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**FINAL REPORT**

**Evaluation of « CONSERVATION AGRICULTURE / ECOFERME PROJECT »**

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| **Lobou Conseils**  **Bureau d’Etudes d’Ingénierie** | Rue 246 Porte 1017 Hippodrome  BP : E3732 – Bamako (MALI)  Tél. : (223) 22 21 03 36  (223) 66 75 53 52  Fax : (223) 22 21 03 36  Site :[**www.lobouconseils.com**](http://www.lobouconseils.com)  Email : [lobouconseils@yahoo.fr](mailto:lobouconseils@yahoo.fr) |
| Travaux Publics – Aménagements hydro agricoles – Assainissement - Hydraulique – Voirie et Réseaux Divers –Bâtiments – Transports. | |

**Team of consultant :**

Modibo Sacko

Molobaly Samaké

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**ACRONYMS AND ABREVIATIONS**

|  |  |  |
| --- | --- | --- |
|  | **FRENCH** | **ENGLISH** |
| **AMAPROS** | Association Malienne pour la Promotion du Sahel | Malian Association for the Promotion of the Sahel |
| **CAEF** | Conseiller aux Affaires Economiques et Financières | Economic and Financial Adviser |
| **CSCOM** | Centre de Santé Communautaire | Community Health Center |
| **ENA** | Evaluation d’urgence de la nutrition | Nutrition Emergency Assessment |
| **GCoZA** | Groupe de Coordination des Zones Arides | Coordination Group for Arid Areas |
| **GMJT** | Groupement Musow Ka Jigiya Ton | Musow Ka Jigiya Ton Savings and Loans Associations |
| **ICRAF** | Centre International pour la Recherche en Agroforesterie | International Center for Research in Agro-forestry |
| **IER** | Institut d’Economie Rurale | Institute of Rural Economy |
| **ONG** | Organisation Non Gouvernementale | Non Governmental Organization |
| **PDSEC** | Plan de Développement Social, Economique et Culturel | Social, Economic and Cultural Development Plan |
| **SAP** | Système d’Alerte Précoce | Early Warning System |
| **YAG TU** | Association pour la Promotion de la Femme "YAM–GIRIBOLO– TUMO’’ | Association for the Promotion of Women ‘’YAM–GIRIBOLO– TUMO’’ |

**1. Introduction**

**1.1. Background and Justification of the Study**

For the implementation of the Conservation Agriculture/Ecoferme project, CARE International in Mali with the support of CARE Atlanta (USA) and in collaboration with local NGOs AMAPROS in Ségou and YA G TU in Bandiagara, received funding from the Howard G. Buffet Foundation for a period of three years.

This project aims to improve in a sustainable way the nutritional status and food security of ten thousand (10,000) agro-pastoralists households in 10 communes of the regions of Ségou and Mopti through the introduction of Conservation Agriculture techniques and gender-sensitive support systems.

To achieve this goal, the following objectives have been assigned*:*

Objective 1: Increased production of staple foods by households adopting and consistently applying conservation agriculture/Ecoferme techniques.

Objective 2: Increased community and public-private investments in viable income-generating activities based on conservation agriculture/Ecoferme that ensure the safety of livelihoods, especially for women and youth.

Objective 3: The sustainable and equitable management of agricultural production and natural resources based on the inviolable rights of users to land ownership and monitored effectively through community accountability mechanisms.

Therefore, it appeared relevant to conduct a mid-term review of the project activities to inform intervention approaches and strategies.

A mid-term review was therefore conducted in January/February 2011, i.e. two years after the official start of the project. It should be noted however that the first year of the project was devoted to developing partnerships, putting in place the project technical team, and Conservation Agriculture/Ecoferme techniques in Segou and Mopti and conducting a baseline assessment. The mid-term review is therefore taking place after two years of official implementation of the project out of a total of 36 months.

**1.2. Objectives of the mid-term review**

The main objective of this consultation was to conduct the mid-term review of the Conservation Agriculture/Ecoferme project in collaboration with the Coordinator of field activities and specifically with the Monitoring and Evaluation Coordinator of the Food Security And Climate Change Adaptation Program (SA/ACC)to which this project contributes in the 10 partners communes in the districts of Ségou (Cinzana, Fatinè, Diédougou and Kamiandougou), Macina (Tonguè and Folomana) in the Ségou region and Bandiagara (Bara Sara), Dourou, Kendié and Diamnati) in the Mopti region.

The key expected results of the study, through surveys with target groups to assess the short-term impacts and effects of the project, were:

* The target groups of the Conservation Agriculture/Ecoferme project fully adopted farming technologies and activities proposed to them;
* Target groups were involved in the implementation of the project (planning/implementation of activities, monitoring and evaluation);
* The strategies and approaches developed by the project contributed to the improvement of agricultural production and the food security for households adopting conservation agriculture/Ecoferme practices;
* The developed strategies and approaches have helped to improve communal development plans taking into account new technical/agricultural production systems;
* Stakeholders such as community workers, women associations (GMJT), youth associations, technical services officers (line departments) have developed collaboration and partnership to improve household food security and nutrition;
* Interventions were gender-sensitive;
* Collaboration between the project and technical services officers and local authorities ensured the sustainability of interventions;
* Research action helped communities to change their behavior toward the implementation of the technologies developed.

As the project is half way in its implementation, CARE deemed it necessary to review the relevance of support provided on the adequacy and effectiveness of intervention strategies with relation to the goal and the three specific objectives of the project.

The mid-term review was initiated in this context to measure the changes and effects of actions carried out for agricultural producers, women and youth following the introduction of conservation agriculture/Ecoferme technologies.

**2. The methodology used to conduct the study**

**2.1. Design of the methodology**

The task was to measure key criteria or "angles of view" for the evaluation of a project:

* Effectiveness/Efficacy: to compare the objectives set at the start and the mid-term results achieved.

The team reviewed the perception of beneficiaries, mostly those who were fully involved in the project;

* Efficiency: to compare results achieved and the means used to achieved them: it assessed the outcome and the approach chosen with relation to mobilized resources (financial, human and material resources);
* To assess the impact and effects of the project on households, children aged six-59 months as well as on the yields of crops: the study analyzed all the possible positive and negative effects identified;
* The implementation strategy was addressed to analyze the relevance of the solution provided by the project to solve the problem;
* The participation of beneficiaries to ensure that the terms of participation required from the populations were realistic and followed;
* Sustainability to analyze the chances for the action to continue after the project has ended. The study also reviewed collaboration between the project and the staff from technical offices and local authorities for the sustainability of interventions.

