third parties. For the forests within their competence, Local Collectivities prepare development plans or have them elaborated. They can implement them directly or entrust their implementation by contract to third parties. In the project, the implementation of forest management plans has been delegated to local communities through contracts whose limited duration (3 years, renewable once) does not secure the investments made by communities (discussed in Section 7.3.3). (ML) Forest management plans contain restrictive measures to ensure the sustainable exploitation of forest fruits as well as prohibitions on logging and hunting. Village communities that respect these sustainable management measures, that see to their application with the other resource users, and are investing in the protection and sustainable management, should also benefit from the advantages that result. Yet the sharing of benefits between villages within a CIVD or even among different groups from the same village sometimes appears not to be driven by clear rules, unless such rules exist but are not always observed. (ML) As a result of staffing problems and inadequate logistical resources within the forestry services, monitoring and enforcement of regulations is not always provided, especially for the surveillance of classified forests which is carried out by communities that are involved in their management. When Waters and Forests services are informed of carbonization or other illegal activities in the forest, they do not have the means to enforce regulations. (MU)
3: Harmonized policies and local partnerships / capacities for integrated SLM following a landscape approach	**ML**	Consultation for planning land use: This issue has been discussed for component 1 (ML) Partnership with CAURIE: Prospects for institutional sustainability of the results were set out in the assessment of the financial sustainability of the component 3 (L)
4: IGAs compatible with the principles of NRM and SLM	**ML**	In the absence of clear rules on the sharing of benefits arising from the sustainable management of resources, or lack of means to enforce these rules, the benefits of activities undertaken through microfinance, whether with the support of Caurie-MF, through traditional tontines, or inspired by the model of Caurie-MF, may be taken over by groups in the community other than those who have invested in the activity (eg forage management by herders in Koutal)
5: Adapted management from lessons learned and the	**ML**	Nine areas of competence were transferred to Local Collectivities including NRM the Governance but continued to step in on development matters, thus creating an institutional overlap and duplication of missions which are not conducive to an effective process of consultation. In addition, although the establishment of a

monitoring system.		consultation framework allows planning and coordinating interventions, the effectiveness of the implementation is compromised by the lack of a framework for monitoring and evaluation.

4.4 Environmental aspects of the sustainability of outcomes

This section assesses whether any environmental risks could potentially jeopardize the sustainability of the project outcomes.

The climate evolution in Senegal over the past 40 years has resulted in an increase in temperature of about 0.9%, increasingly significant aridification in the northern part and a tendency towards semi aridity of southern regions. According to PANA Senegal (2006), the current vulnerability of Senegalese agriculture is mainly due to its strong dependence on rainfall which has decreased by 30% over the last 30 years and whose variability is unpredictable.It is expected that climate change will affect livestock by the increasing scarcity of fodder and water. Rising temperatures, decreasing rainfall and the impact of the reduction of rainwater infiltration on groundwater recharge are attributed to climate change. Projections indicate a considerable lowering of water tables from 5 m to 10 m depending on the scenarios. However, groundwater levels would be quickly restored in the event of a return to normal rainfallas it might be foreseen based on recent climate evolution.

Outcome		Assessment of the environmental risks to sustainability
1: Upscaling innovative adapted technologies for increased cropland fertility	**L**	The project has developed and validated technologies and approaches that have conclusively helped to counter the effects of drought and degradation on salt flats and degraded dryland and to increase vegetation cover. Thus all stakeholders have at their disposal a set of validated solutions to reduce the vulnerability of their environment to environmental risks associated with climate change. Selection of quality seeds, of varieties/species adapted to drought and salinity as well as the diversification of agroforestry plantations and agricultural production also contribute greatly to reducing the vulnerability of production to environmental hazards. However, monitoring of production showed that increased production is still, to some extent, dependent on rainfall. (L)
2: Rational forest and pasture use through upscaling best practices	**L**	The development and management of classified forests and community forests will make pilot sites resistant to climate change, supporting the preservation of biodiversity, contributing to fight against desertification, promoting the improvement of the soil and infiltration of rainwater and providing fodder resources to support livestock and natural resources for the development of IGAs based on their sustainable use, thereby mitigating the effects of climate change. (L) The main threats to rangelands are drought and bushfires that destroy vegetation and alter the soil structure. The increased drought expected according to forecast scenarios will increase the vulnerability of pastures to fires. However, the results of the project show that, in the area covered by the project, the fires are mainly anthropogenic and the reduction of fire occurrence is due to a change in behavior resulting from the awareness and information carried out under the project. The sustainability of this result is not likely to be affected by environmental factors. (L)
3: Harmonized policies and local partnerships / capacities for integrated SLM following a landscape approach		n.a.
4: IGAs compatible with the principles of NRM and SLM	**ML**	IGAs based on a rational use of resources and consistent with the principles of SLM and SNRM depend on the condition of natural resources. To the extent that these IGAs remain coupled with efforts to conserve resources and restore lands, the risk that environmental conditions negatively affect the sustainability of this result is

		moderate.
5: Adapted management from lessons learned and the monitoring system.		n.a.

Table 9. Summary of the assessment of aspects of sustainability for each outcome

Outcome	Financial	Socio-political	Governance / institutional	Environmental
1: Upscaling innovative adapted technologies for increased cropland fertility	**ML**	**L**	**MU**	**L**
2: Rational forest and pasture use through upscaling best practices	**L**	**L**	**ML**	**L**
3: Harmonized policies and local partnerships / capacities for integrated SLM following a landscape approach	**MU**	**ML**	**ML**	n.a.
4: IGAs compatible with the principles of NRM and SLM	**L**	**L**	**ML**	**ML**
5: Adapted management from lessons learned and the monitoring system.	**MU**	**MU**	**ML**	n.a.

4.5 Contribution to building national capacity

This project has contributed to develop and strengthen national capacity for sustainable land management and land restoration at every level: systematic, institutional and individual.

Systemic capacities.

At the systemic level, capacity development involves creating enabling environments in which individuals and institutions work. This includes economic, legislative and regulatory frameworks, mechanisms encouraging responsible management, formal and informal relationships and processes between institutions, as well as the interactions between the different levels, which affect the ability of the whole system.

Systemic capacities developed to supervise and support stakeholders, communities, village and intervillage committees, technical services and local communities in managing sustainably lands and natural resources include local conventions for the pastoral units, management plans for classified forests and community forests, management rules for exclosures, and decisions adopted in favor of of women groups access to plots of land. The updated PLDs integrating NRM and SLM concerns and the environmental action plans serve as a reference for the rural councils to collaborate with their partners. Revision of the Forest Code, once adopted, will improve the framework for managing forests especially by securing the investments of local communities in SLM.

Systemic capacity development also includes support provided by the project to participatory processes through the strengthening of existing cooperation frameworks by including environmental partners such

as ISRA and INP, and overall, the contribution to the emergence of a collective dynamic for SLM and NRM based on local solidarity.

Institutional capacities.

> Institutional capacities relate to the performance of an organization as a whole, its means of operation and its capacity to adapt. An institution is understood as an integrated system, including individuals and groups who make it as well as its relations with its external environment. In addition to physical improvements (eg, infrastructure, machinery and equipment), building institutional capacity includes clarification of missions, structures, responsibilities and reporting relationships, and changes in procedures and communication.

The project contributed to develop the following institutional capacities:

The Department of Water and Forests by providing vehicles and a database linked to a geographic information system;

Caurie-MF has integrated SLM criteria in the identification of the IGAs that it supports through the BVs whereas before the project, 95% of assisted IGAs dealt with small trade. By integrating a social mission to the activities of microcredit Caurie-MF was already at the forefront in its field, but adding the consideration of environmental values and principles raises the cooperative to the rank of pioneer. In addition, the partnership with PROGERT allowed Caurie-MF to develop and test a new financial product, the PIM, of a longer period and awarded to an economic interest group which may include male members (unlike BVs).

The project has contributed to develop the capacity of scientific institutions in the development of knowledge through action research undertaken during the preparatory phase and continued throughout the project – unfortunately insufficiently disclosed.

The project has strengthened the capacity of Local Collectivities by strengthening their planning role and the process for the systematic integration of NRM and SLM in the development and updating of PLDs. The project helped them to better understand the roles and responsibilities for NRM that have been devolved to them in the context of decentralization.

At its own initiative, following training provided by the project, the CR Ndiafate set up a forum of partners across the rural community to harmonize interventions and foster synergies and complementarity. Exchange visits to share best practices have developed their motivation to protect one of their forests from grazing, having observed that through the protection of forests, the return of species that had disappeared may be observed, that fruit trees that produce all year long can be found and that the forest may thus be a source of income.

MEPN The project supported the participation of the representative of the Ministry at the 46th Session of the Council of Ministers of the Inter-State Committee for Fight against Drought in the Sahel in Mauritania.

Individual capacities

> At the individual level, capacity building refers to the process of changing attitudes, behaviors and practices, often through training to acquire knowledge and improve skills. It also includes learning through active participation in actions and performance improvement through changes in motivation and accountability.

The project has contributed to the development of individual capacities as follows:

Local populations The project helped to develop individual capacities and autonomy of local populations by involving them in the identification of land degradation issues and of potential solutions and to decision-making about the implementation of concrete initiatives. Through awareness, education and training activities, their active participation in the land restoration activities, populations are now aware of the need to protect and restore their environment and, in their own opinion, this achievement is sustainable. With the development of capacities to fight against bush fires and against drought, and awareness of the need to join together to fight fires, "*they are now able to cope*".

Women's groups in the villages where the project took place have developed new practices through technical training and exchange visits. Through the coaching by Caurie-MF and experience in BVs and PIMs, they developed organizational, financial and management skills, as well as the reflex of saving and reinvesting which was previously inexistant.

The staff of the Department of Water and Forestry has benefited from training, exchange visits and practical experience which helped to strengthen their motivation. The project helped the IREF and staff of technical services to apply their academic knowledge to carry out a variety of activities concurrently, experiment with new SLM techniques and learn more about microfinance. The project has also helped to support the participation of the representative of the Department of Forestry in the training program in Environmental and Social Management for Infrastructure Projects.

Personnel of partner scientific institutions involved in the project implementation (CSE, ISRA, INP) had the opportunity to develop skills through practical experience and opportunities to test and validate new technologies and approaches, and through a deeper understanding of the intervention ground.

The project staff has received training in SLM, NRM, GIS and data management, thematic trainings offered by the CAP in the areas of project management, public finance, planning and procedures, and especially gained the practical experience from implementing the project over five years. The Coordinator and the Financial Officer of the PROGERT attended seminars on Project Management and Human Resources Management organized by the Institute of AMOS in Casablanca.

5 MONITORING AND EVALUATION

5.1 Design and budget for monitoring and evaluation

All UNDP and GEF projects should include a practical and budgeted monitoring and evaluation plan. Objectives and expected results of projects should be specific and measurable, to allow their effective monitoring and evaluation. The monitoring and evaluation plan should include SMART indicators for results (outcomes and, if applicable, impacts) and the baseline of the project.

5.1.1 Monitoring and evaluation plan

As required for a GEF/UNDP project, the project document included procedures for monitoring and evaluation and a plan to monitor performance and track progress towards achieving project objectives. The monitoring and evaluation plan provides for the establishment of a GIS in the first year, including an environmental and socio-economic database and the logical framework indicators for monitoring the outputs, outcomes and impacts of the project. Requirements for reporting are presented, as well as the main steps of the monitoring and evaluation system. Procedures indicated timeframes and included:

- **Tripartite Review:** A meeting of the parties involved in the implementation of the project is scheduled annually although the specific purpose of this meeting has not been clarified.
- **Mid-term and Final Independent Evaluations** according to UNDP and GEF requirements.

Régular monitoring includes the following elements:

- **Quarterly operational reports**: Brief summary to report on project's progress towards achieving its objectives, including outputs and costs.
- **Annual progress reports**: Annual monitoring report of the project performance relative to the logical framework, indicating the constraints, problems and lessons, the rate of achievement of results and the statement of expenditures.
- **Project Implementation Review** (PIR): Annual report prepared by the PCU and submitted to the UNDP/GEF Regional Coordinator to report on activities, outputs, costs, progress and problems.
- **Project Budgets Revisions and Substantive Revisions** to be endorsed by the Steering Committee in accordance with the UNDP requirements.

- **Meetings of the SC:** Meetings on an annual basis or more frequently to assess the project progress.

M&E budget. The initial budget included in the project document was 192,000 USD and earmarked financial resources for conducting the midterm (20,000 USD) and terminal (60,000 USD) evaluations as well as specific provisions for the steering committee operations (24,000 USD), environmental monitoring (30,000 USD), and audits (5,000 USD) over the planned 5-year implementation, and the annual publication of lessons learned through the project experience (18,000 USD). The amount allocated for the mid-term evaluation appears to be insufficient, especially as they had recruited an international consultant. Also, no budget had been allocated for technical monitoring by the Scientific and Technical Committee although it had an important role to play in advising the technical aspects of project interventions.

5.1.2 Indicators and targets

The logical framework of the project was built around five components formulated as outcomes, to which contribute 22 outputs. The monitoring of these results must be made from 33 indicators, baselines for the majority of indicators (8 are not provided) and targets for the entire project, which were then broken down into annual targets.

Observations on results indicators. For each of the expected project results, observations were made on the formulation of indicators, baselines and targets. The table is presented in Appendix 7. Some observations apply to a large number of indicators, baselines and targets:

- The project does not keep track of the indicator but only of the numerical target.
- The wording of the indicator is ambiguous and thus difficult to measure.
- The project does not have any result for this indicator (nor for the target).
- The indicator does not indicate whether the finalized product provides the desired changes.
- The baseline refers to the situation but does not relate directly to the indicator.
- The baseline is not documented.
- The target is formulated in terms of intervention, not of result.

A few observations are specific and are included here because of their importance for monitoring and evaluating the project.

- Observation specific to the formulation of component 3: The formulation of the component and the target are ambiguous in the sense that integrated land management following the landscape approach is not clearly defined in the project document. It is therefore difficult to assess whether the indicators and baselines are relevant and to use them to monitor the progress of achievements.
- Observation specific to the expected results of component 3: Training sessions and exchange visits are not results but interventions. One will look rather to measure changes brought by these trainings and visits in terms of capabilities developed (if they can be measured), of achievements made possible by the capabilities developed or changes in the ways of doing and behaviors.
- Observation specific to expected result 3.8: A management activity is not a development result and it is not appropriate to include it in the logical framework of a project.
- Observation specific to expected result 5.1: The indicator is poorly formulated, ie not specific and non-targeted, as well as the target, so we do not know what work plans are referred to. The project has not established a coordination unit for the management and monitoring and evaluation and involving all stakeholders in the Groundnut Basin whereas an implementation rate of over 90% is reported. The inappropriate formulation of the indicator likely contributed to create confusion on the expected result for the fifth component.

Requirements of UNDP and GEF and concept of development result. UNDP's *Handbook on Planning, Monitoring and Evaluating for Development Results* underlines the importance of focusing on the achievement of development results. UNDP and GEF define results as positive and negative, intended and unintended changes produced by development actions; in GEF's and UNDP's context, results include

direct project outputs, short and medium term outcomes, and longer-term impacts, including global environmental benefits. However, UNDP insists here on the dimension of "change in the conditions of development that is describable or measurable and resulting from a causal relationship."

"Traditionally, RBM approaches have focused more on internal results and performance of agencies than on changes in the development conditions of people. MfDR applies the same basic concepts of RBM—good planning, monitoring, evaluation, learning and feeding back into planning—but seeks to keep the focus on development assistance demonstrating real and meaningful results.[17]"

"Planning, monitoring and evaluation processes should be geared towards **ensuring that results are achieved**—not towards ensuring that all activities and outputs get produced as planned."[17]

Formulation of SMART development indicators. Two types of output indicators may be distinguished: a **process** (or operational) indicator that allows knowing whether the service or output has been achieved, and a **result** indicator that assesses whether the finalized output is bringing about the intended changes. While it may be useful to use both types of indicators for the same result, the project used primarily process indicators. Now it is not very useful to use purely quantitative indicators that measure the number or percentage of completion, such as the number of training sessions provided or even the number of people who have benefited. These indicators are not very effective because they only refer to an event, without documenting whether this intervention has actually contributed to the desired development result. It is more useful to develop an indicator to document the intended effect of the training in question. Without calling into question the success of the main achievements of the project, it is clear that the project M & E has attempted to follow the actions performed and their outputs to the detriment of monitoring their effects in terms of development results, showing rates of over 100% for most results. Now the calcultation of these rates was based on the targets and not on the expected results or result indicators.

SMART Criteria

GEF and UNDP require that indicators meet SMART criteria. SMART is the acronym for *Specific, Measurable, Achievable and accountable, Relevant and Realistic, Time-bound, Tractable and Targeted*. That is to require that the indicators are:

a. **Specific** e.g. relating to the essence of the expected result by establishing a clear and direct link with the achievement of an objective.

b. **Measurable.** e.g. unambiguously set out so that all parties agree to their content and that there are practical ways to assess whether they were achieved or not.

c. **Achievable and accountable.** e.g. realistic within the capacity of the partners and related to the intervention.

d. **Relevant and Realistic.** e.g. likely to be achieved in practice and taking into account the expectations of stakeholders.

e. **Time-bound, Tractable and Targeted.** e.g. measurable in a cost-effective way, at the desired frequency for a defined period (expected date of accomplishment), and indicating the specific stakeholder group that will be affected by the intervention.

Baseline and target. Baseline and target must clearly correspond to the indicator, and use the same unit of measurement. Baselines are the basis from which change is measured. Without these data, it is very difficult to assess the change through time or to do the monitoring and evaluation in relation to the situation that preceded the action. At the output level (results achieved during a project), targets can be set for the project period but also for a shorter period. The project had actually adopted targets for the project period and had declined them into annual targets.

Outcome indicators. The indicators for the achievement of the specific objective have documented the effects of the project in terms of i) changes in the average yields of the two most important crops of the Groundnut Basin as an indication of the fertility restoration of arable land, ii) agricultural encroachment in

[17] UNDP 2009.

forests and pastures, iii) the number of hectares of degraded land rehabilitated. However, changes in average agricultural yields could also be due to changes in rainfall conditions, so it is difficult to establish an absolute causal relationship between yields and project interventions. To be specific, this indicator should include a comparison of yields in the intervention sites and test sites in the same years. The other two indicators are relevant but must be accompanied by quantified targets, which is the case of the third indicator.

Socioeconomic indicators While the indicators in the logical framework tell us about the effects of the project in terms of land restoration, no indicator is used to evaluate the project's contribution to poverty reduction in the intervention area. Now the project has achieved tangible results that correspond to this second aspect of the specific objective. In the absence of data on poverty rates in areas of intervention, an additional indicator to reflect the removal of barriers for the development of livelihoods based on sustainable valorization of land and natural resources has been used order to highlight the contributions of this project.

Normalized Difference Vegetation Index (NDVI)**.** NDVI is the indicator of choice to highlight the effects of the project in terms of land and natural resources restoration. This index was measured by the CSE at the beginning of the project as well as an index of soil conditions. The NDVI is a simple indicator to measure and monitor growth (vigor) and vegetation cover and biomass production from multispectral satellite data. This information is used to distinguish vegetation under stress from healthy vegetation. A drought index can also be calculated from a time series of NDVI.

Other outcome indicators, i.e. relevant to the specific objective of the project, could have been readily documented in collaboration with the CSE, concerning:

- the **reduction of pressures** or threats on the environment, such as statistics on the number, size, duration of bushfires in the project intervention sites compared to similar sites in the same regions but where the project was not involved, surveys on consumption of wood and coal for households with improved stoves compared to households that do not have them, the number of conflicts over land use for which the intervention IREF is requested;
- the **effects of reduced pressures**, including the evolution of biodiversity indices in sites protected by enclosures and within community and classified forests where management plans are implemented, the milk production for herders who use pasture and rangeland where the project intervened to fight bush fires and enrich rangeland, to name only these;
- the **effects of the improvement of land and resources**, including the percentage of the population living in extreme poverty, disaggregated by gender to account for the effect of the project on the condition of women, either by measuring the indicator separately for men and women or for single-parent households headed by a man or a woman.