The approach used for the study is based on the following three phases:

* A preparatory phase;
* A field data collection phase;
* A phase for processing and analyzing data collected followed by the development and presentation of a report on the findings.

**2.2 Approaches for the Methodology**

**2.2.1 Preparatory Phase**

The objective in this phase was to formulate the problem, creating the best conditions for work. The main activities carried out included:

* Interview with CARE Ségou project staff, including local NGO partners;
* Literature review and development of data collection tools (interview guide, check list) and their approval by the project team (CARE and partner NGOs);
* Developing and presenting detailed timeline for implementing activities in collaboration with the CARE team and partners on the field.

Interview with CARE Ségou project team

A working session was held with the CARE Segou project team to share approaches and various evaluation tools to be used on the field. Attendees included the supervisor of AMAPROS, field activity coordinators, the Monitoring &Evaluation Coordinator and the economic development advisor from CARE Ségou field Office. Also, an intern of CARE joined discussions and exchanges on the tools.

Discussions during these meetings focused on project details, the scope of work, planning (field trips) and outputs issues, the identification of persons and institutions likely to contribute to the success of the study and anticipated results.

The meeting helped to better define the scope of the study and the collection of basic documents available on the project, trip reports, monitoring and evaluation reports. It also helped to make the final selection of communes, villages and partners to be contacted.

The schedule of the study was finalized on the field for Mopti region in collaboration with the NGO YAG TU. Thus, the NGO Coordinator, the supervisor and two junior experts easily liaised with other partners and populations to coordinate field visits. Similarly, in the region of Ségou, the team was introduced and facilitated by AMAPROS through the field supervisor and three junior experts including a woman.

Finally, to facilitate the process of collecting information on the ground, CARE wrote and gave the team a letter of introduction to the various stakeholders.

Management of existing data: Literature review

The Team reviewed all information and documents available on the Conservation Agriculture/Ecoferme project and the activities of partner NGOs which helped to secure secondary data. These pieces of information and documents were related to activities implemented by the NGOs (YA G TU, AMAPROS) and other entities under the Conservation Agriculture/Ecoferme project, the field trip, and monitoring and evaluation reports, etc.

At the end of this first document review and information assessment phase, the team adjusted and refined additional data collection tools (interview guides and survey sheets) used to collect data on households and children.

It should be noted that secondary data were collected and processed continuously. This went on throughout the mission.

Identification of target groups and sampling

Once literature and report review was completed, the team of consultants developed a directory of stakeholders involved in the Conservation Agriculture project who can provide relevant feedback on the possible impacts and/or effects of the project. This concerned not only entities, individuals and legal entities who worked on this issue but also populations (producers, women, and youth) to collect their perceptions.

The sampling process consisted in the identification of a representative group of partners whose characteristics were featured in documents and reports. The choice was reasoned and based on a good knowledge of Communes, villages, and partners.

Three (3) communes were selected in the region of Ségou, i.e. the rural communes of Cinzana and Djédougou in the district of Ségou and the commune of Tonguè in the district of Macina in Ségou region. The villages of Kondia and Dona were selected in Cinzana. The village of Yolo in the commune of Djédougou, and the village of Tongué in the commune of Tongué were selected for the evaluation.

In Mopti region, two (2) Communes were selected: the commune of Bara-sara and the commune of Kendié. The two villages in the commune of Bara sara where the evaluation was conducted are OuoSarè and Mandoli and those in the commune of Kendié were Kendié and Sogodougou.

In each of the selected villages, about ten households were selected for the survey on the consumption of basic food and nutrition of children aged 6-59 months.

The following table shows the distribution of populations surveyed per commune and socio-economic category.

**Table 1: Distribution of population surveyed per commune and socio-economic category**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Target groups | Segou | | Mopti | |
| Men | Women | Men | Women |
| Community workers | 18 | 9 | 23 | 2 |
| Resource persons | 11 | 8 | 12 | 4 |
| Children aged 6-59 months | 57 | 26 | 40 | 43 |
| Youth associations | 4 | | 4 | |
| women MJT Associations | 4 | | 4 | |

Source: 2011 Survey

Development of Data Collection Tools

Several data collection tools were developed and used depending on the target and the nature of the information to be collected. Interview guides for the project targets contain questions on the key issues of the study:

* The knowledge, attitudes and practices of community workers/resources persons, women GMJT, youth associations and their households on Conservation Agriculture/Ecoferme technologies;
* The level of achievement of indicators (effects or impacts) of the project on aspects of food security and nutrition for a representative sample of households, community workers and resources people and indicators on the functionality of MJT associations;
* The capacity of community workers to train producers and the dissemination of messages on new Conservation agriculture/Ecoferme technologies;
* The effects or impacts of micro-projects co-funded under this project for women and youth associations.

With an approved list of target groups and sample partners to consult for interviews, it was easier for the team of consultants to adjust tools and their respective content. It should be noted, however, that depending on the partner groups (NGOs, local communities, community workers, women and youth associations, government technical offices), these tools focused on interviews, evaluation questionnaires. The tools/supports were discussed and adjusted in collaboration with the CARE Ségou project team.

**2.2.2 Data Collection on the Field**

Field visits were organized with various partners identified to conduct interview and surveys.

During this phase of data collection on the field with NGO YAG TU in Mopti region and AMAPROS in Ségou region, the team did the following:

* A better sharing of the contents of data collection tools not only with the junior experts but also with supervisors. The Coordinator of the NGO YAG TU attended this information and orientation session;
* Information, awareness raising and presentation of the objectives of the study to target actors:

Before the start of the field data collection phase, supervisors of the two NGOs explained the nature of the study, its objectives, its stakes and its approach to secure the populations’ buying into it and their participation.

* Quantitative surveys were conducted through a sample of 10 persons (community workers, resource persons) per village and their children:

It was about collecting data through the administration of questionnaires to a sample of households in each of the project intervention area (Mopti, Ségou). Questionnaires included questions on information on the annual coverage of households food needs, etc. I was also possible to collect data on nutrition of children aged 6-59 months.

Sample villages were selected in the presence of the CARE team and partner NGOs.

* Qualitative surveys through semi-structured interviews (ISS) with the various stakeholders, theme-based focus groups with women and youth associations and visits to micro-projects sites:

Key informants targeted by the ISS include:

* Partner NGOs (AMAPROS, YA G TU);
* The technical entities of the government;
* Local communities;
* The CARE team.

Collection of fresh data was facilitated through focus-group, interviews with partners.

Focus group: these discussion groups were implemented using interview guides to identify, from the point of view of the populations, the effects of the implementation of the project on their livelihood, the major constraints related to some technologies, and possible solutions. These focus groups took into account gender aspects by organizing special groups composed solely of women or youth. They were organized in a representative sample of villages supported by the project. For each selected village, a focus group was held with women aged 15 to 59 years and youth aged 15 to 39 years.

 Interviews of partners: The team interviewed locally elected officials of the communes of Cinzana, Tongué in Ségou region, Bara-Sara, Kendié in Mopti region to gather their views on the results and the sustainability of actions. The Team could not meet with the local Agriculture Officer in the commune of Kendié who was out of town.

Partner NGOs implementing the project were interviewed as well.

**2.2.3 Data analysis**

Information collected were processed and quantitative and qualitative results obtained from interviews, observations and focus group meetings were analyzed from results analysis grids. Data were stored and analyzed in 'Excel' spreadsheets in crossed tables to facilitate their interpretation. The results are presented as simple tables depending on the nature of the data.

With regard to the nutritional status of children, data were entered in ENA (Emergency Nutrition Assessment) and analyzed directly. The analysis focused on underweight children falling under the two standard gaps based on weight.

     Project Baseline Analysis

The Team reviewed documents of the baseline survey on the social and environmental situation that prevailed at project start-up. This focused specially on the various documents, particularly the Ecoferme baseline survey, the 2009/2010 crop season monitoring document and the 2010-2011 crop season monitoring report.

The literature review and management helped to get a clear idea on the baseline one year after the official start of the project in February 2009.

Analysis of the effects of the achievements of the project

The relevance and effectiveness of the implementation of the project were examined.

The matrix effects helped to measure the impact of the achievements on the populations. The team reviewed the effects on aspects of food security and nutrition, and the level of involvement of various local stakeholders (communities, women associations, youth associations, community workers, resources persons, etc…), the effects on women and youth associations of co-funded micro projects under this project.

The various constraints identified with the target groups were also analyzed to identify their impact on the results of the project.

The assessment of the project approach was discussed in relation to a number of criteria such as:

* the level of involvement of the beneficiaries during the design and implementation;
* the performance and relevance of methods used to train producers and disseminate messages on new Conservation agriculture technologies/Ecoferme;
* the relevance of criteria used to identify beneficiaries (community workers, resources persons, women and youth associations).

The impact of this approach on the objectives and the results of the project was carefully reviewed.

**3. RESULTS**

**3.1 Project Baseline Assessment**

A critical condition for assessing the achievement of results and measuring the effects and impacts is to know the project baseline with regard to performance indicators established.

It is important to recall that the Conservation Agriculture/Ecoferme project contains in part some of the technologies of the Ecoferme project previously funded by GCOZA Norway, but with conservation agriculture techniques as a foundation. The Team noted that this former project (CARE, 2008) and technologies developed in the new project were considered.

The Conservation Agriculture/Ecoferme project uses a similar intervention strategy, i.e. using NGOs, government technical offices and communities to promote local development and fight poverty. Best linkages between strategies used and actions implemented, a better vision of progress towards the achievement of the development objective were identified. Baseline surveys conducted in December 2009 laid a standard canvas for collecting and processing information on the target areas taking into account the logical framework and monitoring and evaluation indicators. They are focused on households’ food security indicators and the nutritional status of children aged 6-59 months. This diagnosis conducted 10 months after the launch of activities rather focused on underweight children below -2 standard gaps. The results showed that 21% of children in Ségou region were underweight against 25% for Mopti region.

**3.2 Objective Analysis and Project Design**

The Conservation Agriculture/Ecoferme project is funded by the H G Buffet Foundation for a total amount of CFA 815,595,840 from 2009 to 2012.

The hierarchy and composition of project objectives have remained the same since activities started in April 2009. The overall objective was the following: Improve in a sustainable way the nutritional status and food security of ten thousand (10,000) agro-pastoralist households in 10 communes in Ségou and Mopti regions through the introduction of Conservation Agriculture techniques and gender-sensitive support systems. The objectives of the project are intimately linked and if developed as a whole, they should address food security issues that remain a critical concern for the Government of Mali. Objectives 2 & 3 require not only a strong involvement of NGOs, but also of local communities and government agencies to support such an initiative.

Overall, the project is well designed and the hierarchy of objectives is realistic. The basis for ensuring the sustainability of the management of agricultural production and techniques developed is to be considered. The expected results are broadly consistent with the objectives. The baseline survey document developed in February 2010 fits into the national strategy of Mali’s Poverty Reduction Strategy Paper.

The commitment to turn communities and government technical agencies into a body that promotes the involvement of a larger number of populations in project planning and management priorities to ensure sustainability was a major concern. It was the foundation for sustainability of actions and activities in the Conservation Agriculture/Ecoferme project and its contribution to the improvement of food security.

The expected results and the objectives of the logical framework of the Conservation Agriculture/Ecoferme project reflect subsequent strategies to the approach.

The project would have benefited from developing cooperative agreements with government technical services and communities to pave the way for a formal synergy for the sustainability of actions. This approach would have enhanced a more effective involvement and participation in the project planning and management process while ensuring complementarily with other existing projects supporting food security in the communes.

The team noted a breakdown of indicators between the two communes, i.e. 60% for AMAPROS and 40% for YAG TU. This distribution has somewhat facilitated the implementation of activities on the field.

**3.3 Efficiency and Implementation Review**

**3.3.1 Budget and financial management**

The project budget was managed according to CARE existing rules and procedures. Data below show all expenditures made under the project from February 2010 to November 2010. Our review focused on the importance of budget lines for expenditures made during this period.

After 21 months of implementation and 15 months from the project end date, the project disbursed $ 953,332, i.e. 59% of its estimated budget. The most important items are salaries (31% of the total amount disbursed as at November 30, 2010) followed by activities (28%). Equipment and operational costs accounted for 9% each as shown in Table 2. In November 2010, the cumulative disbursement rate for all budget headings was 59% of the overall budget of the project. Monitoring and evaluation, a very important aspect for a better strategic implementation of the project, was allotted very little budget (1%). As at November 30, 2010, 65% of the estimated budget for monitoring and evaluation was used.