Impact indicators. The project has not identified any impact indicator, ie an indicator that allows assessing the project's contribution to the achievement of the development impact, neither when designing the M&E system nor during its implementation. Yet the project was one of the six pilot projects selected worldwide to participate in the development of impact indicators for the sustainable management of land by the United Nations University through the KM Land Project funded by the GEF to monitor the implementation of the UN Convention to Combat Desertification. This report had made recommendations to the project for the measurement of impact indicators after checking with the project team and the STC that these indicators were feasible.

It was intended to document the vegetation cover, soil conditions, certain socioeconomic conditions and carbon sequestration at the end of the project to highlight these effects and impacts but these indicators were not measured. Financial constraints at the end of the project and the absence of the officer in charge of the M & E system from early June to mid-October 2012 explain this gap.

5.2 Implementation of the monitoring and evaluation plan

Implementation of the monitoring and evaluation plan must minimally include the active use of result-related SMART indicators, establishment of a full project baseline and compilation of data so that the

status of the work progress and assessments can be carried out as planned to support the operational implementation of the monitoring and evaluation plan[18].

Steering Committee (SC) **meetings**. Annual meetings – typically early in the year, were held during the project implementation to review and validate annual reports, evaluate outputs and outcomes of the previous year, make adaptive adjustments to the workplan and arrangements of project funds, and adopt workplan for the coming year. After the first year of implementation, the SC made a visit of the project intervention sites and provided detailed and sound recommendations, in particular about the supervision of contracts, strengthening partnerships with national research institutions and regional services and improving coordination. Five-day field visits took place in 2008, 2009, 2010 and 2012.

The SC played a vital role to enable the adaptive management of the project (discussed after this section) and to solve some critical problems during the project implementation. The SC was especially effective in early 2011when the Department of Forestry was split and the institutional supervision of the project changed. While the entire project structure (PLU leaders) remained under the Department of Water and Forests, the project was transferred to the Department of Soil Conservation. The SC then took the decision to keep the arrangement as established according to the principle of collaboration and the Inspectors of Soil Conservation were associated with the IREF. The SC has played an important role again in 2012 in the context of the loss on exchange rate when it convinced UNDP to provide additional funding to mitigate the impact of the loss of resources to help complete the most important interventions.

MTE. The mid-term evaluation was conducted in October and November 2010 and was completed (production of the report) in January 2011. The evaluation, positive overall, recognized the project's progress in achieving planned activities, the strong involvement of the national counterpart, the Department of Water and Forests and its field units, as well as of direct beneficiaries, rural populations, in the implementation. Recommendations were made to: i) include a quantitative assessment of revenues and costs in the monitoring and evaluation system of the project, ii) explore perceptions of the beneficiaries about the project's effects, iii) adjust some targets for results, iv) quantify the national contribution , in particular for IREFs (working time, equipment wear and cash) to be included in budget planning, v) prepare extension materials for IGAs in the field of NRM (technical feasibility and economic performance), vi) selection of techniques best suited to local conditions.

Monitoring and evaluation system. With the support of the CSE, the project has developed a system for monitoring results and impact, the SYSRI, linked to a GIS to plan interventions on a spatial scale. The system was developed using ACCESS software and provides access to annual compilations of achievements at each site, as well as reports and technical products of the project. The data in the SYSRI inform us about the technical implementation rate, calculated in relation to targets determined for each of the expected results and measured each year. Monitoring and evaluation data of the project are housed at CSE but steps are underway to transfer the database to the state level, with the IT Development Agency of the State.

Quarterly progress reports. Technical progress reports and financial reports were submitted to UNDP, MEF and to the Department of Waters and Forests on a quarterly basis, after the CAP had verified compliance. Quarterly Operational Reports were brief reports submitted to UNDP and GEF on a quarterly basis.

Annual reporting. Using the information compiled by the SYSRI, project progress was monitored on an annual basis from 2007 to 2011 for the preparation of annual reports submitted to UNDP, the MEF and the Department of Water and Forests in December 2007, December 2008, January 2010, November 2010 and December 2011. These documents are relatively concise and report on operational (activities) and management problems, key issues, lessons learned and recommendations. These reports do not use the indicators included in the LF but rather do the monitoring based on the annual targets so that tracking the same result from one year to another sometimes lacks consistency.

[18] UNDP 2012

Also, Project Implementation Reviews (PIRs) were produced annually from 2007 to 2012 and submitted to UNDP and the GEF.

Based on financial information provided by the project each quarter, the ATLAS system of UNDP generates a Combined Delivery Report (in U.S. currency) which must be validated by the project between January and March (review can be made until March).

In addition, **Project implementation reviews** were produced on an annual basis from 2007 to 2012, following the evolving format provided by the GEF.

Annual audits. The project was audited every year from 2008 to 2010 by the CAP and twice in 2011 by the CAP and by UNDP. For all four years, the financial implementation rate exceeds 89% (2008: 89.4%, 2009: 96.84%, 2010: 97%, and 2011: 98.9%). Even though, overall, the project was successfully completed, audits raised minor problems, particularly at the beginning of the implementation (2008), on the data management system and delays in the disbursement of funds (GEF and BCI). The first team of auditors had recommended that: i) the PROGERT acquire a reference information system (software) suitable for data management, including the monitoring of commitments and ii) UNDP and CAP accelerate procedures for the disbursement of fund advances to facilitate the implementation of project activities in a timely manner. These recommendations were followed in 2009, as evidenced by subsequent audits.

Adaptive management.

The development of AWPs and the recommendations in each of its annual reports show that the project has adjusted the planning of its activities from one year to another to help achieve the targets that had been determined in a participatory manner. More specifically, the evaluation by the SC based on field visits helped to adjust and correct implementation on an annual basis through its recommendations. Following the recommendations of the mid-term evaluation, some targets were revised. However, none of the objectives or expected results of the project have been revised.

5.3 Rating of the M&E system

The monitoring and evaluation system developed by the project has enabled quite adequately to monitor the level of achievement of the majority of the project activities. However, the system lacked consistency between indicators, baselines and targets. The choice of indicators failed to highlight the results sought through the implementation of activities in terms of change or development. Also, the majority of the targets are formulated in terms of action or intervention rather than in terms of level of result achieved as measured by the indicator.

For most of the results and indicators of components 1 and 2, the project presents the achievement rates in terms of areas where interventions have taken place but where development results are not measured, ie we should rather - or as well - use an indicator to answer the question "What is the development change brought by the of restoration interventions on x hectares of degraded land?"

As required by the GEF Evaluation Guidelines, the Project M&E system is rated on quality of its design and of its implementation. The M&E system is rated **moderately satisfactory** (**MS**) as there were moderate shortcomings mainly related to the identification and monitoring of indicators and targets, as presented in the appendix 7 and in section 5.1.2.

5.4 Monitoring of long-term changes

The monitoring system put in place by the project was built for the needs of the project and not to constitute a long-term monitoring system. However, the development of capacities for data collection, the creation of the database and the determination of the environmental baseline, achieved with the support of the CSE, contribute to the development of such monitoring. The database of the project is housed at the CSE but steps are being taken to transfer it within a permanent structure at the state level, the IT Development State Agency It is anticipated that the World Bank will support the implementation of an integrated database that will allow long-term monitoring.

The project was one of the six pilot projects selected worldwide to participate in the development of impact indicators for the sustainable management of land by the United Nations University through the KM Land Project funded by the GEF to monitor the implementation of the UN Convention to Combat Desertification. This report had made recommendations to the project for the measurement of impact indicators after checking with the project team and the STC that these indicators were feasible. However, these indicators were not measured. Financial constraints at the end of the project and the absence of the officer in charge of the M & E system from early June to mid-October 2012 explain this gap.

6 POTENTIAL FOR REPLICATION

Given the extent of the process of land degradation in the Groundnut Basin, the scope of the project is very modest since it affects only a small percentage of degraded lands. Project interventions have enabled the restoration of 5981.5 ha of degraded land in forest areas, rangelands, agricultural fields and salt flats, representing 0.13% of the total area of the Groundnut Basin, which covers 46,367 km^2 or 4,636,700 ha, and 0.6% of degraded lands if we estimate them at over one million hectares. If a significant effect is desired to reverse the current degradation, the catalytic effect of the project must be demonstrated by a high potential for replication: capacity building, development of enabling conditions and financing mechanisms, choice of sites that are representative of prevailing issues in the area of intervention, and popularization and dissemination of good practices.

The project document indeed acknowledges that replicability is integral to the project because of the importance of bringing interventions to a larger scale, and bases its strategy on the identification of barriers to replication of good SLM practices throughout its implementation in the 5 provinces within the Groundnut Basin. It is assumed that the identification and removal of barriers should encourage spontaneous replicability in other places, so as to extend the project's impacts not only to the rest of the Groundnut Basin but also in other Sahel countries where peanut production dominates the agricultural landscape.

6.1 Replication within the project intervention sites

The project has had a positive and tangible impact within operational sites where the project was directly involved and in the close vicinity for most of its achievements as, for example, the restoration of land and natural resources through the various SLM and NRM approaches, the increase and diversification of production through improved seeds in the CEVs, the dissemination of improved stoves or facilitating access to credit through BVs. The strategy to replicate effects at the width of the intervention zone was not evidenced since the extent of the effect remains relatively limited.

The driving force behind replication within the project sites has been the demonstration of the feasibility and of the tangible benefits provided by the solutions proposed by the project in terms of agricultural and forage production, restoration of degraded lands and of the environment, and for generating income through IGAs. Most solutions adopted and tested by the project under components 1, 2 and 4 have a high demonstrative value and are applicable at a large scale. Demonstration through exchange visits was particularly effective for the IREFs, the members of the Rural Councils and for farmers. Exchange visits allowed them to become aware of the diversity of issues from one region to another and of the positive and negative practices, to meet with experienced people, to develop knowledge, to become familiar with solutions and achievements from other regions or villages, to emulate and adapt them. Exchange visits involving village representatives have enabled them to know and adapt new methods of land restoration and agricultural intensification, but also the possibilities to develop new income generating activities through microfinance.

The project has also adopted an approach to spread appropriate methods, including CEVs, by involving model (or pilot or relay) farmers in their design, implementation and evaluation, and facilitating exchanges between these farmers and others from the same locality or elsewhere. Dissemination of improved stoves was motivated within villages by the wish to make other women benefit from the advantages they provide, but their distribution in the neighboring villages was stimulated by the prospect of earnings through trade.

Moreover, some results had been formulated in terms of percentage of farmers and agropastoralists who benefited trainings (results 1.2 and 1.5) to reflect this replication approach by assuming that the training of 10% of farmers would be an appropriate basis for ensuring significant multiplication of the innovative methods following the replication approach proposed by the project. However, as recommended by the mid-term evaluation, these targets have been changed to be expressed in terms of restored or improved areas.

The project objective was formulated to focus on the catalytic effect of the project, in other words, on the acceleration of a process across the landscape in five regions of the Groundnut Basin. If the components 1 and 2 were initially formulated in English, one may wonder whether they should have been translated in terms of **expansion** of best practices and of the use of appropriate technologies rather than in terms of **development** and **promotion**, which reduces the link with the expected catalytic effect of the project. The word **upscale** is commonly used to mean better quality but it can also have a similar meaning as **go to scale** or **scale up** which means bringing to a larger scale[19] a pilot project to reach a larger number of beneficiaries.

Formulation used in the **English** version of the project document	Formulation used in the **French** version of the project document
Outcome 1. Cropland fertility increased through **upscaling** innovative, adapted technologies in the Groundnut Basin.	*Composante 1. Restauration de la fertilité des terres par le **développement** de technologies novatrices et adaptées dans le Bassin Arachidier* = Component 1. Restoration of land fertility through the **development** of innovative and adapted technologies in the Groundnut Basin.
Outcome 2. Rationalized forest and pasture use through **upscaling** of best practices.	*Composante 2. Utilisation rationnelle des forêts et des pâturages par la **promotion** des bonnes pratiques* = Component 2. Rational use of forest and pasture resources through the **promotion** of good practices

6.2 Replication at national and international levels

In June 2012, the project organized a two-day national workshop to reflect on the spread of SLM in the Groundnut Basin on the basis of the PROGERT experience. Discussions were conducted through three working groups focused on technical, institutional and legal, and economic aspects. Recommendations were formulated to meet the three strategic objectives (defined by the groups) to create an environment favorable to the ownership and support of SLM by stakeholders, to promote good SLM practices on a large scale and have reliable and updated knowledge of on resources and SLM techniques

The fact that the local agreement models regarding pastoral units were translated into five local languages has promoted their adoption within the Groundnut Basin but also in all pastoral areas of the country.

It is expected that the lessons learned and best practices developed within the PROGERT will be utilized for the development of a new project: "Strengthening the resilience of saline and degraded soils of the Groundnut Basin to reduce vulnerability of natural and human systems against the effects of climate change (PRESAL)". However, in the absence of a sustainable financing mechanism and of unequivocal institutional accountability for SLM, replication and expansion of the restoration of degraded lands will remain dependent on projects supported by external partners.

Other projects have applied the techniques developed by the PROGERT thereby replicating lessons learned from the project at the national level, including FIMLA, CODEVAL (Japan project in support to DEFCCS) and the GEF and World Bank project on Sustainable Land Management which has established a platform which the PROGERT was a member.

[19] http://www.collinsdictionary.com/dictionary/english/upscale

The Project Coordinator attended a meeting of the United Nations Convention to Combat Desertification held in South Korea in October 2011 with a representative of the CSE to reproduce the experience of LADA and PROGERT, which allowed sharing these experiences on an international platform.

Advocacy for women's access to land has been brought to the national level by the television broadcast of a workshop held in Thies in 2010 on this topic.

6.3 Documentation of the project experience

The project has published two papers in December 2009 to share pilot experiences developed in the Groundnut Basin and their results. A document was published to guide the implementation of CEVs which models were initiated since 2008 in the Groundnut Basin and the other to guide restoration of saline lands, an activity started in the forest of Koutal since the preparation phase of the project in 2006. Documents present the context of the specific problem to which apply tested technologies, the scientific foundations of technology, previous experience in Senegal, tests, results and discussion, the response of the populations, and best practices. These documents are intended for a scientific or technical audience, but were not popularized to be accessible to farmers.

Many other experiences of components 1, 2 and 4 deserved to be documented and shared, including participatory approaches for the development of management plans for community and classified forests, the integration of NRM and SLM concerns for the revision of PLDs, the various experiences of MED, RNA, CES/DRS and their effects, the experience of the BVs and development of IGAs, and improved stoves. Together with a cost-benefit analysis, each of these experiences could have been presented succinctly, including the context, approach, main steps and technical considerations, the specific challenges and environmental and socioeconomic effects, to be disseminated to all instances likely to benefit, including state services and projects involved in SLM and NRM.

The experience of the PROGERT has been the subject of a special issue of SENE Sylva, the journal of the DEFCCS, and is one of the case studies presented in a document produced in 2011 by the GEF and the United Nations Convention to Combat Desertification from a compilation of case studies, "The Earth, Source of Life - Preserving our common future."

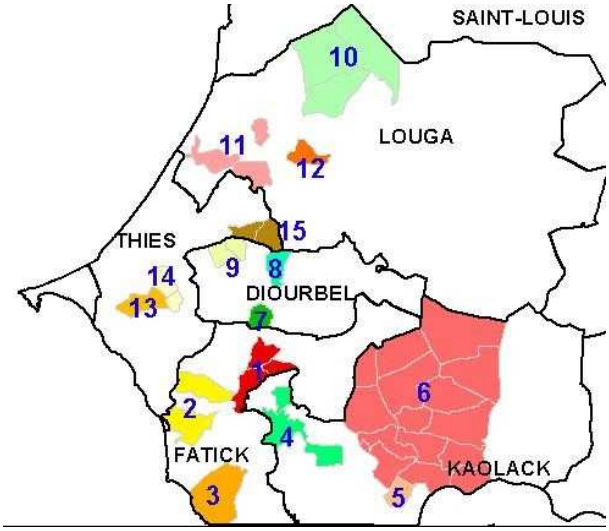
The project was designed based on the recognition that numerous efforts had been invested in the field of SLM in Senegal and in similar areas and that solutions were readily available to be adapted and replicated. In the two documents published on the CEVs and restoration of salinized lands, a short review of previous experiences is presented. It would have been useful that the project published an analytical compilation of the best SLM techniques and approaches that have been tried in Senegal with an analysis of their applicability to the project sites. This document could have been useful for the entire scientific and technical community concerned with SLM and NRM and served as the basis for the publication of another paper at the end of the project which could have included an assessment of the project experiences, profitability analyses of tested techniques and approaches, and recommendations for adaptation and replication of efficient and effective solutions.

7 PROCESSES AFFECTING ATTAINMENT OF PROJECT RESULTS

7.1 Preparation

7.1.1 Project Design and site selection

The initial design of the project, as defined in the project document, was to intervene in major ecosystems affected by land degradation in the Groundnut Basin, to perfect -in a participatory manner- and disseminate appropriate approaches and technologies for sustainable management of land and natural resources, to develop an extensive network ensuring effective and informed consultation of all categories of actors, to achieve integrated planning of SLM across the Groundnut Basin and across each of the regions.



1. Diaoule
2. Mbamane
3. Boyard and FC Samba Dia
4. Keur Bame -Sibassor et Koutal
5. Ndib Birane and Ndiakhène Ndiba
6. Khelcom Diaga and Gniby
7. NDiongo / Mbobène
8. Khokhé
9. Baba Garage / Dinguiraye
10. Thiékène Ndiaye and Keur Momar Sarr
11. Ndiongué Fall, Thiolom Fall and Diokoul
12. Ngaye Ngaye
13. Dakhar Mbaye
14. Ngoudiane
15. Niakhène /Thilmakha / Ndémène

Figure 1. Map of the project intervention sites. Source KM: Land. 2010. Scale unspecified.

The project was implemented in five regions of the Groundnut Basin, Thies, Louga, Diourbel, Fatick and Kaolack, in which 15 sites were selected on the basis of definite criteria: environmental (land use, anthropogenic pressures, level of ecosystem degradation, pressure on grasslands), socioeconomic (poverty level, potential to develop IGAs compatible with NRM) and political and operational (co-financing opportunities and political commitment), so that the lessons learned from innovative approaches, namely for components 1 and 2, can be exploited in other sites and regions subject to similar problems.

7.1.2 Relevance to GEF priorities

The project is consistent with the objectives and guidelines of the GEF Operational Programme 15 (OP-15) designed to i) minimize the causes of land degradation and its effects on the structure and functional integrity of ecosystems by adopting sustainable management techniques and ii) contribute to the improvement of livelihoods and living conditions of populations.

7.2 Institutional framework and guidance mechanisms for implementing the project

The implementation of the project comes under the **Ministry of Environment and Protection of Nature** (MEPN) which entrusted its implementation to the **Department of Water and Forests, Hunting and Soil Conservation** (DEFCCS) under the national execution modality (NEX Mode) of UNDP. This mode of execution, in comparison with direct execution or by an agency of the United Nations entrusts the execution and management of a project to a national institution. In the present case, this mode of execution has presented several advantages: i) it has fostered a strong ownership of the project, its objectives and its achievements by the anchoring institution, which explains the dynamic involvement of its agents; ii) it helped to improve the technical and management capacities within this same institution, thus contributing to the development of its autonomy to address SLM issues and to the sustainability of achievements; iii) through the integration of the project into the regular operations of the anchor institution, it allowed its staff to fully play their role with the local communities they are responsible to support, strengthening links with these communities; iv) it has helped to reduce the cost of achievements by entrusting the management and supervision of achievements to national staff. It was also planned that the Department works closely with the Ministry of Agriculture and agricultural extension services in the project sites.