**Table 2: Budget spending**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Budget headings (US dollars) | Expenditure as at November 30 | | Disbursement Rate (%) | Importance budget lines (%) |
| Forecasts | Expenses |
| Staff salaries and taxes | 523,674 | 294,736 | 56 | 31 |
| Equipment | 89,618 | 89,618 | 100 | 9 |
| Activities | 438,920 | 270,906 | 62 | 28 |
| Operational costs | 144,318 | 88,249 | 61 | 9 |
| Travel | 109,660 | 51,920 | 47 | 5 |
| Consultants | 143,417 | 61,467 | 43 | 6 |
| Monitoring and Evaluation | 11,618 | 7,527 | 65 | 1 |
| Direct costs | 73,061 | 43,221 | 59 | 5 |
| C USA Adret | 72,544 | 45,688 | 63 | 5 |
| **Total** | **1,606,830** | **953,332** | **59** | 100 |

Source: Analysis by authors from data of the project coordination, 2011

The accounting processing of checks and quarterly disbursement of funds may result in delays in the implementation of activities and support to NGOs. The inputs used by partner NGOs and managed directly by the project may not be available by the time agricultural techniques are put in place.

The team presented a budget overview for each line item and all of the expenses incurred since the start of the project and subsequent disbursements until November 2010. The team noted with satisfaction the current level of disbursements as at November 30, 2010 totaling 59% of the budget.

**3.3.2 Institutional anchoring**

CARE developed and implemented a participatory approach as a basis for strengthening the institutional anchoring of the project. Partner NGOs and locally elected officials (offices of the mayors Bara-sara, Kendié, Cinzana and Tongué) participate in developing ownership of the project in rural areas.

Perceptions and opinions received from municipal bodies show symmetric relationships between teams through the two partner NGOs and municipal entities. The team noted that these agencies participated in meetings and discussions on the field structures and made suggestions to improve the economic welfare of the populations.

The project developed close cooperation with the two partner NGOs that helped to take into account the various problems encountered on the field and to strengthen expertise for supporting the 10 communities in the two regions.

The NGOs (AMAPROS, YAG TU) began their actions in support for the various stakeholders in rural communities (community workers, resource persons, women and youth associations, etc.) in collaboration with the communities in the two regions.

The project local anchoring is very relevant and produces very good results in the short and medium term. This anchoring, which is symmetrical in nature, associates numerous elected officials whose main mandate is to plan and manage local and communal development through Economic, Social and Cultural Development Plans (PDSEC).

Communities view collaboration with the project as positive. Communications are constant and satisfactory and meetings help to collect information on populations concerns. AMAPROS and YAG TU Junior Experts were sometimes asked to participate in the development of the PDESEC.

Activities and programming should be highlighted in these plans to ensure better monitoring and sustainability of future actions.

Setting up a Steering Committee paved the way for synergy involving several partners with a variety of expertise. The mandate of the Committee is to highlight and assess the good implementation of the project as well as the achievement of results according to the instructions of the logical framework. Recommendations made by the Steering Committee are largely taken into account in the management of the project. These recommendations will facilitate the project’s institutional anchoring process. In addition to the two (2) partner NGOs (YAG TU and AMAPROS), the following agencies are members of the Steering Committee: GCoZA Mali, IER, ICRAF, the regional Directorates of agriculture of Ségou and Mopti, the regional directorates of water and forests of Ségou and Mopti, the CAEFs of the Governors of Ségou and Mopti, the regional monitoring officers of Segou and Mopti, the prefects of the districts of Ségou, Macina and Bandiagara, the Early Warning System officers of Segou and Mopti.

The team observed that attendance rate for the first meeting of the Steering Committee was 62% compared to 72% for the second meeting. This is a clear indication of effort made and officials and Committee members’ interest in the effective implementation of the project. The meeting minutes confirmed this finding.

Moreover, the team noted a fruitful co-operation with the communities despite the absence of a formal agreement defining the roles and responsibilities of the parties.

**3.3.3 Project Management and Supervision**

A Chief of Party sees to the management of the project and is assisted by a field activity coordinator whose mandate covers the two areas of intervention (Segou, Mopti). The monitoring and evaluation system in place could better clarify and guide synergy in action. The CARE team has adequate expertise to manage and coordinate the project.

Most officials, supervisors, and junior experts on the project and NGO (AMAPROS, YAG TU) teams had a good knowledge of the intervention areas, worked in the Conservation Agriculture/Ecoferme project. The composition of the project team matches with the desired qualifications to carry out activities and lay down the foundation for synergy.

The team confirms the relevance and adequacy of human resources in place and the tasks remain consistent with the position descriptions.

The work environment between the various stakeholders, coupled with the qualifications and expertise, ensures rigorous management and quality of actions with populations (producers, women, and youth) in the two areas of intervention of the project. Their involvement with communities and understanding of the objectives of the project are not different from one region to another.

The evaluation of human resources in place, according to standard indicators (number of staff, number of communes covered, number of villages) for the two regions (Segou, Mopti) shows a gap that needs to be aligned with resources to better support staff in their quest for improvement in the work. A review of the distribution of junior experts between communes and villages could help to fill this gap.

At CARE Regional Office in Ségou, the field activity manager sometimes went beyond his specific mandate as an agronomist to provide administrative and financial management support depending on the emergency to implement some activities. This double mandate does not appear to have affected his major responsibilities, but should be transitional and timely measures, especially for the region of Ségou.

**Table 3: Project staff with CARE**

|  |  |  |
| --- | --- | --- |
| Areas or specialties | Number | |
| 2009 | 2010 |
| Agronomist with Advanced diploma in Agronomy (project coordinator) | 1 | 1 |
| Statistician (Monitoring and Evaluation and participation) | 1 | 1 |
| Hydro Agricultural Development Specialist (Head of program) | 1 | 1 |
| Accountants (coordinators and administrative and Financial Assistants) | 2 | 2 |

Source: Analysis by authors from the survey data, 2011

Partner NGOs (AMAPROS, YAG TU) usually meet expectations. Their scope of work matches in large part with the distribution of indicators depending on resources available.

Coordination of the project through CARE Office helped to foster solidarity and team spirit.

**3.3.4 Review of the Monitoring and Evaluation System**

The coordination of the monitoring and evaluation did a great job providing an impact indicator dashboard for both regions, but in February 2010, one year after the official start of the project, this board shows the distribution of the indicators of the logical framework between the two NGOs.

The project should develop an internal monitoring system with the staff (surveyors) who can inform the project managers on results achieved following the actions carried out in food security and building the capacity of community workers, resource persons, women, youth and locally elected officials in the various communes in Segou and Mopti. It should also promote thinking on the results achieved in support to communities through building the capacity of elected officials and considering the project in planning, programming and managing local development in the communal development action plans (PDESEC).

However, the team observed that the monitoring and evaluation system uses the two NGOs through their supervisors for collecting and processing data. The activities and estimated results are consistent with the planning and iterative programming of interventions in the field based on the implementation of the Conservation Agriculture techniques, and micro projects from the communes action plans (PDSEC).