Institutional "anchoring". One innovative dimension of this project lies in its strong institutional base and the horizontal management approach (coordination rather than direction) adopted by the project coordinator which allowed Forestry officers at all levels to fully play their role in the proposed intervention

models. Thus, in the awarding of contracts to NGOs, the contracts were signed by the Inspector on behalf of the project and the coordinator was simply initialing the contract. This foundation has certainly contributed to increase the project achievements as it allowed close supervision and efficient coordination of a variety of interventions. The cost of these achievements would have been much greater if they had been assigned to an external entity. This anchoring in the services presented definite advantages in terms of ownership of the proposed solutions as well as the success they provide, and also in terms of capacity development, as many favorable conditions for the sustainability of project results.

The **Ministry of Economy and Finance** ensured the interface with development partners, namely the UNDP, and oversees the financial management through the **Support Unit to the implementation of projects and programs** (CAP).

The **CAP** is a structure for support, advice and coaching established for the sake of entrusting the responsibility and leadership of NEX projects to the national actors. The main lines of support provided by the CAP are to improve i) management capabilities, ii) the quality of project implementation, iii) monitoring the financial execution of projects, and iv) transparency. Technical support focuses on the tasks of planning / programming, monitoring and evaluation, control and management of operations.

The CAP supported the PROGERT through the following tasks: coordinating the process of finalization and signing of the project document by ensuring compliance with national policies and management arrangements, appropriate coordination of the selection process and recruitment of project staff by the tripartite committee (MEF / CAP, MEPN, UNDP) project start and planning activities in a workshop involving all stakeholders, development of work plans, including annual and quarterly budgets and statements of expenditure, verification of compliance and request to feed the account , processing requests for cash advances, close monitoring of the implementation of the project, capacity building for project staff on topics relevant to the management and implementation of projects and organization of audits. According to the responsible for PROGERT within UNDP, the support of the CAP has been very effective in ensuring compliance, transparency and efficiency, thus easing the task of supervision of UNDP and accelerating certain procedures. For example, the processing of cash advances can now be completed in 2-3 days.

The National **Steering Committee** (SC) is to provide policy and strategic guidance to the project, oversee the planning, programming and monitoring and evaluation of achievements, approve and validate annual work plans and budgets, progress and financial reports and other reports concerning project implementation, and initiate dialogue and consultation between the various partner organizations of the project. The SC was established during the preparatory phase of the project.

The (SC) includes representatives from the following Ministries: Environment (including the Department of Waters and Forests, Hunting and Soil Conservation), Agriculture, Livestock, Hydraulics, Local Collectivities and Decentralization, Economy and Finance (including the Departments for National Planning, Financial and Economic Cooperation and Debt and Investment / CAP), UNDP and GEF/UNDP Coordination representatives, Focal Points of the United Nations Convention to Combat Desertification and of the GEF. It is chaired by the Minister of Environment and Protection of Nature and the PCU serves as the Secretariat. The SC was responsible for meeting every six months. The first SC meeting was held in Dakar after the official launching in October 2007.

The **Scientific and Technical Committee** (STC) has an advisory role and its mission is to provide scientific and technical support to ensure that the project uses best known practices and technologies as regards SLM, provide technical advice on reports and technical products developed by the project and experts as well as on recruited consultants, see to the consistency of interventions with national and international agreements, plans and programs, and participate in monitoring of the implementation of the project. It is expected that the STC meets every two months and as needed upon convocation by the Project Coordinator. The STC was established during the preparatory phase of the project.

The STC is composed of representatives of the following institutions: Ministry of Environment and Protection of Nature, Unit for Studies, Planning and Monitoring of MEPN, UNDP/GEF, NEPAD Secretariat, National Forestry Research Center, National Agency for Rural Cooperation (ANCAR), Institute of

Environmental Sciences (ISE), Centre for Ecological Monitoring (CSE), International Union for Conservation of Nature, and the Focal Point of the United Nations Convention to Combat Desertification. The PROGERT PCU is a member and serves as the secretariat.

The project was implemented by a central coordination unit and local representations housed within Water and Forests regional services. The **Project Coordination Unit** (PCU) housed at the DEFCCS in Dakar consisted of a National Coordinator assisted by full time national experts in the fields of microproject management, participation, monitoring and evaluation, gender issues, an Administrative and Financial Assistant and an Executive Secretary. The National Coordinator had overall responsibility for the implementation of the project. At the regional level, the project was represented by **Project Local Units** (PLU) each under the authority of the Regional Inspector of Water and Forests (IREF) who directed the activities. The latter was assisted by a research assistant, hired by the project, and other agents of the inspection. At the local level, Heads of Sector (Department) and the Heads of Brigade (District) of Water and Forests were also involved in the project activities. The PROGERT was thus fully integrated into the institutional structure of the Directorate of Water and Forests, top to bottom.

7.3 Country ownership

7.3.1 Consistency with national priorities and sectoral and development plans

The project concept was developed in accordance with national environmental and development interests, and its results are still consistent with current national priorities.

- **UN Convention to Combat Desertification**. The PROGERT is in line with the PAN / LCD and is a strategic response of Senegal to the implementation of the Convention.
- **UN Convention on Biological Diversity**. The project supports the Senegal to meet many of its obligations under the ratification of the Convention by the restoration of natural ecosystems (reforestation, enclosures and assisted natural regeneration, DRS / CES techniques, management plans for community and classified forests)
- **UN Framework Convention on Climate Change**. The project also supports the Senegal to respect its commitments towards the Convention by the use of mitigation and adaptation strategies (reforestation and restoration of soils, choice of crop species or varieties and of technologies adapted to drought and climate variations).

MDGs. The project supports the country to achieve its objectives in the context of the MDGs, including MDG 1 (Eradicate extreme poverty and hunger), 3 (Promote gender equality and empower women) and 7 (Ensure environmental sustainability). Promotion of IGAs, particularly through microcredit for the most vulnerable (women) fits into this perspective.

In addition, the PROGERT sought from its conception to integrate the various national priorities and development plans relevant to its areas of intervention.

The project is consistent with the national priorities stated in two documents that provide a framework for economic and social development:

- The **Poverty Reduction Strategy Paper 2006–2010** aims to create wealth for a pro-poor growth (axis 1) and the fast promotion of access to basic social services, in particular by strengthening and enhancement of human and natural capital (axis 2).
- The **Economic and Social Policy Document 2011–2015** which is largely based on the PRSP includes a Priority Action Plan on the Development of Rural Economy focused on increasing agricultural production through sustainable management and restoration of degraded land, the rebuilding of seed capital and equipment in rural areas.

The PROGERT is also in line with:

- The **Letter of Environmental Policy** (2004) which advocates, among others, habitat conservation, valorization of forest products and the fight against land degradation by DRS/CES operations and development of agroforestry.
- The **Law of Agro-forestry-pastoral Orientation** (2004) which one of objectives is the development of agribusiness, to facilitate large investments that provide rapid and significant changes in the field of SLM and increase of incomes. Promoting private CEVs would fall within this perspective.
- The **Laws of Decentralization** (96-06 and 96-07 of March 22, 1996) transferring 9 areas of competence, including on the management of the environment and natural resources to local collectivities. By involving and empowering the local collectivities, the PROGERT supports the application of these laws.
- The **Forest Code** (Law 98-03 of January 8, 1998 and its decree of application), particularly with regard to the involvement of local collectivities and of populations, the requirement for participatory management of forests, the establishment of community forests, the concerted fight against bushfires and the sharing of benefits from forest resources.

7.3.2 Involvement of relevant country representatives from government and civil society

The Government involvement in the PROGERT is a demonstration of its support to this project's development objectives. Several departments and structures of civil society were involved in the design and implementation of the project:

- The MEPN Cabinet developed texts relating to the project instances (tasks and operation of the PCU, PLU, SC and STC);
- Services of the Ministry of Economy and Finance (DPN, DCEF and CAP) provided the supervision of the implementation, particularly with respect to financial monitoring;
- DEFCCS (MEPN) involved its structures and staff at all levels to accommodate the project, and also made available infrastructure, equipment and vehicles to the project for its proper execution;
- CSE (MEPN) conducted background studies for the baseline, trained PROGERT officers in the areas of monitoring and evaluation (GIS and SYSRI) and assessing land degradation (including through the LADA project);
- INP (Ministry of Agriculture) conducted soil surveys as part of the work on the baseline;
- ISRA (Ministry of Agriculture) helped with the design and implementation of CEV;
- Agriculture Department and ANCAR (Ministry of Agriculture) have contributed to CEV, to validate technical studies and to defining orientations;
- Livestock Department (Ministry of Livestock) and PAPEL project have helped to establish pastoral units and forest enrichment with forage species;
- ADT-GERT and Green Senegal NGOs have applied their experience in the implementation of soil conservation measures, reforestation and improvement of soil fertility;
- CAURIE MF supervised the financing of micro-projects;
- and the Environmental Protection Association "Acting for a Sustainable Africa" raised awareness for the protection of nature and promoted the activities of the PROGERT.

7.3.3 Government approval of policies in line with the project objectives

Securing village communities investments. The project supported the process for the revision of the Forest Code, particularly on two points, the legal recognition of local conventions and contracts of culture. The adoption of the proposed amendments would help to secure the huge investment in time, effort and financial resources provided by the communities in this project - and related gains.

Local conventions for NRM in UP are comanagement protocols between State services and the inter-village development committee representing the villages involved. These codes of conduct established by

consensus among concerned communities are adopted by the Rural Council, validated by technical services, and approved by a State representative, the Sub-prefect or the Governor, making them legitimate but not legal. The project supported a national consultation and an amendment proposal was formulated and submitted to legalize local conventions. Due to the change of government, the proposal has not been adopted yet.

Some projects, including PROGERT, involve communities in the implementation of the classified forest management plan through cultivation contracts. These contracts to enrich forests or reforest with valuable species are established between the Water and Forests Department and local collectivities, and the terms for awarding are defined by decree (Article L15 of the Forest Code). In accordance with Articles L8 and L16 of the Forest Code, local governments may in turn designate persons or entities (villages, groups or individuals) and entrust them with the implementation of work on allocated plots through cultivation contracts. Now, under Article L17 of the Forest Code, these contracts have a limited period of maximum 3 years. The fact that investments in labor and resources of village communities are not secured on public lands makes the communities benefits more precarious in the event of development pressures or any other pressure that would change the vocation of this land. Defining the terms and conditions of contracts between the local governments and populations should consider these risks and protect the interests of the populations.

Gender equity. The project, through the CQGs, supported advocacy for women's access to land, and in several CR, collective cultivation plots were granted to GPFs. Even if the law on the National Domain (Act No. 64-46 of 17 June 1964) and its implementing regulations (in particular the decree of 1972 relative to CRs) do not discriminate against women, the common practice and tradition tend to exclude them. The collective allocations by the CR are certainly an improvement over the situation that has prevailed so far, but to seek greater equity, it would be necessary to help women heads of households to benefit from individual plots.

7.3.4 Government's financial commitments

Until September 30th 2012, the Senegalese Government's cash and in-kind contribution amounted to 1,844,381 USD, including 248,000 USD for the preparatory phase (PDF). In-kind contributions include the premises at the disposal of the project coordination unit and the five local project units, including water and electricity, support staff, and the vehicles made available to the project by the Water and Forests Department. In total, these contributions represent 132 % of the contribution planned in the project document and are a demonstration of the government support for the successful implementation of this project.

7.4 Stakeholders involvement and synergies

The PROGERT has been an innovative project in Senegal. This is one of the pioneering projects in land degradation, distinguished by the fact that it was more focused on people's needs, especially women, regarding the selected crops, and more focused on agricultural potentiality for the benefit of farmers. Beneficiary participation is thus an essential dimension of its design and its implementation.

7.4.1 Stakeholder participation in design stages

Senegal has received financial support from the GEF and from UNDP (PDF B) from 2005 to 2007 which allowed, through a preparatory phase, to conduct the participatory formulation of the project. During this phase, several activities were conducted with the participation of many actors at national, regional and local levels.

National level

- Within **MEPN**, the Ministry's cabinet assured the establishment of the project bodies (PCU, PLU, SC and STC)[20]. The DEFCCS / PCU played a pivotal role in launching the preparatory project, the provision of

[20] Ministerial order of MEPN (2005) for the creation, organization and operation of the PROGERT

infrastructure and equipment, the establishment of partnerships (NGOs and technical services), the inception of work (determining the baseline, SLM pilot actions), development of the project document (consultants studies, workshops and synthesis, project document by an international consultant), and mobilization of required co-financing. PGIES provided support by sharing experiences. CSE provided support for the establishment of the baseline (mapping, methodological approach).

- The CAP within the **MEF** has supported the finalization and signature of the project document.
- ISRA, INP, ANCAR and Agriculture Department of the **Ministry of Agriculture** participated in field test experiments (soil, vegetation and crops), and supported and validated technical studies. INP has established the baseline for soil conditions.
- Department of Livestock and PAPEL project of the **Ministry of Livestock** participated in field test experiments, and supported and validated technical studies.
- **UNDP** has contributed through its financial and technical support, follow-up and validation of work on the development of the project document to ensure compliance with UNDP and GEF requirements.

Regional level (Diourbel, Kaolack, Fatick, Louga and Thiès)

- The IREF (PLU), ADT-GERT and Green Senegal NGOs, and the Regional Technical Services helped to identify and carry out pilot actions in the field, raise awareness and mobilize local actors, and to do the M&E of field activities.

Local level (intervention sites)

- Local collectivities, CBOs and populations helped by sharing experiences with technicians and among populations and participation in pilot projects in the field.

Participation of all stakeholders in the design process of the project allowed: i) making a more credible diagnosis, ii) raising awareness and identifying problems and real needs, iii) sharing different solutions with all stakeholders, iv) retaining best practices to build the project on solid foundation, and v) creating from the beginning a wide synergy between communities and other stakeholders.

7.4.2 Local resource users' participation to project implementation and decision-making

One specific feature of this project, as noted by the IREF in Thies is its systemic approach to participation: the project has taken into account all stakeholders likely to have stake in the issues of restoration of land and natural resources, starting with village communities who use resources. The project adopted an integrated approach requiring the empowerment of people and contributed to this mobilization by informing, educating and training involved community members who now know how to respond to their problems and seek NGOs and state services to help them find solutions. The appropriation of new methods and practices is based on populations' open-mindedness which arises from the fact that the project has engaged them in the reflection process so they felt involved in identifying problems and implementing solutions.

The approach adopted by the project has thus helped build capacity and empower local people by involving them in the identification of problems of land degradation and potential solutions, in the decisions to implement practical initiatives and in the identification of community groups to carry out the action programs.

7.4.3 Linkages between the project and other interventions in the sector

The project design recognizes that considerable efforts have been invested in Senegal and elsewhere in the areas of sustainable agriculture, sustainable pastoralism and sustainable forestry and that appropriate solutions already exist and should be valued and brought to scale. Ongoing projects have been identified to provide appropriate and field-validated technical solutions in sustainable management and restoration of land. The PROGERT has thus established numerous partnerships with other projects or programs operating in the same area during its preparatory phase and implementation. The collaboration of the

PROGERT with other projects working in the same field and implemented with the support of UNDP under the NEX mode was facilitated through coordination work done by the CAP.

PGIES During the design phase, those responsible for the PROGERT visited all sites of the PGIES to learn from the experiences of this project whose specific objectives are similar and which covers the various ecosystems of Senegal. An exchange visit in December 2007 in one of the areas of intervention of PGIES allowed research assistants to visit community nature reserves and to discuss local systems of funding, organizational aspects and constraints in the implementation of interventions. Some studies and the development of management plans for Pakane and Missirah watersheds located respectively in the rural communities of Medina Sabakh (Nioro) and Toubacouta (Fatick) were carried out in partnership with the PGIES.

LADA This project, implemented by the CSE, focused on the same themes as the PROGERT and the Groundnut Basin was one of its study sites. The Coordinator of the PROGERT was also a member of the LADA task force. He participated in the development of methodological tools and frameworks, which allowed him to adapt them to the context of the PROGERT. Project staff also participated in a regional training provided through the LADA which included representatives from Mali, Burkina Faso, Niger and Senegal.

Other collaborations have been established with:

- the Project to Support Forest Development for technical support on the supply of seeds and nursery development, as a cofinancing to the PROGERT,
- the Project to Support Livestock, for delineating UPs and enriching courses with forage plants, especially in the rural community of Keur Momar Sar, as a cofinancing to PROGERT,
- the Arabic Gum Project for support in the field of reforestation and RNA, including in Thiékène Ndiaye,
- the Integrated Forestry Development Project for technical support on DRS / CES, particularly in the department of Nioro Rip (Kaolack), and the training of three officers of the Fatick, Kaolack and Diourbel PLUs on bund techniques,
- ADT GERT NGO for CES interventions in Dakhar Mbaye on the plateau of Thies, as a cofinancing to the PROGERT - the NGO's mission is to restore the condition of soil and natural resources in the terroir of the Thies plateau where several major rivers that feed cities around the plateau, including Dakar, take their source,
- the Project to Support Small Local Irrigation aimed at the restoration of degraded land and improving the living conditions of populations in rural communities, for making impoundments, as in Boyard (Fatick),
- the Program TOKTEN to assess carbon stocks sequestered in the sites of the PROGERT with a view to eventually implement a program of financial valorization through the carbon market.

The Research Assistant in the region of Fatick participated in meetings with ISE as part of its research program undertaken in the region to develop a collaborative work on carbon sequestration.

7.5 Participation and advancement of women

The main beneficiaries targeted by the project are the populations and CBOs and, according to the proposed landscape approach strategy, it is stated that special attention must be paid to women and young people who are the most active part. The project has thus involved women in SLM activities on an egalitarian basis and in relation to their specific concerns. In addition to interventions aimed at reducing their tasks (improved stoves, mills, huskers) and increasing their revenue (IGA development), the project has highlighted the effective participation of women in productive activities and soil restoration. The project worked especially by removing constraints that limit their participation in SLM activities as regards access to land, technical training and equipment, and access to credit and its management.

Commitment and perseverance of women will have been critical success factors in achieving significant and tangible results. Unfortunately, the project has not adopted indicators disaggregated by sex to

distinguish the effects of the project on women. However, field visits revealed the strong involvement of women in activities and to note down the number of members involved in the microcredit system (Table 10).

The approach adopted by the project was particularly relevant since women are generally more affected by the degradation of natural resources due to the distribution of tasks within the household (collection of dead wood, picking forest fruits, fetching water, etc.). They are also more affected by poverty and generally do not have control over household resources. Their situation is all the more difficult they usually do not have access to land, also controlled by men. This vulnerability makes them more sensitive to the specific objective of the project which is to help restore degraded lands and fight against poverty, but also more likely to benefit from it.

Table 10. Membership of groups in 11 sites visited by the mission (of 15)

Locality	Women	Men	BV and/or PIM	Observations on participation of women, men and youth
Dakhar Mbaye	20	15	BV	Men and women work together in the NRM/SLM
Ngoundiane	400	n.d.	----	A few men support
Ndiongué Fall	100	---	BV and PIM	3 to 4 men support the GPF
Thiékène Ndiaye	135	---	BV and PIM	Men are not involved
Keur Momar Sarr	n.d.	n.d.	---	The project works separately with men and women in NRM/SLM
Khokhé	61	n.d.	BV	Youth working with the project in NRM / SLM
Tock Ngol	37	---	BV	Men participate in the NRM/SLM
Keur Bame, Keur Ngoor	90	70	PIM	Men and women work together in the NRM/SLM
Keur Yoro Soumbou	n.d.	n.d.	---	Men and women work together in the NRM/SLM
Koutal Ouolof	145	---	BV and PIM	1 man supports the GPF
Mbamane	70	60	---	Men and women work together in the NRM/SLM

n.d.: not documented

Impact of project interventions for the promotion of gender equality. Through awareness raising conducted by the project during local workshops, radio and television programs broadcasted at the regional and local levels and advocacy done by CQG, women spoke in meetings and participated in decision making, which has allowed to take into account their demands in the budget and encouraged the adoption by CR of deliberations to grant land to groups of women. Since 2011, some women sit on domanial commissions for the allocation of land. Whereas before poorer quality plots were allocated to women, they now have access to plots closest to houses as well as plots with good soil quality.

Based on women's account, income enabled them to share the responsibility of their household, to cover the costs of tuition, to purchase medication, clothing for children, school supplies, seeds and food for the transition period, to establish a small herd (Tock Ngol) that serves as risk insurance, and set up tontines to make individual loans for solidarity/support to other women in their group who do not already have access to credit.

The IGAs implemented in the project have developed a greater cohesion and solidarity within the groups involved. One of these groups told us they met once a year before joining the BV and they now meet twice a month. The project experience has changed their minds on the need to group together to find solutions to the problems they are facing. By developing consultation between them, women have also developed greater confidence among themselves, allowing them to discuss everyday problems in areas other than NRM. Support from CAURIE-MF through structured meetings and the imposition of a certain discipline has increased their organizational dynamics. The experience gained through IGAs, dissemination of improved stoves and credit supervised by CAURIE-MF has developed in some of them a reflex of saving to reinvest and the emergence of an entrepreneurial mind.

Despite some regional differences related to religious pressures, interventions in the project have developed in communities, especially for women, a sense of confidence and of having a better control over their quality of life.

7.6 Communication and information dissemination during project implementation

Communication within intervention sites. Information dissemination may serve various purposes, namely enhancing project coordination and efficiency among implementing partners and between local and central levels, and fostering local stakeholders and public participation through developing their common understanding of the issues and ownership of the resources.

The project recognized communication as an essential tool for dialogue, consensus building, negotiation and coordination between the different partners. A communication strategy has been designed with the following objectives: institutional (between the project and its partners), educational (training in SLM) and social (based on the social structure of the village). Its formulation is however conceptual rather than directed towards action. An example of a strategic communication plan structured according to its practical implementation is presented in Appendix 8. Such a plan should include objectives, particularly in terms of information, project internal communication and external communication with national and international partners, identification of target groups, key messages that should be sent to them, preferred means of communication to reach target partners, and frequency of messages. The plan should also include a list of recipient addresses where appropriate, a timetable for communication and identification of resources and facilities required to implement the plan.

Initiatives undertaken by the project include the production of articles, the establishment of partnership protocols with community radio stations or television producers and with associations.

- The topics covered in the articles published in major print media (Le Soleil, Sud Quotidien, Wal Fadjri and a website, Senegal-Environment) include project activities (launching of activities, information on achievements) and natural resources management. Educated urban public is the main target audience.
- Partnerships have been established with three community radio stations and producers of television programs broadcast nationally. The three community radio stationscover each a portion of the project area and the the topics covered are land degradation, activities and results of the project. Emissions are generally for a period of 45 minutes and allow for interactive discussions in local languages (Wolof, Serer and Peul, depending on the area). Populations in the area of the project intervention sites, particularly those involved are the target audience. Television media (Senegalese Radio Television, Wal Fadjri and the Audiovisual unit of the Ministry of the Environment) aired nationwide information in French or Wolof on the project, its activities and results, for authorities, partners and citizens.
- Agreements have been made with cultural or environmental protection associations, at the time of major events (World Environment Day and World Biodiversity Day) to raise public awareness, especially of young people, on the degradation of the environment and on the achievements of the PROGERT.

The effect of these initiatives has not been evaluated, but according to project staff, they helped raise awareness about the PROGERT and its achievements i) locally, which likely contributed to the awareness and mobilization of villagers around operational sites, ii) at regional and national scales where, in association with exchange visits, they have greatly enhanced the interaction between actors. As examples in terms of impact, we can highlight the virtual disappearance of bushfires in the rural community of Keur Momar Sar (Northern Louga) or restoration of degraded land in Ngoundiane near Thies, through the dissemination of good practices such as soil amendment with peanut shell. Collaboration with foreign media such as the television channel France 3 has raised awareness of the PROGERT on the international scene.

Communication at the national level: The project participated to the financing of 2011 World Day to combat desertification celebrated in Dakar as part of the celebration of the first African Drylands Week. The project has also participated in the World Environment Day in Mbao (Dakar), at the Seventh Congress and Scientific Symposium of the "Most Beautiful Bays in the World" in Toubacouta / Fatick and to the National Day of the Tree celebrated in Loul Séssène (Fatick).

Communication at the international level: The PROGERT coordinator has been designated as a member of the Senegalese Delegation participating in the United Nations Forum on Forests in New York in

February 2011 and in the 10th Conference of Parties to the UNCCD held in Changwon, South Korea from 10 to 21 October 2011.

7.7 Work planning

The project adopted a bottom-up planning where the Annual Work Plan (AWP) was developed based on the needs expressed by the populations in the intervention sites, in line with priorities identified in the PLDs. Items were then carried forward to the level of the Groundnut Basin administrative regions, after checking their consistency with the Integrated Regional Development Plans (PRDI). A selection performed according to the financial and technical capacity of the project to meet local needs led to the establishment of the Regional AWP which was integrated into the AWP for IREFs and in Regional Council's AWP. What the project could support was then synthesized by the national coordination of the project. The organization of a national workshop to develop the AWP was an opportunity to arbitrate in the presence of all partners including UNDP and the MEF to ensure consistency of planned interventions with targets identified in the project document and the priorities of each region, and according to available resources. The STC reviewed and consolidated the draft document and the SC validated it. The document was then submitted for signature to the Minister of Environment or his representative, and countersigned by the UNDP Resident Representative. The whole process would take approximately three months.

7.8 Financial planning and co-financing

7.8.1 Financing plan and actual contributions

The total project budget is USD 14,717,649. Planned contributions from various partners as indicated in the project document, added to contributions for the PDF phase, are provided in Table 11 and compared to paid contributions as of September 30th 2012.

Table 11 indicates that the payments made as of 30th September 2012 are 10 % lower than planned contributions as stated in the project document, including contributions to the preparatory phase.

GEF. The GEF contributions amounted to 4,005,728 USD, which represents 30.2 % of the total project cost. Cofinancing represents 69.8 % of the total cost. According to the budget presented in the project document, planned GEF contribution represented 27.2% of the total budget, and cofinancing, 72.8%. The difference is minor and mainly related to lower contributions from the private sector and projects.

UNDP. The total contribution of UNDP is US $ 556,526, or 82% of the contribution pledged for the project and its preparation. The contribution for the preparatory phase was only 56% of the promised amount and it was not possible to know the reason since it is not documented and the responsible involvement of the current project within UNDP is recent. The contribution for the implementation of the project was 91.3% of the contribution pledged, as of 30 September 2012. It is likely that this proportion will near 100% after the expenditure related to the final evaluation of the project will have been incorporated.

Government. Until September 30th 2012, the Government's cash and in-kind contribution added up to 1,844,381 USD which amounts to 132 % of the contribution pledged according to the project document. In-kind contributions include the premises at the disposal of the project coordination unit and the five local project units, including water and electricity, support staff, and the vehicles made available to the project by the Water and Forests Department. DEFCCS state services were actively involved in every activity of the project, and thus represent a significant part of the Government's in-kind contribution.

Table 11. Project financing plan and actual contributions from partners as of September 30th 2012 (USD)

		GEF	UNDP	Government of Senegal	Local collectivities	Local populations	NGOs	Bi- and multilatéral projects	Private sector	TOTAL
Planned PDF	**cash**	350,000	180,000	0	-	-	-	-	-	530,000
Planned project	**cah**	3,655,728	500,000	623,000	48,889	-				4,827,617
	parallel						300,000	6,749,920	1,157,000	8,206,920
	in-kind	-	-	778,112	-	-	375,000	-	-	1,153,112
Total planned		4,005,728	680,000	1,401,112	48,889	0	675,000	6,749,920	1,157,000	14,717,649
Paid PDF		350,000	100,000	248,000	-	-	-	-	-	698,000
Paid project		3,655,728	456,526	1,596,381	302,794	546,770	841,443	4,388,835	797,268	12,585,745
Total cost 09.30.12		4,005,728	556,526	1,844,381	302,794	546,770	841,443	4,388,835	797,268	13,283,745
	%	100%	82%	132%	619%	-	125%	65%	69%	90%

Local collectivities. Contributions of local collectivities, particularly rural communities, are much higher than what was planned (more than six times the amount expected) and demonstrate the commitment of local governments to the project objectives. Rural communities have been involved in almost all field and planning activities. Presumably, this increased mobilization relates to the consistency of the solutions proposed by the project with the priorities identified in local and regional development plans with the assistance of the project.

Local communities. Local communities participated in the project through contracts-plans and on a voluntary basis, according to their perception of the benefits they could derive from it. In-kind contribution of local communities was not estimated in the project document although the achievement of large part of the results rests on their active participation. It was thus decided to provide an estimation of this essential contribution in the TE report to reflect the beneficiairies investment in the project activities, without which most project results would not have be attained.

In-kind contributions of local communities were estimated at USD 546,770, or more than 4% of the total investment. These contributions include participation to updating of the 11 PLD, participation in 12 frameworks for consultation, restoration activities of 1,855 ha of land through RNA, development of CEV over 200 ha, CES / DRS and agroforestry activities on 1,339 ha, restoration of salinized land 538 ha, setting up of three nurseries and production of 1.5 million seedlings, development of forest management plans covering more than 3,000 ha, enclosure of 411 ha of fields and forests, establishment of pastoral units covering a total area of 95,457 ha, enrichment of rangeland on 800 ha and planting of tree fodder species on 200 hectares, and mechanical and manual clearing of firebreaks firewalls over 471 km.

Projects. Projects parallel contributions, significantly lower than what was anticipated at the time of project development (65%), contributed to the development of management plans, restoration of salinized land, CES/DRS activities, enrichment of rangelands and establishment of local frameworks for consultation.

Leveraged funds. The information collected did not show that additional resources had been mobilized by new partners during the project. However, the project's achievements have attracted the attention of the Secretariat of the United Nations Convention to Combat Desertification and of the United Nations University who funded the participation of the Project Coordinator in international workshops on the

definition of impact indicators of the implementation of the Convention. For the same reasons, the participation of project members in national and international workshops was also supported by the Inter-State Committee to Combat Drought in the Sahel and by partner projects such as the Project for Improvement and Valuation of Forest Ecosystem Services in Senegal and the Program to Support the mainstreaming of Adaptation to Climate Change into Sustainable Development in Senegal.

7.8.2 Cost of main achievements

Table 12. Cost (FCFA) of main achievements

Description	Unit	PROGERT unit cost	Average national unit cost	Ratio PROGERT cost / average national cost	Physical achievements	Financial achievements	Technical support from State services	Populations in-kind contribution	Rural communities cash and in-kind contribution	Parallel cofinancing from development projects	NGOs in-kind contribution
		FCFA	FCFA			FCFA					
1. Protection of natural regeneration	Ha	3,235	20,000	16 %	1,855	6,000,000	x	x	x		
1. Seedling production	seedling	35	100	35 %	1,555,762	54,451,659	x	x	x		
1. Nursery development	nursery	2,000,000	4,000,000	50 %	3	6,000,000	x	x	x		
1. PLD updating	PLD	2,899,727	5,000,000	58 %	11	31,897,000	x	x	x		x
1. Ecologically viable fields	Ha	126,405	500,000	25 %	202	25,596,942	x	x	x		
1. Reclamation of salinized land	Ha	32,550	500,000	6 %	538	17,511,869	x	x	x	x	
1. Agroforestry & CES/DRS	Ha	18,629	400,000	5 %	1,339	24,940,766	x	x		x	x
2. Enclosures	Ha	48,737	400,000	12 %	411	20,006,356	x	x	x		
2. Development of management plans	Ha	7,445	50,000	15 %	3,034	22,587,450	x	x	x	x	
2. Setting up pastoral units	Ha	133	NA	-	95,457	12,720,522	x	x	x		
2. Enrichment of livestock corridors	Ha	25,179	300,000	8 %	800	20,142,939	x	x	x	x	
2. Pond scouring & management	study	4,000,000	8,000,000	50 %	2	8,000,000	x		x		
2. Corridor maps	map	1,052,656	4,000,000	26 %	4	4,210,622	x				
2. Fodder tree planting	Ha	26,613	50,000	53 %	200	5,322,569	x	x	x		
2. Mechanical clearing firebreaks	Km	108,927	400,000	27 %	376	40,956,445	x	x	x		
2. Manual clearing of firebreaks	Km	172,421	200,000	86 %	95	16,380,000	x	x	x		
5. Frameworks to support coordinated action	framework	1,411,180	2,000,000	70 %	12	16,934,159	x	x		x	x

Table 12 compares the cost of outputs achieved by the project with the average national cost for the same achievements by other actors. For all achievements, PROGERT average unit cost is lower and represents only 6% to 86% of the national average unit cost. The high efficiency of the project results is due to the active involvement the decentralized services of the State and rural communities (the latter having also contributed financially), voluntary contributions from populations and NGOs, and partnership with other development projects to implement certain actions. Le tableau 12 indique les contributions particulières à chacune des réalisations qui expliquent, du moins en partie, les coûts avantageux du projet. Une autre explication de l'efficience des réalisations peut concerner le faible coût des intrants, notamment pour la restauration des terres salinisées avec les coques d'arachide. En vue de la réplication des solutions développées dans le cadre du projet, ces résultats étonnants méritent d'être documentés davantage. Table 12 shows the specific contributions to each achievement that explain, at least in part, the advantageous cost obtained by the project. Another explanation for the efficiency of achievements may relate to the low cost of inputs, namely the restoration of salinized land with peanut shells. With a view to replicating solutions developed in the project, these astounding results deserve to be further documented.

7.8.3 Financial management

Each quarter and year end, the project prepares technical and financial progress reports (financial statements in local currency) and submit them to the CAP for verification of compliance, and to UNDP and the Department of Water and Forests. The CAP supported the PROGERT to develop work plans, budgets and annual and quarterly statements of expenditure, verification of compliance and processing of requests for cash advances, according to a procedure manual developed specifically for the needs of the project.

The main difficulties encountered at the start of the project were related to the slow disbursement of startup funds, delaying the establishment and operationalization of PLU offices and field trips needed during this initial phase, despite the support of IREF on this aspect. Other difficulties were encountered at the end of the project and are described in the paragraph about Revision D.

Budget revisions. Three budget revisions have been made during the implementation of the project (A budget is the original budget).

Revision B was required to take into account the fact that the project had started in the last quarter of the year and reframe the budget based on this interval. At the same time, unplanned activities were carried out to support the start of the project, the annual work planning workshop and the sharing of project objectives with the team and direct partners of the project.

Revision C was required to account for the reprogramming of activities that had been planned for 2008 and for activities that were carried out without being planned in the 2008 budget, such as the acquisition of vehicles (command launched in 2007 and effective in 2008), the consideration of gender, the study on sustainable financing mechanisms for land management, a training session and the national workshop on decentralization and sustainable land management.

Revision D: The preamble to the 2012 AWP revealed that verifications made on the basis of the CDR showed losses amounting to 62,140.87 USD relative to the overall budget of the GEF funds. In view of this situation, UNDP has increased its contribution by 10,000 USD; the contribution of the State remained the same for 2012. To comply with these changes, the PROGERT's 2012 AWP which had been validated in February was revised.

Project staff explained that these losses were caused by the differences between the exchange rates prevailing at the time of the financial planning of the project and the rate following the financial crisis of 2008. It remains surprising that this loss was only seen at the end of the project. A one-off delay in the transmission of information on losses caused by the difference in exchange rates between the project and the UNDP in 2008 or early 2009 seems to have prevented the necessary corrections at the project level before the end of March 31 (after which corrections are not possible). Indeed, at the end of each year, the project prepares its financial statements in local currency and submits it to the CAP and UNDP for verification. UNDP then communicates to the project the Combined Delivery Report (CDR), which takes

account of expenditure incurred at its level, and the exchange rate that should apply. After receiving the CDR, the project must make adjustments accordingly and reprogram the balance in the budget of the following year. Now the CDR for 2008 had been adjusted at the level of UNDP, but due to delays (after the deadline of 31 March), it has not been adjusted at the project level. It was not until July 2012, when requesting the remainder of the grant from the GEF that it was found that the adjustment had not been made.

The SC held a meeting on July 12, 2012 which centered on validating the AWP revised to reflect the lower availability of funds of nearly 40 million FCFA.

7.9 Challenges and constraints faced by the project

The difficulties the project faced are mentioned in the relevant sections to explain some weaker aspects of the project. Here they are again in a separate section.

Financial management. Difficulties at the start of the project were related to the slow implementation of start-up funds delaying the establishment and operationalization of ULP offices and field trips needed during this initial phase, despite IREF support on this plan. The operationalization of the CAP has increased the efficiency of fund management.

Other difficulties encountered at the end of the project were related to communication problems between UNDP and the project on the actual balance in U.S. and national currency. Confusion on the actual balance affected the programming of activities at the end of the project, including the measurement of outcome and impact indicators.

Monitoring and evaluation. It was intended to document the vegetation cover, soil conditions, certain socio-economic conditions and carbon sequestration at the end of the project to highlight these effects and impacts but these indicators were not measured. Financial constraints at the end of the project and the absence of the responsible for the M&E from early June to mid-October 2012 for health reasons explain this gap.

Instability of the composition of the staff of decentralized departments. Following the change of government, many officials were transferred. For instance, in Thies, the entire team of Water and Forests has been changed at the levels of the region and the department. These changes made for political reasons reduce the impact of the project on capacity building in partner institutions.

Changes in the institutional supervision of soil conservation. The Directorate of Water and Forests, Hunting and Soil Conservation who was the anchoring institution of the project was divided in two in early 2011, shortly before the *alternance*. The supervision of Waters, Forests and Hunting has been entrusted to the Ministry of the Environment and the Conservation of soil, to the Ministry of Agriculture. While the entire structure of the project (heads and staff of the ULP) remained under the Directorate of Water and Forests, the project was transferred to the Directorate of Soil Conservation. The SC then took the decision to keep the arrangement as established according to the principle of collaboration and Inspectors of Soil Conservation were associated with the IREFs. Following the presidential elections, all the offices were merged again under the DEFCCS.

7.10 UNDP supervision and backstopping

In accordance with the national execution implementation mode, UNDP's support to PROGERT, through CAP, included contributing to develop the project and draft the project document following GEF requirements, hiring the National Project Coordinator, guiding the project for the recruitment of staff and advisors, helping the PCU through project start up and execution, providing guidance on UNDP and GEF procedures and requirements namely for reporting, participating to PSC meetings and support the organization of MTE and TE. UNDP, with the support of CAP, ensured that adequate financial resources were made available on an ongoing basis through administering the payment of advances. UNDP also supported tendering of international contracts and procurement of equipment.

UNDP representative visited the project sites in November 2007, November 2008, October 2010 and December 2011.

8 LESSONS LEARNED

L 1: One innovative aspect of this project is its strong **institutional base** and **horizontal management** (coordination rather than direction) adopted by the project coordinator, which allowed Water and Forestry officers at all levels to fully play their role in the proposed models of intervention. For instance, in the awarding of contracts to NGOs, contracts were signed by the Inspector on behalf of the project and the coordinator was only stamping it. This strong base has certainly contributed to the magnitude of the project achievements as it allowed a close supervision and an efficient coordination of a variety of interventions. The cost of these achievements would have been much higher if they had been assigned to an external body. Anchoring the project in the technical services has presented definite advantages in terms of ownership of the proposed solutions and of associated successes, as well as in terms of capacity development, as many favorable conditions for the sustainability of project results.