The team noted with satisfaction the work done by the monitoring and evaluation coordination and the relevance of the baseline survey conducted in 2009. However, it observed that monitoring and evaluation should have also focused on interventions by other development partners in the project implementation area.

**3.3.5 Production of project documents and reports**

Partner NGOs’ (AMAPROS, YAG TU) annual activity reports are written for the CARE Regional Office in Ségou. Given the peculiarity of interventions in selected areas and the mandates given to NGOs, other forms of reports may be required like the list of community workers, resource persons, etc.

The reports are usually sent to project managers in Ségou on time and meet the requirements. The information provided is very detailed and meets the project objectives and expectations.

The team recognized the technical efforts made by partner NGOs and project managers with CARE to develop reports and process information available on the project. The team reviewed dozens of documents (field visit reports, monitoring reports, etc.) including the 2009-2010 annual report.

However, the team found that content, especially with regard to the annual report, should be more analytical and detailed by presenting results summaries, constraints and solutions offered.

**3.4 Results and efficiency assessment**

The results achieved and presented by the Conservation Agriculture Project/Ecoferme project are not intended to give a comprehensive matrix of all results achieved following the actions identified and conducted. The efficiency assessment will try, instead, to highlight the main results achieved against forecasts.

**Results 1 & 2**

|  |
| --- |
| • 10,000 households adopt conservation agriculture/Ecoferme techniques for the production of basic foodstuffs;  • 400 ha of degraded land are rehabilitated and under agro-sylvo- pastoral production |

To achieve these results, many activities were conducted and followed by the two partner NGOs (AMAPROS, YAG TU) respectively in six (6) communities in Ségou region and four (4) communities in Mopti region.

The Team considered using the word ‘’ using’’ instead of ‘’adopting’’ given the fact that adoption happens only after the support to community workers and resource persons is ended. Thus, the adoption process is measured after the project has stopped financial and technical support for producers once they have the expertise to develop and apply the results on the ground with their own resources. Based on this logic, the team noted a utilization rate of 64.54% compared to the estimate.

The procedures for planning and programming with target groups (community workers, resource persons, women, and youth) have facilitated the implementation of the activities under the project so as to not affect negatively their usual practices. The start of activities in April 2009 helped producers to better cope with the agricultural calendar and implement some Conservation Agriculture/Ecoferme techniques including the microdose of fertilizers, mainly on millet and sorghum crops and the rehabilitation of degraded land.

The following table gives the number of community workers and resource persons using the Conservation Agriculture/Ecoferme techniques.

**Table 4: Number of community workers and resource persons**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Regions** | **Number of communes** | **Number of community workers** | | | **The number of resource persons** | | |
| M | (F) | T | M | (F) | T |
| Segou | 6 | 250 | 116 | 366 | 1,807 | 249 | 2,056 |
| Mopti | 4 | 222 | 45 | 267 | 3,428 | 337 | 3,765 |
| TOTAL | 10 | 474 | 161 | 633 | 5,235 | 586 | 5,821 |

M: Male; F: female; T: Total

Source: Data from 2010 surveys

The semi structured interview with partner NGOs shows for the region of Ségou that approximately 366 community workers, including 116 women, use the Conservation Agriculture/Ecoferme techniques against 267 community workers, including 45 women, for Mopti region.

In Mopti region, 3,765 resources people, including 337, women were affected against 2,056 (249 women) for Ségou region.

Based on this information, the analysis showed that approximately 6,454 households are affected by the project, i.e. 64.54% of the total expected by the end of the project.

Moreover, the team observed that following semi structured interviews with partners, the areas rehabilitated by the project and those that are under agriculture-pastoral production totaled over 933 ha, i.e. about 230% of the forecast. The rehabilitation of the land facilitated the production of rain-fed rice, especially in Mopti region.

**Table 5: Areas rehabilitated and under agro-sylvo-pastoral production (ha)**

|  |  |  |  |
| --- | --- | --- | --- |
| Regions | 2009 | 2010 | Total |
| Segou | 294.25 | 509.14 | 803.39 |
| Mopti | 30 | 100 | 130 |
| Total | 324.25 | 609.14 | 933.39 (230%) |

Source: Data YAG TU and AMAPROS, 2010

**Result 3**

180 community workers and 600 local resource persons recognized for knowledge and training skills in conservation agriculture, and monitoring and improvement of the nutritional status of children

The fertilizer micro dose like in garden planks of moringa, Baobab, improved z*iziphus mauritiana* cultivars are technologies well known to several community workers and resources people for five years through the former Ecoferme project implemented from 2005 to 2008. Crop rotation and the concept of ‘’little’’ or ‘’no ploughing’’ were identified as techniques globally known to the populations. However, the technique consisting in permanently covering ground with crop straws was not well known to the populations and is just being introduced on the field in the two regions, but with a slight advantage for the region of Ségou.

Focus groups in the various villages helped to ensure a better understanding of the micro dose techniques. Also, community workers, resources people and women and youth were able to explain and develop the content of some of the techniques developed on the field (moringa and baobab).

Local capacities for developing Conservation Agriculture/Ecoferme techniques (planning, programming, monitoring/evaluation) were strengthened, mainly as regard to microdose technologies, baobab and moringa.

Thus, following the focus groups, the team noted with satisfaction the level of understanding and involvement of the various target groups in the implementation process of microdose technology. Furthermore, it observed the integration of gender approach even if women and youth involvement rate is lower than that of men.

Under its current phase, the PEF program covered the Mopti region. However, to achieve Result 3, the project conducted a series of training for community workers on the problem in the regions of Ségou and Mopti. In the second year of the project, 366 community workers in Ségou region and 267 in Mopti region were trained on monitoring of the nutritional status of children. According to NGO YAG TU’s 2010 annual report, 1,298 children and 578 women were tested in the district of Bandiagara and 154 cases of malnutrition, including six severe cases, were detected.

According to the 2009-2010 annual report, many village meetings involving community workers, resource persons and other producers were held in 11 villages covered by the project. 270 people, including 157 women, attended these meetings. Moreover, it was reported that 13 community workers and people who work on the Conservation Agriculture project and the nutrition project developed expertise to identify and monitor the nutritional status of malnourished children.

The following table shows the number of community workers who were trained on monitoring the nutritional status of children in Mopti region.

**Table 6: Number of community workers and resource persons trained to monitor nutritional status**

|  |  |  |  |
| --- | --- | --- | --- |
| **Regions** | **2009** | **2010** | **Total** |
| **Segou** | **-** | **366** | **366** |
| **Mopti** | **-** | **267** | **267** |
| **Total** |  | **633** | **633** |

Source: YAG TU and AMAPROS, 2010 report

The team noted that for community workers, the project exceeded largely its objective.