L 2: The project has chosen to adopt an **approach driven by farmers' demands**. Responding to the needs expressed by the villagers has been an important motivation to involve and commit them to actions promoted by the project. Selected activities have not only led to a rational and sustainable management of land, but also led to an improvement of the social (greater equity for women) and economic (improved revenues and means of production) situation of involved populations.

L 3: One outcome of the project is to have developed the sense of **responsibility of beneficiaries** towards the quality of the environment where they live and carry out their occupations by informing and educating people but also by entrusting the implementation of activities to them. As they have the full responsibility for the activities, people are in a position to take the full measure of the success (or failure) of interventions, but more importantly, to appropriate it and to do the related learnings. This sense of responsibility should favour the sustainability of the involvement and commitment of village populations.

L 4: The partnership with Caurie MF proved to be a wise choice to facilitate **access to microcredit** for rural populations for the development of IGAs. On the one hand, the mission of Caurie-MF (including targeted beneficiaries in rural areas) is fully consistent with the objectives of the project in terms of poverty reduction and the cooperative has agreed to integrate SLM and NRM criteria for the identification of IGAs it has supported. On the other hand, this partnership has avoided certain pitfalls sometimes encountered in development projects that engage in microfinance:

c) In some projects, financial mechanisms are developed with a view to be managed by CBOs established by the project which rarely have the competence required to pursue the management and services autonomously when support ends. Founded in 2005 and established as a savings and credit cooperative in January 2009, Caurie-MF experienced strong growth of its operations and credit portfolio (no credit risk). Thanks to its experience and quality of management, Caurie-MF obtained a rating of excellence for transparency and is the only African institution to achieve a B rating awarded by a global platform, the Microfinance Information Exchange.

d) The adventure of microcredit does not always live up to its promises of prosperity, especially when loans are used to finance activities that do not generate profits (it can be difficult to repay the value and accrued interest at the date of repayment of the loan) and when individuals borrow increasingly higher amounts from different institutions to repay loans (with interest) previously contracted with other institutions. Yet MF-Caurie only supports productive activities evaluated by feasibility studies and imposes a set of conditions that prevent farmers to get trapped in a debt spiral. In addition, Caurie-MF rests on the establishment of BVs consisting of solidarity groups in which women are bond to each other, thus ensuring a rigorous proximity monitoring.

L 5 As part of capacity building, the project organized **exchange visits** to enable populations, IREF and sector heads, farmers and herders to share the successful experiences carried out in other sites. These visits were an effective and efficient approach for capacity development and dissemination of best practices in SLM and NRM, by exploiting the demonstration effect of achievements and associated benefits

to raise the motivation to adopt the same approaches, and through the exchange of technical knowledge among participants.

L 6 Dissemination of improved stoves. The project has adopted a strategy based on a sequence of actions that has proven effective to promote and disseminate improved stoves in rural areas while generating revenue incentives for GPF: i) raising awareness on energy saving and training women to use improved stoves ii) training artisans in the targeted villages for making stoves from material available in the region iii) giving responsibility to GPF for managing the sale of stoves and donation (grant) of improved stoves corresponding to 10% of households in the village iv) sale of stoves by those responsible at no profit for households in the village and use the revenue to make new orders to meet the demands within the village, v) promotion and sale of stoves in the neighbouring villages with profit.

9 RECOMMENDATIONS

Recommendations include actions to contribute to the sustainability of the project results and for improving or facilitating the execution of similar projects in the future. Depending on issues, the recommendations are addressed to the DEFCCS as the institution in charge of soil conservation in the government of Senegal, to institutions and projects working in the field of SLM, as well as UNDP and the CAP.

On many occasions during meetings with partners and project beneficiaries, people expressed the wish that the evaluation team recommends project to donors to fund a second phase of the project. We believe it is thus necessary to recall the GEF guidelines of 2008 for the preparation of project terminal evaluations (section 1.2: *Purpose of Terminal Evaluations*) which stress that terminal evaluations should not be used as an appraisal, preparation, or justification for a follow-up phase of the evaluated project.

R 1 Transfer of assigned resources. It is recommended to UNDP and/or the DEFCCS to see to the transfer of funds under "assigned resources" to Caurie-MF at project closure, and it is recommended to Caurie-MF to maintain a partnership with DEFCCS to ensure the technical supervision of the IGAs related to SLM and NRM developed in the framework of BVs and PIMs.

R 2 Securing investments of local populations in SLM. It is recommended that the DEFCCS, the National Council for Dialogue and Cooperation for Rural, RCs, environmental NGOs and village associations look into the terms and conditions of contracts, conventions or other forms of agreement that define the rights and obligations of the parties in NRM to ensure that the investment of local populations (in-kind and financial) are secure or fairly compensated in the event of changes in the use of lands they have contributed to improve and that would affect their access to cultivable land of good quality and natural resources.

R 3 Given the large variations in selling prices of natural resources (eg fodder) from one place to another and in order to maximize profits of village communities, it is recommended to projects and technical services to support them in the commercialization and marketing of products derived from the rational use of natural resources, particularly for determining fair and equitable selling prices on the basis of **continuous information about regional and national markets**.

R 4 It is recommended that institutions and projects working in the field of SLM, conservation and NRM add the **drought index as an indicator of impact**. Indeed, the severity of a drought can be evaluated by measuring the deviation of NDVI from its long-term average. The difference between the average NDVI for a given month in a given year and the average NDVI for the same month in recent years is called the anomaly of NDVI. In most climates, plant growth is a good indicator of vegetation stress due to drought and degradation. Today, researchers from NASA and NOAA have NDVI data over three decades on the globe. Comparison of NDVI data of a given month or year with the average over a large number of years will reveal whether plant growth in a specific region is typical or significantly more or less productive and is used as an index drought.

R 5 When Water and Forests services are informed of carbonization or other illegal activities in classified forests by members of village communities who survey these forests, they often do not have the means

to enforce regulations and intervene with offenders. This is a serious disincentive for villagers who are involved in the management of these forests. In order to overcome - *in part* - the problem of staffing and inadequate logistical means in the forestry services, including for the monitoring of forests which is now done on an informal basis by the communities that are involved in their management, it is recommended to DEFCCS to recruit **ecoguards** from communities as auxiliaries to the Forest Service, in accordance with the provisions of Article L57 of the Forestry Code. Issues of recruitment, devolved responsibilities, compensation and institutional authority to which they should report (communities or departments) should be carefully considered.

Project management

R 6 Communication plan. It is recommended that projects adopt a format for a strategic communications plan structured according to its practical implementation to effectively guide and coordinate the actions of communication and follow-up. Such a plan should include objectives, notably in terms of information, project internal communication, and external communication with national and international partners, identification of target groups, key messages that should be sent to them, preferred means of communication to reach them and frequency of messages. The plan should also include a list of addresses, where appropriate, a timetable for communication and identification of resources and facilities required to implement the plan.

R 7 Training on MfDR and SMART criteria. It is recommended that the CAP and UNDP organize trainings on the concepts of managing for development results, on the development of consistent M&E frameworks through the formulation of results and indicators that meet the SMART criteria, and on the importance of establishing baselines for all indicators and targets directly related to the indicators.

Documentation of project experience

R 8 Cost-benefit analysis and economic impact The Mid-term review had recommended the project to document the costs and benefits associated with all types of restoration intervention and sustainable land management. Unfortunately, this recommendation has not been followed. It is here repeated for the Ministry in charge of managing natural resources, the DEFCCS and future SLM projects as this information is essential to support the replication of approaches and techniques developed in the project. In addition, the economic benefits of the project interventions could have been evaluated to document the impact of the project in terms of poverty reduction since this aspect is one of the specific objectives of the project

R 9 Popularized technical sheets To support technical training, disclose and disseminate technologies and approaches validated in the field with farmers in the Groundnut Basin and other regions of Senegal who could benefit, it is recommended to develop illustrated educational materials, accessible to farmers, available in local languages and printed in a page on a durable material.

R 10 Thematic brochures. Numerous experiences of components 1, 2 and 4 of the project are worthy of being documented and shared, such as participatory approaches to the development of management plans for community forests and classified forests, the integration of NRM and SLM concerns in the participatory process for updating PLDs, the various experiences of MED, RNA, CES/DRS and their effects, the experience of BVs and development of IGAs, and the dissemination of improved stoves.

It is recommended to present replicable experiences in a succinct manner (4 pages brochure illustrated with graphs, tables, diagrams and photographs), together with a cost-benefit analysis, including the context, approach, main steps and technical considerations, specific challenges and environmental and socioeconomic effects, to be disseminated to all instances likely to benefit from it, including decentralized services and projects involved in SLM and NRM.

R 11 Compilations The project was designed recognizing that many efforts had already been invested in the field of SLM in Senegal and in similar areas and that solutions were readily available to be adapted and replicated. In the two documents published on the CEV and restoration of salinized lands, a short review of previous experiences is presented. It would have been useful, however, for the project to publish an analytical compilation of the best SLM techniques and approaches that have been experimented in Senegal with an analysis of their applicability to the project sites. This document could

have been useful for the entire scientific and technical community concerned with SLM and NRM and provided the basis for the publication of another document at the end of the project and that could have included an assessment of project experiences, a cost benefit analysis of techniques and approaches experimented and recommendations for adaptation and replication of efficient and effective solutions.

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Project implementation reviews 2007, 2008, 2009, 2010, 2011, 2012

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Appendices

Appendix 1. Project Identification

I. Project Identification

GEF Project ID: 2511
GEF Agency Project ID: 3170
Countries: Senegal
Project Title: Groundnut Basin Soil Management and Regeneration
GEF Agency: UNDP

II. Dates

Milestone	Expected date	Actual date
CEO endorsement/approval		August 21, 2007
Agency approval date		October 1, 2007 (signature of the prodoc)
Implementation start		October 1, 2007
Midterm evaluation		January 2011
Project completion		September 30, 2012
Terminal evaluation completion		December 2012
Project closing		

Appendix 2. Project logical framework (original - from the signed project document)

Results chain	Indicators	Current situation	Targets	Verification sources	Risks and hypothesis
Objectif global Contribuer au développement durable du secteur rural au Sénégal et à la préservation de l'intégrité et de la stabilité des écosystèmes pour assurer la durabilité de leurs fonctions et services					
Objectif Spécifique du projet Catalyser la gestion durable des terres au niveau paysage dans le but de combattre la dégradation des terres et de réduire la pauvreté.	Rendements moyens de mils et d'arachide dans 5 sites (ce faisant pour la restauration de la fertilité des terres arables dans le paysage à travers leur intensification)	Baisse des rendements pour les cultures du mil et de l'arachide respectivement de 1.34% à 3%.	Augmenter les rendements de 10 % dans les cinq sites à l'année 5.	Rapports et sondages	Sécheresse sévère et récurrente Inondation et Péril acridien Réduisent les rendements Les bonnes pratiques sont disponibles et peuvent être codifiées très rapidement et transférées aux bénéficiaires du projet pour leur amélioration
	Expansion agricole dans les forêts et pâturages dans 5 sites	Augmentation moyenne dans les zones cultivables de 19, 68 % depuis les années 80.	Stabiliser les zones cultivables à l'année 4.	Rapports et sondages	Les grands producteurs de même que les petits seront soumis aux codes de conduite.
	Nombre d'hectares de terres dégradées réhabilitées dans 5 sites	Plus d'un million d'hectares de formations forestières et de parcours sont dégradées dans le Bassin Arachidier.	Réhabiliter 60 000 ha de parcours et de forêts à l'année 4.	Imageries satellitaires Rapport du Centre de Suivi Écologique (CSE)	L'établissement des corridors de transhumance et les systèmes de rotations sont acceptés par les éleveurs.
Composante 1 : **Fertilité des terres cultivables améliorée par le développement de technologies novatrices et adaptées.**	Augmentation des rendements et diversification des productions.	Établissement de la situation de référence de la monoculture dès la première année Baisse de la fertilité et faiblesse des rendements pour les deux principales cultures : - Arachide : 1,34%/an - Mil : 3%/an	Augmenter la diversification des productions moyennes par ménage de 50 % à l'année 5. Augmenter les rendements de mil et d'arachide de 10 % à l'année 5.	Rapports techniques Rapports projet	La sécheresse et le niveau d'inondation continuent comme prévu. Les invasions acridiennes sont minimes durant la mise en œuvre du projet.
Résultat 1.1 : L'espace rural est géré de façon rationnelle pour combattre la perte massive du couvert végétal.	Nombre d'agropasteurs ayant adopté et appliqué les nouvelles règles d'utilisation des terres et de préparation des champs.	Incohérence et incompatibilité dans l'utilisation de l'espace dans la plupart des collectivités locales	Assurer la mise en oeuvre de 15 plans locaux de développement élaborés dans les communautés rurales à l'année 4 acceptés par au moins 150 agropasteurs	Rapports annuels de suivi/évaluation	

Results chain	Indicators	Current situation	Targets	Verification sources	Risks and hypothesis
Résultat 1.2 : Des modèles d'intensification agricole durables sont vulgarisés	Nombre d'agropasteurs ayant appliqué les techniques d'intensification durables sur le plan environnemental.	Tendance à une agriculture minière dans le bassin arachidier et faiblesse dans la restitution des éléments minéraux et organiques du sol	- Amener 10 % d'agropasteurs à appliquer les techniques d'intensification durable à travers les services d'extension sur 20 sites couvrant environ 200 ha	Rapports techniques	
Résultat 1.3 : La capacité d'adaptation aux changements climatiques est augmentée.	Nombre d'agriculteurs ayant adopté des techniques culturales de résistance à la sécheresse (labour zéro) comme moyen d'adaptation aux changements climatiques		Amener 10 % de producteurs à adopter les nouvelles pratiques d'adaptation aux changements climatiques à l'année 4 dans les sites choisis.	Rapports techniques	
Résultat 1.4 : Les terres salées sont restaurées.	Nombre d'hectares de terres salées cultivables	389 500 ha de terres salées	Mise en défens participative de 389 500 ha et récupération de 600 ha de terres salées à l'année 4	Rapports techniques	
Résultat 1.5 : Les terres cultivables sont restaurées à travers une gestion intégrée de la fertilité par l'agroforesterie et la conservation des eaux et des sols.	Nombre d'hectares de terres cultivables restaurées		Appuyer 10 % des agriculteurs à appliquer les techniques de restauration couvrant au moins 5000 ha à l'année 5.	Rapports techniques	
Composante 2 : Utilisation des forêts et pâturages rationalisée par la promotion des bonnes pratiques.	Degré d'utilisation des codes de conduite Nombre de plans d'utilisation des terres élaborées et mis au point	Existence de codes de conduite insuffisamment appliqués ou n'engageant pas toutes les parties ;	Appuyer la gestion de 60 000 ha de terres de parcours et de formations forestières sur une base communautaire à l'année 4.	Rapports d'évaluation Images satellitaires Contrats	Conflits fonciers non résolus
Résultat 2.1. Les agropasteurs et les transhumants adoptent des règles et des technologies durables pour l'utilisation des terres de parcours.	Nombre d'hectares de terres pastorales délimitées et gérées suivant des règles consensuelles basées sur les réserves pastorales ou pastoraux traditionnels.	Existence de règles partiellement appliquées gérant des conflits dans les terroirs	Appuyer les populations dans la délimitation et la gestion de 20000 ha à l'année 5 par des règles consensuelles ; Elaborer et adopter 5 codes de conduite dans l'utilisation des terres de parcours Protégées par un réseau de 200 km de pare-feu ; 800 lots de matériels	Rapports annuels de suivi/évaluation 5 Codes de conduite signés	
Résultat 2.2. Des corridors sont négociés et établis pour l'accès du bétail à l'eau et au pâturage à travers les zones de parcours.	Nombre d'hectares de terres délimitées et enrichies.		Appuyer la mise en place de 2000 ha de corridors inter communautaire.	Rapports de mission et de suivi	
Résultat 2.3. Des plans d'aménagement participatifs sont élaborés pour les forêts villageoises, aménagées et pour les forêts classées.	Nombre d'hectares de villages et de forêts communautaires ayant adoptés les plans d'utilisation des terres et appliqué les codes de conduite.	41 % des forêts naturelles sont dégradées	Protéger au moins 7500 ha de forêts naturelles.	Rapports de mission et de suivi	

Results chain	Indicators	Current situation	Targets	Verification sources	Risks and hypothesis
Résultat 2.4. Des pratiques agropastorales sont améliorées pour l'intensification durable de la production pastorales et pour la satisfaction des besoins énergétiques (foin, production de fourrages apport de fumier, plantation d'arbres pour le fourrage aérien et l'énergie) respect des capacités de charge des parcours.	Nombre d'éleveurs ayant adopté les pratiques d'intensification durables	Existence d'exemples de bonnes pratiques à petite échelle.	Appuyer au moins 100 éleveurs ou propriétaires de troupeaux à adopter au moins une nouvelle pratique à l'année 3.	Rapports de projet	
Résultat 2.5. L'utilisation et la consommation du bois-énergie sont améliorées	Nombre de ruraux ayant adopté au moins une technique d'économie d'énergie	Prédominance de techniques entraînant un gaspillage d'énergie et donc de ressources ligneuses	Appuyer 30% des paysans (hommes et femmes) pour l'adoption de techniques d'utilisation efficiente du bois énergie à l'année 4.	Rapport technique	
Résultat 2.6. Les collectivités améliorent le réseau de pare-feu à travers une meilleure organisation (comité de lutte contre les feux de brousse, formation et équipement)	Nombre de comités villageois faisant partie du réseau.		Appuyer et équiper au moins 45 Comités villageois de lutte contre les feux à l'année 5.	Rapport technique	
Composante 3 : Les politiques et le partenariat local sont harmonisés et les capacités renforcées pour la gestion intégrée des terres suivant l'approche paysage.	- Nombre de plans de gestion intégrée des terres élaborés et mis en œuvre qui renforcent la capacité d'adaptation des systèmes locaux aux changements climatiques et aux sécheresses récurrentes. - Nombre de partenariat public/privé à travers l'approche paysage - Nombre d'auto-évaluation transparente, participative et concertée et de politiques d'incitation par les Ministères concernées utilisant l'approche paysage - Nombre de décideurs locaux qui ont une meilleure compréhension des problèmes de durabilité environnementale.	- Les collectivités locales sont faiblement impliquées dans la conception des projets et programmes, la sélection des sites et la définition des stratégies d'intervention. - Cloisonnement dans les interventions. - Constat de la non durabilité des solutions découlant des anciennes stratégies adoptées	- Intégrer l'approche paysage dans au moins 15 Plans Locaux de Développement à l'année 3. - Au moins 10 villages ont formellement adoptés des plans et des protocoles sectoriels d'application (prévoyant des motivations et pénalités) à l'année 5 - Etablir au moins 5 partenariats publics/privés pour la gestion durable des terres à l'année 4. - Evaluer au moins deux stratégies actuelles et proposer des réformes appropriées à l'année 3. - Amener au moins 100 décideurs locaux à avoir une meilleure compréhension à l'année 3.	Protocoles d'accord signés Plans élaborés Rapports d'exécution de plans	Inexistence d'événement politique affaiblissant le système de prise de décision local. Les tendances économiques ne se démarquent pas de la tendance actuelle de prise en compte des préoccupations de durabilité.
Résultat 3.1. Les besoins en	Plan de formation par catégorie d'acteurs	Formations multiples	Elaborer une	Rapport	

Results chain	Indicators	Current situation	Targets	Verification sources	Risks and hypothesis
formation sur le plan individuel, institutionnel et systémique sont identifiés	pour une stratégie détaillée de renforcement de capacités.	développées sans liens avec les besoins réels des acteurs	stratégie de formation pour chacun des 5 sites du projet dés l'année 1.	d'avancement du projet	
Résultat 3.2. Les capacités des acteurs clés (élus locaux, services techniques, OCB, équipe de projet) sont renforcées.	Nombre d'initiatives de régénération des terres développées par les acteurs	Insuffisance de moyens mis à la disposition des collectivités locales malgré l'importance de leur responsabilité dans la GDS ; Faiblesse des moyens des services techniques pour leurs interventions	Organiser 40 sessions de formation sur la gestion durable des terres à l'intention des bénéficiaires à l'année 3. Organiser au moins 12 visites intervillageoises à l'année 3.	Procès – verbaux de réunion des Collectivités Rapports de formation	
Résultat 3.3. Le réseau des journalistes en environnement participe à l'identification, à la dissémination et l'amélioration des bonnes pratiques.	Nombre de publications de journalistes.	Faible implication du réseau de journalistes dans la gestion durable des terres.	Publier au moins 5 reportages (radio, TV, vidéo, internet) par an.		
Résultat 3.4 La formation sur les textes de la décentralisation est assurée.	Nombre d'agents de vulgarisation et de responsables ruraux formés.	Des agents de vulgarisation et responsables ruraux ne sont pas bien imprégnés de la politique de décentralisation.	Organiser 8 sessions de formation sur l'application des textes sur la décentralisation à l'intention d'au moins 160 participants à l'année 4.		
Résultat 3.5 Des accords sont établis avec les institutions financières locales pour le développement de mécanismes de financement durable de la gestion des terres.	Des protocoles pour l'octroi de crédits axés sur la gestion durable des terres.	Inexistence de liens entre l'octroi des crédits et la gestion durable des terres.	Etablir au moins un protocole au niveau de chacun des sites à l'année 2.		
Résultat 3.6 Les décideurs locaux et les agents du système judiciaires sont formés pour mieux prendre en charge les conflits fonciers par le biais de l'approche paysage.	Nombre de responsables chargés du règlement des conflits familiarisés aux questions de gestion durable des terres et de l'environnement		Former au moins 10 responsables chargés du règlement de conflits à l'année 3.		
Résultat 3.7. Les comités consultatifs locaux sont rendus opérationnels et assurent une réelle participation des communautés à la gestion des conflits	Nombre de comités consultatifs locaux créés ou redynamisés.	Existence de nombreux comités locaux sans moyens incitatifs de fonctionnement sur les plans humain, méthodologique et matériel	Rendre fonctionnels 5 comités locaux consultatifs à l'année 1.	Rapport/ Procès – verbaux de réunions	
Résultat 3.8 Le Comité National de Pilotage et le Comité Scientifique et Techniques assurent régulièrement la supervision du projet	Nombre de réunions de comité ayant abouti à des prises de décisions.		Organiser au moins deux (2) réunions du Comité Scientifique et Technique et une (1) réunion du Comité de Pilotage par an.	Procès – verbaux de réunion	
Composante 4 : Activités Génératrices de Revenus rendues	Revenu moyen par habitant (niveau de pauvreté).	La proportion des ménages pauvres est de 59, 2 % à Louga,	Développer des AGR liées à la GRN pour réduire de 10% la	Rapport d'enquêtes	

Results chain	Indicators	Current situation	Targets	Verification sources	Risks and hypothesis
compatibles avec les principes de Gestion de Ressources Naturelles et Gestion Durable des Terres		65, 3% à Diourbel, 68,4% à Thiés, 75,7 à Kaolack, et 81,4% à Fatick (Revue scientifique PROGERT 2005). 40% des ménages dans le bassin arachidier ont des revenus mensuels de moins de 59 500 FCFA.	pauvreté dans les différents sites du projet à l'année 5.		
Résultat 4.1. Les activités génératrices de revenus liées aux principes de Gestion durable des terres sont développées	Nombre de personnes ayant bénéficié de l'appui de projet pour développer des activités génératrices de revenus compatibles avec la gestion durable des terres.	Les activités génératrices de revenus à petites échelles utilisant beaucoup de ressources naturelles et générant peu de revenus.	Appuyer au moins 70 personnes pour la réalisation d'AGR liées à la GDS à l'année 5.	Rapport d'enquêtes Rapports Cellule DSRP (Direction de la Prévision de la Statistique)	
Résultat 4.2. le secteur privé et les petites entreprises sont motivés pour promouvoir la gestion durable des terres.	Lignes de crédit ouvertes pour la gestion durables des terres.	Faible attractivité de l'environnement de la gestion des ressources naturelles pour le secteur privé entraînant de faibles investissements.	Faciliter l'accès au micro-crédit à 30 groupements à travers l'ouverture de lignes de crédit dans les Systèmes Financiers Décentralisés (SFD) à l'année 2.	Rapports Contrats signés	
Composante 5 : Gestion adaptée des leçons apprises et du système de suivi.	Nombre de cadres de concertation fonctionnels.	Faible coordination entre les acteurs. Manque de motivation parmi les acteurs. Manque de programmes fédérateurs.	Redynamiser au moins 10 cadres de concertation sur la base de programmes fédérateurs et d'approches harmonisées liées à la gestion durable des terres à l'année 1.	Procès verbaux de réunion Rapport d'activités	
Résultat 5.1. Une unité de Coordination de gestion et de suivi évaluation impliquant tous les acteurs dans le Bassin Arachidier est créée et fonctionnelle.	Niveau d'exécution des plans de travail approuvés		Assurer au moins un taux d'exécution de 60% par an, en moyenne		Mobilisation des fonds du projet dans

Appendix 3. Terms of Reference (excerpt)

II. OBJECTIF DE LA MISSION D'EVALUATION FINALE DU PROGERT

Objectif global

L'**objectif global** de la mission d'évaluation est de faire, après cinq (5) ans d'exécution, une évaluation finale de la phase de développement du PROGERT au regard des objectifs initiaux et de formuler des recommandations.

Objectifs spécifiques

Plus spécifiquement, la mission devra apprécier :

- **la pertinence et la cohérence** qui permettent d'apprécier la justesse du projet par rapport au diagnostic ou encore à la problématique dégagée par rapport aux priorités en la matière, ainsi que l'agencement des actions, voire la stratégie menée en tenant compte des objectifs et du contexte. La mission devra vérifier la concordance du projet avec les besoins et les demandes des bénéficiaires, ainsi que sa conformité avec les orientations stratégiques et générales du pays ;

- **l'efficacité** pour apprécier dans quelle mesure les activités du projet ont permis d'atteindre les résultats escomptés tels que mentionné dans le cadre logique;
- **L'efficience** pour mesurer les résultats ou effets obtenus par rapport aux moyens matériels, financiers et humains mis en œuvre, conformément aux normes requises ;
- **La durabilité,** c'est-à-dire la viabilité, l'appropriation et la reproductibilité des actions entreprises par le projet et la représentation des différents groupes de bénéficiaires dans les instances ; il en va de même de l'appropriation du projet par les bénéficiaires.
- **Les effets** qui seront constitués par l'ensemble des changements constatés au niveau des bénéficiaires, et de l'environnement du projet et qui lui incombent ;

La mission devra enfin formuler des recommandations allant dans le sens de la consolidation des acquis et/ou la correction des problèmes.

III. MANDAT DES CONSULTANTS

L'évaluation finale du PROGERT sera menée simultanément par des Consultants national et international indépendants, et coordonnée par la Direction de la Planification Nationale sur une durée maximum de quatre (4) semaines calendaires ou vingt (20) jours ouvrables.

Une fois les deux consultants recrutés, il leur reviendra de fournir une note d'orientation méthodologique dans un délai d'une semaine calendaire. Le consultant national se conformera au chronogramme décliné par le consultant international, chef de mission.

De manière spécifique, l'évaluation mettra l'accent sur les points suivants :

- ✓ La **conception** : porter un avis sur la pertinence du projet comme réponse aux problèmes à résoudre et apprécier son degré de cadrage par rapport à ses objectifs, aux OMD (éléments de référence), au DSRP (secteur concerné) et à la Lettre de Politique Sectorielle (LPS) de l'Environnement et de la Protection de la Nature et autres documents stratégiques.
- ✓ Le **cadre institutionnel** : apprécier la cohérence du montage du projet avec les principes de l'exécution nationale, en considérant le cadre institutionnel et la structuration des Unités locales du Projet ;

- ✓ **L'élaboration des plans de travail annuels et trimestriels** : apprécier l'efficacité et l'efficience du processus de planification des activités du PROGERT (PTA, PTT) ;
- ✓ **La mobilisation des ressources** : apprécier la promptitude et la capacité des gestionnaires à prendre de bonnes stratégies de mobilisation des ressources pour favoriser un bon niveau d'absorption. Elle permettra également d'appréhender le niveau d'*exécution financière* à travers l'appréciation de l'efficacité et l'efficience du projet en termes de gestion financière et l'examen du mécanisme de suivi budgétaire (rapports financiers…) ;
- ✓ **La mise en œuvre des activités et les résultats obtenus** : apprécier la pertinence des stratégies développées sur le terrain et des initiatives prises par les responsables du projet pour mettre en œuvre les activités planifiées. Apprécier également le degré d'atteinte des cibles fixées au PROGERT d'ici la fin du projet ;
- ✓ **Les partenariats établis** : apprécier la synergie avec les structures publiques, les projets, les programmes, associations et autres ONG intervenant dans la zone du bassin arachidier ;
- ✓ **Les mécanismes d'orientation, de coordination, de conseil et de suivi** : apprécier la régularité des réunions/rencontres des différents organes tant au niveau central qu'au niveau des sites (Comité de Pilotage (CP), Comité Scientifique et Technique (CST), Comités Inter Villageois (CIV)…). Il s'agira aussi de s'intéresser au *système de rapportage du projet* par l'appréciation des délais de fourniture des différents rapports. La mission fera le point sur la qualité et la promptitude des rapports : rapports des Unités Locales du Projet (ULP), rapports (annuels, trimestriels) de l'Unité de Coordination du Projet (UCP), rapports du Comité National de Pilotage (CNP) et du Comité Scientifique et Technique.

  On s'intéressera aussi à la *qualité du management* en passant en revue en plus des aspects déjà abordés, ceux relatifs à la qualité de la gestion des ressources (humaines/le personnel ; matériel,…) ;
- ✓ **Les questions liées à l'Equité et l'Egalité de Genre, aux groupes vulnérables** : apprécier les efforts d'intégration de la dimension genre dans la mise en œuvre et le fonctionnement du projet de même que la prise en compte des groupes vulnérables ;
- ✓ **La communication/visibilité du projet** : apprécier la pertinence des moyens, supports et stratégies de communication utilisés vis-à-vis de toutes les parties prenantes pour une meilleure visibilité du Projet ;
- ✓ **L'appréciation des bénéficiaires** : recueillir les opinions des bénéficiaires, sur les différents aspects relatifs au projet (stratégie d'approche, ciblage, résultats atteints, niveau d'approbation, etc.) ;
- ✓ **Les atouts/contraintes rencontrés** : identifier tous les facteurs ayant favorisé ou entravé la mise en œuvre des activités. Il s'agira aussi d'établir les conséquences des facteurs négatifs et d'identifier les mesures correctives à entreprendre ;
- ✓ **Les perspectives du projet** : identifier les axes de pérennisation et de capitalisation des acquis du projet ainsi que les perspectives d'intervention par rapport aux thématiques actuelles et nouvelles, de même que les sites prioritaires.

IV. PRODUITS ATTENDUS / LIVRABLES

Il est attendu de l'équipe d'évaluation finale, conformément aux TDR et au contrat à signer:

- Une note méthodologique cinq (5) jours après la signature du contrat. Cette note comprendra entre autres, une méthodologie détaillée indiquant les différents outils et méthodes qui seront utilisés, la présentation de la démarche à adopter qui s'appuiera sur les éléments du projet (DAP, cibles, cadre logique,…), le chronogramme pour la conduite de l'évaluation ainsi que les éventuelles difficultés. Cette note sera validée par le Comité de Pilotage ;
- Un rapport provisoire en dix (10) exemplaires au terme de la troisième semaine:
  - tirant des conclusions spécifiques concernant le déroulement du projet ;
  - formulant des recommandations détaillées et ciblées pouvant donner de nouvelles orientations ;

  Le rapport provisoire sera présenté devant le Comité de Pilotage présidé par la Direction de la Planification (DPN) du Ministère de l'Economie et des Finances (MEF).
- Un rapport final en dix (10) exemplaires, rédigé en français avec une copie traduite en anglais par les soins du consultant international, tenant compte des observations du comité de pilotage, et ceci au terme de la quatrième semaine.

Le Consultant International, Chef de la mission d'évaluation, est responsable de la rédaction du rapport. Le rapport rédigé en français puis traduit en anglais par les soins du Chef de mission comme précisé précédemment, sera soumis au Comité de Pilotage, au Gouvernement et au PNUD en format électronique avec copie à l'équipe du PROGERT. Dix (10) exemplaires imprimés en «hard copy» devront également être envoyés à la fin de la mission au Directeur de la Planification Nationale, Président du Comité de pilotage.

V. ORGANISATION ET SUPERVISION DE LA MISSION

Les travaux de la mission d'évaluation finale du PROGERT seront supervisés par un comité de pilotage présidé par la Direction de la Planification Nationale (DPN) et composé de la Cellule d'Appui à la mise en oeuvre des Projets et Programmes (CAP), de la Direction de la Coopération Economique et Financière (DCEF), du Ministère de l'Ecologie et de la Protection de la Nature (MEPN), de la Direction de l'Environnement et des Etablissements Classés (DEEC), de la Direction des Eaux, Forêts et Chasses et de la Conservation des Sols (DEFCCS), du Programme des Nations Unies pour le Développement (PNUD/FEM). Ce comité sera chargé de suivre et valider les résultats de l'évaluation. Il organisera deux réunions pendant la mission :

- Une réunion de briefing au démarrage de la mission pour apprécier la note d'orientation méthodologique des consultants ;
- Une réunion d'examen du rapport provisoire.

Une visite des sites sera organisée durant la mission et les coûts de la mission sont prévus dans le budget du projet.

La documentation nécessaire au bon déroulement de l'évaluation finale sera mise à la disposition de la mission (version électronique, documents imprimés en «hard copies»). Avant le début des travaux, les membres de la mission pourront disposer des documents de base (descriptif du projet, rapports trimestriels et annuels, documents techniques…).

VI. DUREE DE LA MISSION

La mission est prévue pour une durée de quatre semaines calendaires (20 jours ouvrables). Les consultants doivent respecter le délai établi sous peine de sanction.

VII. PROFIL DES CONSULTANTS

La mission d'évaluation finale du PROGERT sera composée de deux (02) consultants qui doivent avoir une connaissance et une expérience avérées dans la conduite d'une évaluation:

a) un consultant international, chef de mission. Il devra être un spécialiste en Gestion durable des terres (biophysique, spatial, temporel et socio-économique) couvrant notamment une expertise sur la lutte contre la désertification avec des synergies sur les changements climatiques. Il/elle doit également disposer d'une parfaite maîtrise des outils de la planification locale, d'aménagement des formations naturelles avec une solide connaissance du pastoralisme, du système financier décentralisé et d'une bonne capacité d'analyse socio économique. Le consultant international devra avoir un doctorat ou équivalent et une expérience professionnelle d'au moins dix (10) ans et être capable de parler et d'écrire couramment le français et l'anglais.

b) Un consultant national, spécialiste en gestion des ressources naturelles avec une expertise avérée dans l'agroforesterie, le pastoralisme et les systèmes de financement décentralisé. Le consultant devra être titulaire d'un diplôme universitaire de niveau bac plus quatre (4) ans au moins ou équivalent et avoir une expérience professionnelle d'au moins dix (10) ans.

Appendix 4. List of persons interviewed

List of persons met in Dakar

Name	Institution	Position
Sékhou DIAKHABY	Direction de la Planification Nationale - MEF	Directeur
Gabriel SARR		Agent
Alioune Badara KAERE	PNUD	Expert Changement Climatique
Daniel ANDRE	Direction des Eaux, Forêts et Chasse et de la Conservation des Sols (DEFCCS)	Directeur
Baïdy BA	Direction de la Planification et de la Veille Environnementale	Directeur
Ibra Sounkarou NDIAYE	PROGERT	Coordonnateur
Ibra FAYE		Responsable Administratif et financier
Tanor DIENG		Expert Responsable Suivi-Évaluation
Pascal Mbaye DIOP		Expert Approche participative
Mme Coura LY		Secrétaire Comptable
Samba SOW	Institut National de Pédologie (INP) Cartographie	Chef de Division
Papa Nékhou DIAGNE		Chef de Bureau
Soulèye BADIANE	Centre National de Recherche Forestière (CNRF) Institut Sénégalais de Recherche Agronomique	Chargé de Recherche
Déthié Soumaré NDIAYE	Centre de Suivi Écologique	Chargé de Programme
Assize TOURE		Directeur Général
Bakary SIGNATE	CAP – MEF	Coordonnateur
Dieynaba DIAW		Chargée de Programme

List of persons met in the region of Thies

Name	Institution	Position
Guy Valentin MEDANG	PROGERT	Assistant de Recherche
Seydou DIEME	ADT-GERT	Secrétaire Général
Mor WADE	Village de Dakhar Mbaye – CVD	Président
Goté WADE	Village de Dakhar Mbaye	Chef de village
Ndèye KANDJI		Trésorière GPF
Maty KA		Présidente GPF
Sokhna NDIAYE		Secrétaire GPF
Moussa TINE	Village de Ngoundiane – CEV	Producteur -Relais
Astou GNING	Village de Ngoundiane – GPF	Présidente
Rokhaya NGOM		Secrétaire
Khady GNING	Village de Ngoundiane –GPF, CEV -Femmes	Responsable du Champ
Biram DIENG	IREF Thiès	Inspecteur
Abdourahmane DIAGNE	Secteur Départemental Eaux et Forêts Thiès	Chef Secteur
Mamadou Lamine GUEYE	CAURIE -Microfinance	Directeur Général
André Roland YOUM		Directeur des Opérations chargé du partenariat

List of persons met in the region of Louga

Name	Institution	Position
Opa DIATTA	Secteur Eaux et Forêts de Kébémer	Chef de Secteur
Ibrahima FAYE	Brigade Eaux et Forêts de Ndande	Chef de Brigade
Elhadj Ndongo FALL	Village de Ndiongué Fall	Chef de village
Aïda NDOYE	Village Ndiongué Fall – GPF	Présidente du GPF
Bintou FALL		Trésorière
Fatou MBAYE		Secrétaire
Abdourahmane GUEYE	Service Régional d'Appui au Développement Local - SRADL/ Louga	Chef SRADL, Responsable Cercle Qualité Genre
Fatou SEYE	GIE Diappo Ligguèye Village de Thièkène Ndiaye	Présidente
Fama NIANG		Vice- Présidente
Amy SYLLA		Secrétaire
Dioumory KA	Conseil Rural de Keur Momar Sar	Président
Bathie SOW	UP Thiapédia (CR Keur Momar Sar)	Responsable
Mabousso DIAGNE	UP Diassarnabé Ali (CR Keur Momar Sar)	Secrétaire général Comité de gestion
Ibrahima SOW	CR Keur Momar Sar	Responsable des pare-feux
Gora NDIAYE	IREF Louga	Inspecteur

List of persons met in the region of Diourbel

Name	Institution	Position
Elhadj Fallou NIANG	IREF Diourbel	Inspecteur
Ogo Niang	Village de Khokhé	Chef de village
Ndèye NDAO	Banc Villageois, Khokhé	Présidente
Fara SOW	GIE Jouboo, Khokhé	Président
Faty Badiane SIDIBE	Cercle de Qualité Genre Diourbel / SRADL	Responsable
Birame Diouf	Village de Tock Ngol	Chef de village
Modou NGOM	Commission Environnement - CR de Ngohé	Président
Amy DIAGNE	GPF Tock Ngol	Présidente
Ndèye BA	GIE micro-finance Tock Ngol	Présidente