**Result 4**

300 women savings and loan associations (approximately 10,000 members) are operational and provide financial intermediation services to their members to enable them to improve their livelihood and ability to negotiate public and private investments for their income-generating activities (IGA)

Today, rural women open themselves more to the outside to try to adapt their behavior to the socio-economic conditions of their environment. They do so by mobilizing women groups and associations to which they give new content to undertake income-generating activities. Through these associations and groupings in the villages, they build relationships with NGOs and development projects that could provide institutional recognition and economic support.

Women associations identified by the project in Segou and Mopti reflect the hierarchical structure of the society which they are part of. In this way, strategic positions are usually assigned to women who meet probity criteria and are close to men holding important positions in the village. Thus, in the mid-term review, the team observed that in general the President of the association or the Treasurer was closely related to the village chief or to the advisors.

Women associations work through weekly contributions from their members, the amounts of which are set during the Assembly. In general, part of the funds raised is reserved for savings and the other part for the solidarity or self-help fund.

**Table 7: Women savings and loan associations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Regions** | **2009** | **2010** | **Total** |
| **Segou** | **31** | **5 (113)** | **149** |
| **Mopti** | **-** | **5 (56)** | **61** |
| **Total** |  |  | **210** |

The project is working currently with 210 associations, 149 of which are in the region of Ségou. In 2010, given saturation, the project had to work with the old associations. So, 113 associations were identified and are connected to the project in Ségou region against 56 for Mopti region.

The team observed a good structuring of women associations in general. However, internal loans to members were used more generally to fund small businesses (millet, rice, fish etc.) than to fund the development of Conservation Agriculture techniques.

**Result 5**

80 producers associations (2,400 members, mainly women and youth) have secured long term inviolable users rights on land resources for their micro-projects based on conservation agriculture/Ecoferme

Women and youth associations identified interface with women and youth and partner NGOs (AMAPROS, YAG TU). NGOs’ junior experts are potential intermediaries for conducting and monitoring activities.

For a long-term use of land resources by the micro projects, the institutional recognition through signed agreements was established for women and youth associations in Ségou and Mopti regions.

In 2009, four associations in Ségou region were granted award for micro-projects (see table 8). In 2010, still in Ségou region, 32 associations established agreements for micro projects (conservation agriculture, one shallots store, one fish pond) against 21 (conservation agriculture, one shallots store) for Mopti region. Women and youth in both regions were involved in conservation agriculture through covering with straw. In Ségou region, the shallots store is managed exclusively by women. In Mopti region, it is managed by both youth and women. The fish pond in Ségou region is operated by youth only.

**Table 8: Women and youth associations for micro-projects**

|  |  |  |  |
| --- | --- | --- | --- |
| **Regions** | **2009** | **2010** | **Total** |
| **Segou** | **4** | **32** | **36** |
| **Mopti** | **0** | **21** | **21** |
| **Total** | **4** | **53** | **57 (71%)** |

Overall, 57 youth and women associations have had access rights to land resources for micro-projects based on conservation agriculture/Ecoferme, i.e. approximately 71% of the total forecast.

During group interviews in the villages, the team noted that among the women associations (GMJT), there are also some community workers that are connected to the process of training and dissemination of activities among resource persons. Thus, a strong synergy was developed between the various stakeholders who are sometimes members of the same organizations.

Women associations that the team met with reported an improvement in their financial situation through the animal feeding program which helped to replenish their bank.

For youth associations, the team observed in some places that the practice of microdose on millet crops increased production. Discussions with the groups revealed that production has increased by at least 20%.

The team noted with satisfaction that some women associations initiated contacts with NGOs to improve their households’ livelihood. By observing how neighboring villages have been provided with equipment such as iron fence, wheelbarrows, etc…these women decided to contact the organization. However, the current level of women and youth associations’ expertise needs to be strengthened for their micro-project (training on animal fattening techniques, fish farming).

**Result 6**

10 communes have developed operational policies and action plans for the sustainable and equitable management of agriculture and natural resources, including legislations on land tenure systems which reconcile customary and State legislation and address the specific needs of the various interest groups, including women and youth.

The Economic, Social and Cultural Development Plan (PDSEC) is a policy and strategy paper which defines development objectives pursued by the community. This plan stems from an in-depth diagnosis with populations to identify problems and constraints that they face.

The team noted that this development plan was being finalized in almost all the communities they visited. A scanning of the document helped to get an idea on the planned activities.

The Conservation Agriculture/Ecoferme Technologies are not clearly reflected in the documents being finalized. However, it is important to note, for example, that the 2010-2015 PDSEC of the community of Cinzana contains several areas including among others: health, agriculture, water, infrastructure etc.These fields take into account agricultural and income generating activities for the benefit of youth and women.

Synergy in action through partner NGOs was highly appreciated. For example, for stocking the fish pound in Kondia, the resources were remitted to the office of the mayor of Cinzana on behalf of the village to implement this program.

In general, the team noted that the actions defined address the concerns of women and youth.

Strategies and approaches developed by the project helped to improve agricultural production and achieve food security for households using conservation agriculture/Ecoferme practices.

The strategies helped each identified community worker (with the participation of elected officials, village chiefs, technical services, NGO) to train at least five resource persons for the implementation of Conservation Agriculture/Ecoferme techniques in the various areas covered by the project.

The selection of community workers to take into account the concerns of the populations has proven very useful in the planning and participation process to ensure transparency. Communities played a vital role in this process. Community workers were selected from villages and were used to train people and disseminate the techniques. The methods used have stimulated the participation of women and youth at the bottom of the socio-economic ladder. By establishing separate groups (men, women, youth), each category expressed their visions and concerns over Conservation Agriculture/Ecoferme techniques. Concerns were in general about the availability of straw to cover the soil, and protection against animals.

Interventions were consistent with the basic principles of the strategy and focused on a participatory approach to development, extended consultation mechanisms as wished under decentralization. The team noted that this mobilization strategy was highly appreciated.

**3.5 Effects/Impacts Assessment**

**3.5.1 Increased agricultural production**

A review of the production monitoring report for the 2010-2011 crop season (Monitoring and Evaluation Coordination) shows increased crop yields and production not only from community workers but also from resource people. For millet and sorghum, community workers achieved very satisfactory yields. The yield of millet for which fertilizer was used (2 g per hole) was 2.2 tons per hectare against 1.45 ton for the test. For sorghum, it was three tons per hectare against 1.7 ton for the test.