List of persons met in the region of Kaolack

Name	Institution	Position
Oumar DIENG	IREF Kaolack	Inspecteur
Penda DIOP	PROGERT - Kaolack	Responsable Genre
Mamadou SAMB	Conseil Régional Kaolack	Responsable Environnement
Abdoulaye TRAORE	Secteur Eaux et Forêts Kaolack	Chef de Secteur
Absa DIAKHATE	Cercle de Qualité Genre	Responsable
Matar NDAO	Keur Bame – Keur Barro Comité Inter- villageois de Gestion (CIVG) de la mise en défens(MED)	Président
Socé NDAO	Comité Inter- villageois de Gestion (CIVG) -PIM	Secrétaire
Ndéné NDIAYE	Conseil Rural de Ndiafatte	Président
Fatou Kiné DIASSE		Assistante Communautaire
Abdoulaye Diop	Village de Ndiafatte	Chef de village
Boubacar DIALLO	Village de Keur Yoro Soumbou CIVG de la mise en défens (MED)	Surveillant général de la MED
Biram DIALLO		Chef de village
Nakho FALL	Village de Koutal Ouolof– GPF Takkou Liguèye	Présidente
Ahmadou Tidiane NDIAYE	Village de Koutal Oulof - GPF	Chef de village

List of persons met in the region of Fatick

Name	Institution	Position
Aladji COLY	IREF Fatick	Inspecteur
Coumba Ndofène Bouna Diouf	Conseil Régional Fatick	Président
Alassane NDOUR		Secrétaire Général
Mamadou TOURE		Expert-Géographe
Waly NIANG	Village de Mbamane	Chef de village
Cheikh DIOUF	GIE Hommes/Mbamane	Président
Mberry SENE	GPF Mbamane	
Aliou KONTE	Brigade Eaux et Forêts de Mbamane	Chef de Brigade

Appendix 5. Mission schedule and travel within the region covered by the project, from October 28 to November 9, 2012

Date	Location	Time	Meetings
28 octobre	Dakar		Arrivée Consultante Internationale
29 octobre	Dir. Planification Nationale (MEF)	8:30 – 9:30	Discussion avec le Directeur, Président du Comité de Pilotage de l'évaluation finale
	Dir. des Eaux et Forêts, et Conservation des Sols (MEDD)	10:30-11:30	Visite de courtoisie au Directeur des Eaux et Forêts/Point Focal Convention Lutte contre la Désertification (UNCCD)
	Unité Coordination du Projet (UCP)	11:30	Installation de la Mission à l'UCP, collecte de documents
	Dir. Planification et Veille Environnementale (MEDD)	16:00 – 17:30	Rencontre avec le Directeur de la Planification et de la Veille Environnementale, en qualité d'ancien IREF de Thiès, dans le cadre du PROGERT (ULP Thiès)
30 octobre	Unité de Coordination du Projet	9:00 – 13:00	Séance de travail avec l'équipe de l'UCP : Exécution des activités de terrain, Gestion financière, Partenariat / Participation, Suivi-Évaluation
	Institut national de Pédologie, Min. Agriculture	15:00 - 16:00	Discussion avec l'INP sur la collaboration avec le PROGERT
	Centre National de Recherche Forestière (ISRA)	16:15 – 17:00	Discussion sur la collaboration avec le PROGERT et les technologies agro-forestières dans les CEV
31 octobre	Centre de Suivi Écologique	8:30 – 9:30	Discussion sur la collaboration avec le PROGERT, cartographie, base de données, renforcement des capacités etc.
	Cellule d'Appui à la mise en œuvre des projets NEX	10:00 – 12:00	Discussion sur la mission de la CAP et sur sa collaboration avec le PROGERT
1er novembre	Région de Thiès NDakhar MBaye	10:30 – 11:30	Voyage sur Thiès
		15:15 – 17:30	Visite des ouvrages de CES/DRS et des Bancs Villageois à NDakhar MBaye Rencontre avec les populations
	NGoundiane	18:00 – 19:00	Visite du CEV privé de Ngoundiane
		19:00 – 20:30	Visite de la plantation agro-forestière des femmes-Discussion sur le champ collectif, le moulin, la pépinière, le microcrédit et les foyers améliorés.
			Nuit à Thiès
2 novembre	Ville de Thiès IREF	09:00 – 10:00	Visite à l'IREF. Discussion sur les expériences de gestion des ressources naturelles et sur les perspectives après le PROGERT
	CAURIE –Micro-finance	10:30 – 13:00	Discussion sur la démarche et les activités de CAURIE MF, sur la collaboration avec le PROGERT et sur l'après- projet.
	Région de Louga Ndiongué Fall	15:00 – 17:30	Rencontre avec l'ULP Louga. Discussion avec les populations de Ndiongué Fall. Visite du PIM et du site de la pépinière
	Ville de Louga	19:00 – 20:00	Discussion avec le responsable du Cercle de Qualité Genre / Service Régional d'Appui au Développement Local
			Nuit à Louga
3 novembre	Thiékène NDIAYE	10:00 – 12:30	Rencontre avec les populations locales, Visite Unité de transformation de fruitiers forestiers (PIM), bancs villageois et foyers améliorés
	Keur Momar Sarr (UP Diassarnabé Aly)	13:00 – 16:00	Rencontre avec le Président du Conseil Rural- Discussion avec les populations. Visite de l'Unité Pastorale (UP) de Diassarnabé Aly : pare feu et mise en défens (MED)

Date	Location	Time	Meetings
	Ville de Louga	18:00 – 19:15	Visite à l'IREF de Louga. Discussions sur les feux de brousse et les perspectives après projet
			Nuit à Louga
4 novembre	Région de Diourbel Khokhé	10:00 – 13:00	Rencontre avec l'ULP et les partenaires techniques. Visite plantation agro-forestière à Khokhé et rencontre avec les populations locales (bancs villageois, moulin et foyers améliorés)
	Ville de Diourbel	13:00 – 14:30	Discussion avec la Responsable Cercle de Qualité Genre (accès des femmes à la terre et aux AGR)
	Tock Ngol	16:00– 19:00	Visite MED de Tock Ngol et rencontre avec les populations locales (Bancs villageois)
		19:00	Voyage et Nuit à Kaolack
5 novembre	Région de Kaolack Ville de Kaolack	9:00 – 10:00	Rencontre avec la responsable Genre du PROGERT (AGR, Foyers améliorés, plaidoyers etc.)
	Ville de Kaolack	10:00 – 12:30	Rencontre avec ULP et partenaires techniques (IREF, Responsable du Cercle de Qualité Genre, représentant du Conseil Régional)
	Keur Bame et Keur Ngoor	15:00 – 18:30	Visite de la MED et discussion sur le PIM (apiculture) et les foyers améliorés
			Nuit à Kaolack
6 novembre	Ndiafatte (Communauté Rurale)	10:00 – 11:30	Rencontre avec le PCR de Ndiafatte. Discussion sur la collaboration avec le PROGERT et le partenariat local pour la gestion des ressources naturelles
	Keur Yoro Soumbou	12:00 – 14:00	Visite de la MED de Keur Yoro Soumbou et discussion avec les populations
	Koutal	15:00 – 19:30	Visite des réalisations à Koutal (récupération terres salées et MED) et rencontre avec les populations locales centrée surtout sur les bancs villageois et le PIM
			Nuit à Kaolack
7 novembre	Région de Fatick Ville de Fatick	9:30 – 10:00	Visite à l'IREF (l'ULP) de Fatick. Discussion sur les acquis du PROGERT et l'après projet
	Ville de Fatick	10:10– 11:00	Rencontre avec les partenaires techniques (Cadre de Concertation du Conseil Régional)
	Mbamane	11:10– 13:00	Visite des réalisations à Mbamane (pépinière, MED / récupération terres salées, CEV et Apiculture) et discussion avec les populations
		15:30	Retour sur Dakar
8 novembre	Direction Eaux et Forêts Conservation des Sols	10:00 – 11:00	Séance de travail avec le Directeur sur les perspectives après le projet.
	UCP	11:15 - 21:00	Préparation de la séance de debriefing
9 novembre	Direction de la Planification Nationale	10:00 – 11:30	Séance de restitution des observations préliminaires sur les réalisations du PROGERT
	PNUD	16:00 – 17:30	Discussion avec l'expert en changements climatiques sur le suivi du projet par le PNUD, la collaboration avec la CAP et les perspectives
		21:00	Départ de la consultante internationale

Appendix 6. Questions to guide interviews

Questions to guide the interviews with local stakeholders on the basis of the LF

Description	Indicators	Additional TE Questions
Objectif Spécifique du projet - Catalyser la gestion durable des terres au niveau paysage dans le but de combattre la dégradation des terres et de réduire la pauvreté.	Rendements moyens de mils et d'arachide dans 5 sites (ce faisant pour la restauration de la fertilité des terres arables dans le paysage à travers leur intensification)	* Quelles sont les superficies pour lesquelles les rendements améliorés ont été mesurés ?
	Expansion agricole dans les forêts et pâturages dans 5 sites	
	Nombre d'hectares de terres dégradées réhabilitées dans 5 sites	
Composante 1 : Fertilité des terres cultivables améliorée par le développement de technologies novatrices et adaptées.	Augmentation des rendements et diversification des productions.	* De quelle façon sont sélectionnées les variétés à cultiver pour la diversification ? tient-on compte des besoins des communautés ou des possibilités de revenus en fonction d'un marché existant ? (note : les AGR liées à la GDT sont moins rentables)
Résultat 1.1 : L'espace rural est géré de façon rationnelle pour combattre la perte massive du couvert végétal.	Nombre d'agropasteurs ayant adopté et appliqué les nouvelles règles d'utilisation des terres et de préparation des champs.	Dispose-t-on de données sur le couvert végétal avant et après l'intervention du projet ? Quels changements dans les pratiques des éleveurs découlent de ces nouvelles règles ? Comment ces règles ont-elles été définies ?
Résultat 1.2 : Des modèles d'intensification agricole durables sont vulgarisés	Nombre d'agropasteurs ayant appliqué les techniques d'intensification durables sur le plan environnemental.	Quels changements dans les pratiques des éleveurs découlent de ces nouvelles techniques ? comment ces techniques ont-elles été identifiées / sélectionnées ?
Résultat 1.3 : La capacité d'adaptation aux changements climatiques est augmentée.	Nombre d'agriculteurs ayant adopté des techniques culturales de résistance à la sécheresse (labour zéro) comme moyen d'adaptation aux changements climatiques	Quels changements dans les pratiques des éleveurs découlent de ces nouvelles techniques ? comment ces techniques ont-elles été identifiées / sélectionnées ? Les polymères absorbants sont-ils une solution écologique ? accessible pour les paysans (coût) et reproductible à grande échelle (disponibilité des intrants) ?
Résultat 1.4 : Les terres salées sont restaurées.	Nombre d'hectares de terres salées cultivables	Quels types de culture peuvent être réalisés sur des terres salées réhabilitées ? Celles-ci correspondent-elles au souhait des producteurs ?
Résultat 1.5 : Les terres cultivables sont restaurées à travers une gestion intégrée de la fertilité par l'agroforesterie et la conservation des eaux et des sols.	Nombre d'hectares de terres cultivables restaurées	Quelles espèces sont utilisées dans les systèmes agroforestiers ? le projet avait-il une préoccupation pour protéger l'agro-biodiversité ? Quel est le taux de survie des plantations ?
Composante 2 :Utilisation des forêts et pâturages rationalisée par la promotion des bonnes pratiques.	Degré d'utilisation des codes de conduite Nombre de plans d'utilisation des terres élaborées et mis au point	Qui participe à la conception des plans d'utilisation des terres ? Ces plans ont-ils une valeur légale qui protègerait l'investissement des communautés si les terrains sont revendiqués pour une exploitation/utilisation différente ?
Résultat 2.1. Les agropasteurs et les transhumants adoptent des règles et des technologies durables pour l'utilisation des terres de parcours.	Nombre d'hectares de terres pastorales délimitées et gérées suivant des règles consensuelles basées sur les réserves pastorales ou pastoraux traditionnels.	Quel est l'effet de cette gestion des terres pastorales ? Peut-on mesurer une réduction des menaces ? telle que la réduction de l'intensité et de l'étendue des feux de brousse ? ou la réduction de la coupe de bois ?
Résultat 2.2. Des corridors sont négociés et établis pour l'accès du bétail à l'eau et au pâturage à travers les zones de parcours.	Nombre d'hectares de terres délimitées et enrichies.	Quel est l'impact de l'aménagement de ces corridors ?

Description	Indicators	Additional TE Questions
Résultat 2.3. Des plans d'aménagement participatifs sont élaborés pour les forêts villageoises, aménagées et pour les forêts classées.	Nombre d'hectares de villages et de forêts communautaires ayant adoptés les plans d'utilisation des terres et appliqué les codes de conduite.	Qui est responsable d'initie le processus participatif ? qui sera responsable de l'initier après le projet ? Quels sont les objectifs de ces plans d'aménagement et comment sont-ils définis ? Quelle est la superficie forestière stabilisée ?
Résultat 2.4. Des pratiques agropastorales sont améliorées pour l'intensification durable de la production pastorales et pour la satisfaction des besoins énergétiques (foin, production de fourrages apport de fumier, plantation d'arbres pour le fourrage aérien et l'énergie) respect des capacités de charge des parcours.	Nombre d'éleveurs ayant adopté les pratiques d'intensification durables	Combien d'éleveurs sont présents dans la région ? Quel est l'effet de l'adoption des pratiques d'intensification ? Le fourrage / foin sont-ils produits dans une saison pour être utilisés au cours de la saison sèche ? Les éleveurs ont-ils l'intention de continuer ces pratiques après la fin du projet ? si oui / si non, pourquoi ? Quel impact ont eues ces nouvelles pratiques ?
Résultat 2.5. L'utilisation et la consommation du bois-énergie sont améliorées	Nombre de ruraux ayant adopté au moins une technique d'économie d'énergie	Quel est l'effet de l'adoption de ces pratiques d'économie d'énergie ? Peut-on observer un impact sur la coupe de bois ? sur la quantité de charbon vendu au marché ?
Résultat 2.6. Les collectivités améliorent le réseau de pare-feu à travers une meilleure organisation (comité de lutte contre les feux de brousse, formation et équipement)	Nombre de comités villageois faisant partie du réseau.	Des statistiques sur le nombre / superficies / durée des feux de brousse sont-elles disponibles ? Quelles indications avons-nous que ce réseau poursuivra ses activités après la fin du projet ? Quelle est la motivation des villageois à l'entretenir bénévolement ? Quelle est leur compréhension des effets bénéfiques du réseau des pare-feux ?
Composante 3 :Les politiques et le partenariat local sont harmonisés et les capacités renforcées pour la gestion intégrée des terres suivant l'approche paysage.	- Nombre de plans de gestion intégrée des terres élaborés et mis en œuvre qui renforcent la capacité d'adaptation des systèmes locaux aux changements climatiques et aux sécheresses récurrentes.	Qui est responsable d'initier le processus participatif ? qui en a la capacité ? Quelles sont les ressources requises pour maintenir le processus participatif de planification au-delà du projet ? Ces ressources sont-elles disponibles ?
	- Nombre de partenariat public/privé à travers l'approche paysage	
	- Nombre d'auto-évaluation transparente, participative et concertée et de politiques d'incitation par les Ministères concernées utilisant l'approche paysage	
	- Nombre de décideurs locaux qui ont une meilleure compréhension des problèmes de durabilité environnementale.	
Résultat 3.1. Les besoins en formation sur le plan individuel, institutionnel et systémique sont identifiés	Plan de formation par catégorie d'acteurs pour une stratégie détaillée de renforcement de capacités.	
Résultat 3.2. Les capacités des acteurs clés (élus locaux, services techniques, OCB, équipe de projet) sont renforcées.	Nombre d'initiatives de régénération des terres développées par les acteurs	Les cibles ne se rapportent pas à l'indicateur Quel est l'effet de ces formations ? Le nombre d'initiatives développées par les acteurs a-t-il été mesuré ? Quels changements les bénéficiaires des formations ont-ils apportés dans leurs pratiques à la suite des formations ? leurs perceptions ont-elles changé ?
Résultat 3.3. Le réseau des journalistes en	Nombre de publications de journalistes.	Quels sujets ont été traités dans les publications ?

Description	Indicators	Additional TE Questions
environnement participe à l'identification, à la dissémination et l'amélioration des bonnes pratiques.		Quel public était ciblé ? Le moyen de diffusion était-il approprié pour joindre le public cible ? Une stratégie de communication a-t-elle été développée pur le projet ?
Résultat 3.4 La formation sur les textes de la décentralisation est assurée.	Nombre d'agents de vulgarisation et de responsables ruraux formés.	
Résultat 3.5 Des accords sont établis avec les institutions financières locales pour le développement de mécanismes de financement durable de la gestion des terres.	Des protocoles pour l'octroi de crédits axés sur la gestion durable des terres.	Comment a évolué cet indicateur au cours du projet ? A-t-on une indication que le niveau de confiance des institutions financières s'est amélioré ? envers les femmes ? envers les hommes ?
Résultat 3.6 Les décideurs locaux et les agents du système judiciaires sont formés pour mieux prendre en charge les conflits fonciers par le biais de l'approche paysage.	Nombre de responsables chargés du règlement des conflits familiarisés aux questions de gestion durable des terres et de l'environnement	Quelle est l'approche paysage pour la résolution des conflits fonciers ? Quel est le nombre de conflits résolus ?
Résultat 3.7. Les comités consultatifs locaux sont rendus opérationnels et assurent une réelle participation des communautés à la gestion des conflits	Nombre de comités consultatifs locaux créés ou redynamisés.	Les comités consultatifs ont-ils un autre rôle à jouer que celui de la gestion des conflits ? Quelles sont les ressources requises pour assurer le fonctionnement des comités locaux ? De quelles ressources les comités disposeront-ils après le projet ? Les rapports annuels présentent des résultats en termes d'hectares de plantation de jatropha – quel est le lien ?
Résultat 3.8 Le Comité National de Pilotage et le Comité Scientifique et Techniques assurent régulièrement la supervision du projet	Nombre de réunions de comité ayant abouti à des prises de décisions.	Quelles sont les principales décisions prises par le CP au cours du projet ? Quel rôle le CST a-t-il joué dans le projet ? Qui jouera ce rôle après le projet ?
Composante 4 :Activités Génératrices de Revenus rendues compatibles avec les principes de Gestion de Ressources Naturelles et Gestion Durable des Terres	Revenu moyen par habitant (niveau de pauvreté).	Cet indicateur a-t-il été mesuré séparément pour les ho et les fe ? et pour les jeunes ?
Résultat 4.1. Les activités génératrices de revenus liées aux principes de Gestion durable des terres sont développées	Nombre de personnes ayant bénéficié de l'appui de projet pour développer des activités génératrices de revenus compatibles avec la gestion durable des terres.	Comment ont été identifiées les AGR liées à la GDT ? Ont-elles fait l'objet d'études de faisabilité basées sur les marchés existants et accessibles et de plans d'affaires ? Le projet a-t-il contribué au développement de capacité en gestion de microentreprise ? Quelles sont les AGR qui ont été développées à chaque site et quel en est l'impact ?
Résultat 4.2. le secteur privé et les petites entreprises sont motivés pour promouvoir la gestion durable des terres.	Lignes de crédit ouvertes pour la gestion durables des terres.	Les crédits sont-ils entièrement alloués au développement d'activités de GDT ? Que permettent ces crédits ? Quel est l'impact de l'accès au crédit? Peut-on différencier le taux de remboursement des hommes et des femmes aux différents sites d'intervention ? Ce taux a-t-il évolué au cours du projet ?
Composante 5 :Gestion adaptée des leçons apprises et du système de suivi.	Nombre de cadres de concertation fonctionnels.	Quel est l'objet de ces cadres de concertation ? Quelle est la couverture géographique ou administrative de chacun de ces cadres ? Sur quelle base sont-ils formés et comment opèrent-ils ? Avec quelles ressources ?