Thus micro dose fertilizer technique increased significantly agricultural yields which contributed to meeting households’ food needs.

**3.5.2 Food Situation of households**

Surveys with a sample of community workers and resource persons in the two regions (Segou, Mopti) helped to understand that the food situation of households has improved as a result of collaboration with the Conservation Agriculture Ecoferme project.

The following table shows the annual coverage rate of households food need in both Segou and Mopti.

**Table 9: Coverage rate of households’ food need (%)**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Period (months) | | |
| < 6 | 6≤X < 12 | =12 |
| Segou | 5 | 56 | 39 |
| Mopti | 20 | 24 | 57 |

Source: Analysis by authors from the survey data, 2011

The results of the survey showed that in Mopti region, more than 50% of households could cover their food needs during the 2009/2010 crop season against 39% for Segou region.

Moreover, the results showed that moringa leaves contributed significantly to improving the food situation and responding to the treatment of several diseases among children (chronic constipation, headache, stomachache, fever, etc.).

**3.5.3 Nutritional Situation of children aged 6-59 months**

The nutritional status of children aged six to 59 months was appreciated through the index expressed in terms of number of units of standard gap based on the median of the NCHS International Reference Population. Children that fall within two standard variances below the median of the reference population are considered malnourished.

A study conducted by EDS in 2006 and reported by CARE showed that the prevalence of malnutrition measured by underweight was 25.7% for the region of Ségou and 28.1% for Mopti region. Moreover, the baseline survey conducted in December 2009 had shown that for the region of Ségou underweight rate was 21% compared to 26% for the Mopti region.

The survey conducted through this mid-term review on a sample of 166 children distributed fairly between the two regions (Segou, Mopti) showed 42.2% of children aged 6-59 months in Ségou are underweight against 18% for Mopti region. This may be explained by a strengthening of child nutrition programs in target communities in Mopti. Interviews with women in Kendié showed that Misola porridge is widely consumed by children and lactating women.

In Ségou, the communes covered by the Conservation Agriculture/Ecoferme project did not benefit from a nutrition project as Mopti did. Thus, children receive little or no food supplements to improve their weight.

Table 9 shows the nutritional status of children under the age of five years by selected socio-demographic characteristics.

**Table 10: Underweight by sex and region**

|  |  |  |
| --- | --- | --- |
| **Region** | **Below-2 standard gaps (%)** | |
| Baseline survey, 2010 | Mid-term review |
| Segou | 21 | 42,2 |
| Mopti | 26 | 18,1 |
| **Sex of the child** |  |  |
| Boy | 25 | 33 |
| Girl | 21 | 26.1 |
| Total | 23 | 30.1 |

Source: Analysis by authors from the survey data, 2011

Analysis of the previous table shows that boys are more affected than girls, and that more than 30% of the boys fall below-2 standard gaps compared to 26.1% for girls.

Furthermore, it is important to note that the rate of 42.2% may seem excessive compared to the baseline survey rate (21%). This rate may be explained not only by the size of the sample which was low, but also by the fact that target communes did not receive support from a nutrition project. Another explanation may be the facts that the selected sample refers to households whose children are most affected by malnutrition.

However, the team notes that strategies and approaches developed helped to increase agricultural production as a whole and thus to contribute to the food security of households.

The survey with a larger sample of children would have helped to reach more significant results to better understand the weight status. Thus, during the final review, an emphasis should be put on a larger sample to better assess the nutritional status of children.

**3.6. Sustainability of interventions**

The sustainability of interventions express the capacity of the strategies and approaches developed to ensure the sustainability of actions and activities conducted by the population over time. It is firmly linked not only to the economic and financial profitability of the Conservation Agriculture/Ecoferme techniques, but also to the institutional anchoring of the project so that the entire process could be self-reliant without any support from CARE.

At the beginning of the project, the implementation of communal development plans was almost ending for most of the communes. As the project started its activities in 2009, it found itself in between the end of the former plan and the beginning of the new one, for example with regard to the plan of Cinzana. However strategies and approaches developed helped partner NGOs’ junior Experts to be involved in the development process of the plans being finalized. For example, in the commune of Cinzana, the new plan that covers the 2010-2014 period was supported through AMAPROS’ expertise.

Activity planning and programming mechanisms and procedures in relation to new technologies must be introduced and operationalized in local agencies and communities. This implies the introduction of planning and programming procedures to local decentralized entities taking into account the activities of the Conservation Agriculture/Ecoferme project.

The system should see to the development of cooperative agreement between communities and NGOs, highlighting the roles and responsibilities of each party in activity design and implementation. During discussions with local elected officials, it became clear that this approach fits better into the poverty reduction dynamics.

The team found that the activities of the project would be taken into account in the communal development plans if formal contracts are established and followed.

Collaboration between the project technical services officers and local authorities helped to pay the way for the sustainability of interventions.

In the region of Mopti, connection with the local Agriculture Department could not be assessed by the team due to the absence of local agriculture service officer.

The signing of cooperative agreements with technical services, specifically with local agriculture offices in both regions would strengthen synergy to ensure activities are taken into account in their dissemination channels.

In the Ségou region, the local agriculture office in Cinzana is strongly involved in the whole process, from the planning of activities to monitoring on the field through AMAPROS. Interviews with the Deputy Chief of the agriculture sector helped to note that several partners (Sasakawa Global 2000, PRECAD, and AMAPROS) implemented activities related fertilizer micro dose in the commune.

Action research helped communities to change their behaviors toward the implementation of the technologies developed. This change in behavior can be observed on micro dose technology and the use of moringa leaves in households. Some farmers combine organic manure and fertilizer in the fertilizer micro-dose. Also, moringa leaves are added to tea for consumption.

**4 CONCLUSIONS AND RECOMMENDATIONS**

**4.1 Conclusion**

**4.1.1 Relevance**

The team regards the Conservation Agriculture/Ecoferme project as a relevant climate change adaptation initiative. The activities developed are consistent not only with the donor’s policy, but also with that of the Malian Government through the Poverty Reduction Strategy Paper (CSLP/PRSP) adopted in May 2000. This strategy paper is a will and a tool for the national food security strategy in Mali. Also, the team noted that the activities developed and implemented take into account the concerns of the populations of both regions (Segou, Mopti). These concerns relate largely to a decline in the fertility of the soil, combating water and wind-caused erosions, children nutrition, the lack of income generating activities for women and youth, etc.