Description	Indicators	Additional TE Questions
Résultat 5.1. Une unité de Coordination de gestion et de suivi évaluation impliquant tous les acteurs dans le Bassin Arachidier est créée et fonctionnelle.	Niveau d'exécution des plans de travail approuvés	Une base de données a-t-elle été créée ? où est-elle logée ? Qui a la capacité et la responsabilité de la mettre à jour ? de récolter les données pour la mise à jour ? À qui sont accessibles ces informations ? par quel moyen ?

Questions to guide the interviews with project partners on management issues

Section of the report	Questions	Source of information
PROJECT FORMULATION		
Purpose of the terminal evaluation Project start and its duration		UNDP Program manager
Project Design		
National ownership	Project consistency with national development, environmental and SLM action plans and PRSP strategies	Senegal's national action plan to combat desertification and other environmental / development action plans, PRSP
Stakeholder participation in design stages	Have the partners and beneficiaries been consulted during the project preparatory phase?	UNDP Program manager Gov. Representative Local authorities and partners
Linkages between the project and other interventions in the sector	What is the relationship / coordination / communication between PROGERT and other projects xxx that also focus on xxx Are there other projects that collaborate or complement the PROGERT interventions?	UNDP Program manager Project coordination
PROJECT IMPLEMENTATION Implementation approach		
Use of the logical framework as a management tool during implementation	Was the LF used during the course of the project to monitor the results, assess the risks/assumptions?	Project coordination Local coordination units
	How were the anual work plans developed? Were partners involved in the development or validation of the work plan?	Project coordination Local coordination units
Adaptive management reflected in work plan development	Was the work plan revised / adapted according to the results of the monitoring / evaluation of the results?	Project coordination
Monitoring and evaluation		
Project steering committee	Was the PSC helpful to solve critical issues during the project implementation?	Project coordination
Quarterly progress reports	How were the different units coordinated for the monitoring of results, preparation of the quarterly and annual reports? How many reports (narrative and financial)/ formats had to be submitted? To whom?	Project coordination Local coordination units
Annual monitoring and reporting	How frequently were LF result indicators measured?	Project coordination Local coordination units
Definition of appropriate indicators	Have the indicators been changed / modified during the project?	Project coordination
	Did UNDP or GEF provide support / advice to identify appropriate indicators?	Project coordination
National ownership	Has the project contributed to develop or support regulation and policy framework? Is the country adopting new regulations or policies that further the project objectives?	UNDP Program manager Gov. Representative
Stakeholder participation		
Local resource users' and partners participation in project implementation and decision making	Were they involved and how?	Project coordinator Local coordination units
Mechanisms for information	Did the project develop a communication strategy?	Project coordinator

Section of the report	Questions	Source of information
dissemination in project implementation	How was communication established throughout the project structure and with partners?	Local coordination units
Financial planning, expenditure statement and efficiency		
Financing plan and actual contributions	Ask for table	Project accountant
	If there are discrepancies between pledged and paid amounts, are there specific explanations?	Project accountant Project coordinator
	Did the project have a leverage effect to mobilize additional contributions from other partners?	Project accountant
Expenditure statement per outcome and co-financing source from xx 2007 to xx 2012	Ask for table	Project accountant
	Were there major budget revisions? Based on PSC decisions?	Project accountant Project coordinator
	If there are major discrepancies between budget and actual amounts, are there specific explanations?	Project accountant Project coordinator
Local communities in-kind contribution	Is it possible to estimate the local communities' contribution in the various interventions for the total duration of the project?	Project accountant / Project coordinator
Cost of main achievements under each outcome	Ask for tables	Project accountant
Planning for sustainability	Did the project develop a sustainability strategy? Or an exit strategy?	Project coordinator
	What are the institutional arrangements and financial mechanisms in place to ensure the sustainability of the project results?	Project coordinator
Execution and implementation modalities		
Implementation issues	Mechanisms for coordination among all actors / partners	Project coordinator
Financial management	Management with UNDP and coordination with the project units	Project coordinator Local coordination units

Appendix 7. Observations on the logical framework indicators, baselines and targets

Outcomes / Intended results	Indicators	Targets	Observations
Immediate objective: Catalyze sustainable land management at the landscape level with the goal of combating land degradation and reducing poverty	Average yields for millet and groundnut in 5 sites (by restoring arable land fertility in the landscape through intensification) **Baseline**: Lower yields for millet and groundnut crops, respectively 1.34% to 3%.	Increase yields by 10% in the 5 sites in Year 5.	Variations in yields may also reflect variations in rainfall - To be specific, this indicator should be based on a comparison of yields in the intervention sites and control sites for the same years
	Agricultural expansion in the forests and grazing land in the 5 sites. **Baseline:** Increased average in cultivable areas of 19.68% since the 1980s.	Stabilize the cultivable areas in Year 4.	-
	Number of hectares of degraded land rehabilitated in 5 sites. **Baseline:** Over one million hectares of forest formations and rangeland are degraded in the Groundnut Basin.	Restore 60,000 ha of rangeland and forest by Year 4.	**-**
1: Cropland fertility increased through upscaling innovative, adapted technologies in the Groundnut Basin	Increased yields and diversification of production. **Baseline:** Lowered fertility and low yields for the two main crops: - Groundnut: 1.34%/year - Millet: 3%/year	Increase diversification of average production per household by 50% by Year 5. Increase yields for millet and groundnut by 10% by Year 5.	Reference does not document the diversity of productions and since the target is expressed as a percentage increase, the project achievement can not be properly monitored.
1.1 The rural space in managed rationally in order to combat the massive loss of vegetation cover	Number of agro-pastoralists having adopted and applied the new regulations for land use and field preparation. **Baseline:** Incoherence and incompatibility in the use of space in most local collectivities.	Ensure the implementation of 15 local development plans (LDP) developed in rural communities by Year 4 accepted by at least 150 agro-pastoralists	The reference refers to the situation but does not relate directly to the indicator. The reference and the target should be formulated using the same unit as the indicator, so in terms of the number of agropastoralists having adopted and applied the new rules ... recorded in 15 PLD. The project does not have any result relating to the indicator, but rather to the target.
1.2 Sustainable agricultural intensification systems are replicated (French version in the prodoc: disseminated / made accessible	Number of agro-pastoralists having applied sustainable intensification techniques related to the environment. (CEV) **Baseline:** Trend toward agricultural mining in the Groundnut Basin and low levels of restoration of the soil's mineral and organic nutrients.	Guide 10% of agro-pastoralists in applying sustainable intensification techniques through extension services on 20 sites covering approximately 200 ha.	The reference refers to the situation but does not relate directly to the indicator. The target is appropriate, but the project presents a result in terms of area and not related to the indicator.
1.3 Increased capacity to adapt to climate change	Number of farmers having adopted drought-resistant agricultural techniques (zero labor) as a means for adaptation to climate change **Baseline:** Not specified	Guide 10% of producers to adopt new practices for adaptation to climate change by Year 4 in the selected sites.	The baseline is not documented. As the total number of farmers in the area is not documented, the level of achievement of the target can not be evaluated.
1.4 Reclamation of salinized lands	Number of hectares of cultivable salt land **Baseline:** 389,500 ha of salt land.	Participatory enclosure of 389,500 ha and restoration of 600 ha of salt land by Year 4.	**-**
1.5 Reclamation of farmers fields through integrated fertility management, agroforestry, and soil and water	Number of hectares of restored cultivable land. **Baseline:** not specified	Support 10% of farmers in applying restoration techniques covering at least 5000 ha by Year 5.	The baseline is not documented. The target should be formulated using the same unit as the indicator, so the number of hectares of land restored (expected result) rather than percentage of farmers receiving support (intervention)

Outcomes / Intended results	Indicators	Targets	Observations
conservation			The project does not have any result for this indicator
2: Rationalized forest and pasture use through upscaling of best practices	Degree of the utilization of codes of conduct. **Baseline:** Existence of codes of conduct inadequately applied or that do not commit all parties	Support the management of 60,000 ha of rangeland and forest formations on a community basis by Year 4.	The degree of utilization of ... is ambiguous wording; this indicator is therefore difficult to measure. The baseline and the target are not directly related to the indicator The target is formulated in terms of intervention, not of result.
	Number of land use plans developed and finalized. **Baseline:** not specified		The number of plans developed is an operational product that tracks the progress of activities but we are more interested in rates and results of the implementation of conventions and plans, in terms of reduced pressures (straying animals, encroachment, bush fires, logging) and of production of results (improved forage potential, of the condition of the livestock, of milk production).
2.1 Agro-pastoralists and transhumants adopt sustainable techniques and rules for rangeland use	Number of hectares of pastoral land that is delineated and managed according to consensual regulations based on pastoral or traditional pastoral reserves **Baseline:** Existence of partially applied regulations for managing land disputes.	Support communities in the delineation and management of 20,000 ha by Year 5 through consensual regulations ; Develop and adopt 5 codes of conduct in rangeland use, protected by a network of 200 km of firebreak; 800 pieces of equipment.	The target is formulated in terms of intervention, not of result. The area of forest and pastoral units delineated and managed on the basis of conventions and management plans indicates that the product has been supplied but does not indicate whether the finalized product provides the desired changes concerning the adoption of rules by actors.
2.2 Negotiate and establish corridors for access by livestock to water and pasture through farmland	Number of hectares of delineated and enriched land **Baseline:** not specified	Support setting up 2000 ha (or 200 km) of inter-community corridors.	The baseline is not documented. The indicator does not indicate whether the finalized product provides the desired changes. An additional indicator could relate to the perception of herders on rangeland improvement - or - on milk production.
2.3 Participatory management plans for village forests and "scheduled"(gazetted) forest	Number of hectares of villages and community forests having adopted the land-use plans and applied the codes of conduct **Baseline:** 41% of natural forests are degraded	Protect at least 7500 ha of natural forests.	The baseline is formulated as a percentage rather than in hectares
2.4 Improved agro-pastoral practices for sustainable intensification of livestock production and energy needs (hay, fodder production, field manuring, tree plantations (for fodder and fuel), sustainable browse harvesting, etc)	Number of livestock farmers having adopted sustainable intensification practices **Baseline:** Existence of examples of best practices on a small scale	Support at least 100 livestock farmers or herders to adopt at least one new practice by Year 3	The indicator does not indicate whether the finalized product provides the desired changes.
2.5 Improved energy efficiency for rural consumption of charcoal and fuelwood	Number of rural populations having adopted at least one energy-saving technique **Baseline:** Predominance of techniques causing wasted energy and, consequently, ligneous resources	Support 30% of farmers (men and women) in adopting techniques for efficient use of wood energy by Year 4	- The result is poorly-formulated (incomplete). -An indicator for the savings in wood and coal resulting from the adoption of energy-saving technologies, on the incidence in terms of logged trees, would have been appropriate. -The target is not directly related to the indicator and expressed in terms of percentage while no figure has been put on the baseline. -The number of trained farmers does not

Outcomes / Intended results	Indicators	Targets	Observations
			inform about a development result. It would be better to formulate or add an indicator for the desired change as a result of training.
2.6 Communities maintain a network of firebreaks, through enhancing greater organization (firefighting groups), training and equipment	Number of village committees belonging to the network **Baseline:** not specified	Support and equip at least 45 village committees to combat fires by Year 5	The baseline is not documented. The indicator is badly formulated (incomplete). The "number of village committees having the capabilities and equipment needed and actively involved in the fight against bush fires" would be more appropriate. The target is formulated in terms of intervention, not of result.
3: Policies and local partnerships are harmonized and capacities are strengthened for integrated land management following a landscape approach.	Number of integrated land management plans developed and implemented that strengthen the capacity of local systems to adapt to climate change and drought **Baseline:** - The local collectivities have little involvement in the design of projects and programs, site selection and definition of intervention strategies	Integrate the landscape approach into at least 15 local development plans at Year 3. At least 10 villages have formally adopted sectoral application plans and protocols (foreseeing motivations and penalties) by Year 5	The formulation of the component and the target are ambiguous in the sense that Integrated Land Management following the landscape approach is not clearly defined in the project document. It is therefore difficult to assess whether the indicators and baselines are relevant and to use them to monitor the progress of achievements.
	Number of private/public partnerships through the landscape approach **Baseline:** Compartmentalization in interventions	Establish at least 5 public/private partnerships for sustainable land management by Year 4	The reference refers to the situation but does not relate directly to the indicator. The target is formulated in terms of intervention, not of result and the project did not monitor this indicator.
	Number of transparent, participatory and collaborative self-evaluations and incentive policies by the involved Ministries using the landscape approach **Baseline:** Reports of the unsustainability of solutions derived from previously adopted strategies	Evaluate at least two current strategies and propose appropriate reforms by Year 3	The reference refers to the situation but does not relate directly to the indicator. The target is formulated in terms of intervention, not of result and the project did not monitor this indicator.
	Number of local decision makers who have improved understanding of the problems of sustainable environment **Baseline:** not specified	Guide at least 100 local decision makers in gaining improved understanding by Year 3	The baseline is not documented. What is the development result that follows from this understanding?
3.1 Training needs at the individual, institutional and systemic levels are identified	Training plan set up around categories of actors for detailed strategy to strengthen capacity **Baseline:** Numerous training programs developed without any links to actors' actual needs	Develop a training strategy for each of the 5 project sites from Year 1	-
3.2 Key actors' capacities (local elected officials, technical services, CBOs, project team) are strengthened	Number of initiatives to regenerate developed land by actors **Baseline:** Inadequate means made available to local collectivities despite the importance of their responsibility in SLM; Low level of means for technical services for their interventions.	Organize 40 training sessions on sustainable land management aimed at beneficiaries by Year 3. Organize at least 12 inter-village visits by Year 3.	The reference refers to the situation but does not relate directly to the indicator. The target does not relate to the indicator but the project did the monitoring according to the target and not to the indicator which was relevant to the expected result. The training sessions and exchange visits are not results but interventions. It is preferable to seek to measure the changes brought by these trainings and visits in terms of capacities developed (if it can be measured) or of achievements made possible through developed capacities
3.3 A network of	Number of publications from	Publish at least 5 reports	The reference refers to the situation but does

Outcomes / Intended results	Indicators	Targets	Observations
journalists for environment involved in identifying and disseminating best practices for greater upscaling effect	journalists **Baseline:** Low involvement of the network of journalists in sustainable land management.	(radio, TV, video, internet) per year.	not relate directly to the indicator. The indicator and target are not sufficiently specific and targeted.
3.4 Training on legal provisions on decentralisation	Number agents for popularization and rural officers that are trained **Baseline:** Agents for popularization and rural officers are not well versed in decentralization policy.	Organize 8 training sessions on applying decentralization statutes to reach at least 160 participants by Year 4	The result as formulated is not a development result. Comments made on training under result 3.2 apply here. The indicator is not specific enough.
3.5 Agreements with local financial institutions for developing sustainable financial mechanisms for land management	Protocols for granting credit targeting sustainable land management **Baseline:** Inexistence of links between granting credit and sustainable land management	Establish at least 1 protocol at the level of each site by Year 2	The reference refers to the situation but does not relate directly to the indicator. The baseline should be "0". The existence of protocols is not a result of development. However, that local actors have access to sustainable sources of funding to support SLM would be one.
3.6 Local decision makers and judicial system is trained to better address land conflicts using landscape approach	Nb of people in charge of handling disputes who are familiarized with sustainable land management and environmental issues **Baseline:** not specified	Train at least 10 people to be in charge of handling disputes by Year 3	The baseline is not documented. Previous comments concerning training apply.
3.7 Local advisory committees are functional and ensure real community participation and conflict management	Number of local consultation committees created or revitalized **Baseline:** Existence of numerous local committees without means to ensure functioning on a human, methodological and material level	Make 5 consultation committees operational by Year 1	The reference refers to the situation but does not relate directly to the indicator. It would have been useful to use an indicator to measure the perception or level of satisfaction of communities about their participation in conflict management since it is the result sought by the establishment of advisory committees.
3.8 National Steering Committee and Scientific Technical Committee provide timely guidance to project implementation	Number of committee meetings having reached decisions. **baseline**: n.a.	Organize at least 2 STC meetings and 1 SC meeting per year	A management activity is not a development result and it is not appropriate to include it in the logical framework of the project.
4: Income Generating Activities made compatible with the principles of Natural Resources Management and Sustainable Land Management.	Average income per inhabitant (poverty level) **Baseline:** The percentage of poor households is 59.2% in Louga, 65.3% in Diourbel, 68.4% in Thiés, 75.7% in Kaolack and 81.4% in Fatick (PROGERT Scientific Review, 2005). 40% of households in the Groundnut Basin have monthly incomes below 59,000 FCFA.	Develop IGAs linked to NRM to reduce poverty by 10% in the different project sites at Year 5	The reference refers to the situation but does not relate directly to the indicator. The project did not monitor this indicator. The target refers to the development of IGAs and the reduction of poverty rather than to income per capita.
4.1 Income generating activities that are compatible with sustainable natural resource management and SLM principles are developed (English version of the prodoc: transfered and upscaled)	Number of persons having benefited from project support for developing income generating activities compatible with sustainable land management **Baseline:** Small-scale income generating activities using many natural resources and generating little income	Support at least 70 persons to engage in IGAs linked to SSM by year 5	The reference refers to the situation but does not relate directly to the indicator.

Outcomes / Intended results	Indicators	Targets	Observations
4.2 The private sector and small enterprises are motivated to promote sustainable land management	Credit lines opened for sustainable land management **Baseline:** Low attractivity of the environment of natural resources management for the private sector causing low investments	Facilitate access to micro-credit for 30 groups by opening credit lines in the Decentralized Funding Systems (DFSs) by Year 2	The reference refers to the situation but does not relate directly to the indicator.
5: Adapted management from lessons learned and the monitoring system.	Number of operational consultation frameworks **Baseline:** Weak coordination between actors. Lack of motivation among actors. Lack of unifying programs	Revitalize at least 10 consultation frameworks based on unifying programs and harmonized approaches linked to sustainable land management by Year 1	The reference refers to the situation but does not relate directly to the indicator. The baseline should be 0.
5.1 A management and monitoring & evaluation unit involving all actors working within the Groundnut Basin is created and functional	Execution level for work plans approved **Baseline:** n.a.	Ensure an execution rate of at least 60% per year, on average	The indicator is poorly formulated, ie non-specific and not targeted as well as the target, so we do not know what plans are in question. The project has not established a management coordination and monitoring and evaluation unit involving all stakeholders in the groundnut basin while a delivery rate of 90% is reported. Inappropriate formulation of the indicator likely contributed to confusion (mislead) on the expected outcome for the fifth component.

Appendix 8. Communication strategic plan (example of a structure)

Objectives of the communication strategy

Information	Raise public awareness … on the importance to carry out such intervention, create interest and mobilize stakeholders and others likely to be interested in issues ... to participate in all stages of the process proposed by the project.
Internal communication	Ensure optimal coordination to manage the process effectively and efficiently
External communication	Benefit from and share lessons learned throughout the project with other partners at national level and international - Promoting complementarity and development of synergies - Foster the mobilization of new support throughout the project

Target groups and key messages

	Target groups	**Key messages**	**Communication means** [21]	**Frequency**
Information	Population			
Project internal communication (management)	Steering Committee			
	Local Project Units			
	National Consultants			
	Department of Water and Forest			
	Scientific and Technical Committee			
	UNDP			
	CAP			
External communication	Ministries			
	CBOs			
	NGOs			
	Donors			
	Medias			
	Partners in other countries involved in the same process			

List of emails / mailing addresses

…

Communications Timetable (based on the previous table)

…

Required resources (staff and budget)

…

[21] Radio, local and national televisions, Newspapers, Posters and brochures, Email, Telephone, Postal mail, Meetings, Workshops, Conferences, Newsletter, News, Articles, Interviews, Reporting