**4.1.2 Efficiency**

Management and supervision of the project are provided by the two (2) partner NGOs through their supervisors and junior experts in synergy with the project coordination within CARE. Staff assigned to CARE and partners for this task are fulfilling their duties with satisfaction. Financially, and on the basis of the financial information received by CARE Ségou, the team finds that expenses are mostly related to salaries and activities. As at November 30, 2010, about 59% of the overall budget was disbursed.

**4.1.3 Effectiveness/Efficacy**

The team would like to stress the participatory nature of the project which is the result of a former project to enhance Conservation Agriculture techniques. The project is implemented in an area where several stakeholders are brought together in synergy. Partner NGOs (AMAPROS, YAG TU), locally elected officials from the two regions (Segou, Mopti), staff from government technical offices on the one hand and the project staff within CARE on the other hand, are required to contribute to the effective implementation of the project.

The main objective of the project is to improve the nutritional status and food security of ten thousand (10,000) agro-pastoralists households in 10 communes in Ségou and Mopti regions through the introduction of Conservation techniques and gender-sensitive support systems. To reach more easily and on a large scale the various social groups in the target communities, the project uses two (2) local NGOs (AMAPROS, YAG TU) which have supervisors and junior experts for the implementation and monitoring of activities with the populations.

The team observed that two (2) years after official start, the project reached approximately 6,454 households, i.e. a use rate of 64.54% of the forecast and 933 ha of land rehabilitated and under agro-sylvo-pastoral production.

The training of community workers exceeded all expectations. Out of an estimate of 180, over 630 community workers have expertise in conservation agriculture/Ecoferme techniques and monitoring of malnourished children.

Women savings and loan associations are operational in general and allow their members to gain access to funding to start income-generating activities (small businesses like trading millet, rice and fish for the most part). From its start till now, the project was able to network with approximately 210 associations, including 169 old associations. However, it should be noted that funds mobilized are not enough to put in place Conservation Agriculture/Ecoferme techniques.

At the same time, 57 women and youth associations, i.e. 71% of the forecast, established management agreement with communities and partner NGOs to implement micro-projects. These micro-projects are underway, but face difficulties as for the sustainability of the system.

**4.1.4 Impacts and/or Effects**

Despite its late implementation, the monitoring and Evaluation system made a good reference work for the project. It helped to understand the food situation in the various communities where the project is implemented, the yields of the crops and the nutritional status of children aged 6-59 months.

It is worth recalling that in a situation involving several partners; it is extremely difficult to separate the effects or impacts of a given intervention. However, referring to the baseline survey conducted in January 2010, the team also identified the effects or impacts on households and children aged 6-59 months. Interviews showed an improvement in the food situation in the regions covered by the study. On the other hand, regarding the nutritional status of children in Mopti region, the team noted a significant improvement in underweight which dropped from 26% to 18.1%. The team credited this in large part to the intervention of the nutrition project in villages covered by the study where Misola flour is heavily consumed by children and lactating women.

Finally, the team observed a significant improvement in crop yields (millet, sorghum) using the micro dose technique. Agricultural production through the micro dose increased from 0.7 tons to 3.4 tons per hectare. Considering this substantial increase observed and mentioned universally by all the project stakeholders, and the practical nature of technology, we can say that this technology will probably continue to play a crucial role in the agricultural production system of populations.

**4.1.5 Sustainability**

The Steering Committee put in place set in motion a rigorous approach to providing technical support and monitoring in order to maximize lessons learned and ensure mutual accountability. This also requires stakeholders and other development partners to keep a regular flow of information and put in place a formal way of collaboration to achieve the common goals of improving the living conditions of the populations.

The assessment team believes that the design of the project is rewarding and challenging for improving intervention strategies. However, the team noted some weaknesses in the operational system for capitalizing information and actions between the two regions (Segou, Mopti) as well as in the institutional anchoring. Meetings and periodic field visits between the staffs of the two regions could inform and strengthen the system.

Currently, the project covers 10 communities in two (2) regions (Segou, Mopti). At the time of the team’s visit, most of the communes surveyed were developing or finalizing their Economic, Social and Cultural Development Plans (PDSEC). The team noted the involvement of NGOs in the plan finalization process.

The team observed that stakeholders like community workers, women associations (GMJT), youth associations, technical services, partner NGOs developed collaboration and partnership to improve households’ food security and nutrition.

The team also noted improvement in collaboration through having the steering committees hold two meeting in July 2010 and January 2011.

* 1. **Recommendations**

Rrecommendations presented are the result of perceptions of the beneficiaries, partner NGOs, technical services, communities, direct observations and findings on the field.

* The performance of the project is expected to improve these points:

On Conservation agriculture/Ecoferme techniques, intensify the follow-up of achievements on the field, especially with regard to the technique using straw and micro projects. However, for large scale dissemination while ensuring the sustainability of the straw technique, the team proposes the use of local approaches and land protection conventions to replace the wire fencing. The use of wire fencing for test plots in such a situation does not address concerns over time. Also, fences are more suitable for small plots of vegetables garden than for millet and sorghum fields.

The team recommends clarification on the quantity of straw needed to cover one hectare of farming land to better guide producers given the competition around the consumption of straw (animals, sale, and soil coverage). It would be interesting for the project to move towards land coverage alternatives or the possibilities of combining straw with natural regeneration techniques, or introduction of crops and/or woody species which may provide sufficient biomass to strengthen the coverage of plots with straw focusing on materials fairly used or unused.

For the technologies to produce better effects, it would be interesting to develop factsheets for each technology to standardize quantities applicable in the unit surface area to be covered with grass.

Women and youth associations must be better trained in their respective fields to take advantage of micro-projects as much as possible. Given the low literacy rate among women, literacy could be part of the capacity building activities for a better understanding of the operation of farmer organizations.

* In terms of budget expenditures and for more efficiency:

The team recommends a better system for sharing financial information at all levels of responsibility of the project and the consumption of the budgetary headings. Fifteen months from its end, the project has used 59% of the total budget. This information and the importance of the budget line items in annual spending should be communicated regularly to project managers to better plan activities in the future.

* Strategies and Approaches:

The Steering Committee in place must develop synergy with other stakeholders (PRECAD, Sassakawa Global 2000, AMAPROS, etc…) of the micro dose to better inform the dissemination process. Partners’ intervention methods on the micro dose fertilizer and results achieved should be clarified

This would have the advantage of capitalizing the added values and taking advantage of the comparative advantages and effects.

* Monitoring of Effects and Impacts:

The monitoring and evaluation system should take into account interventions by other development partners in order to identify collateral or unexpected effects from this intervention.

* Sustainability:

For the sustainability of interventions, it would be appropriate to focus on economic studies on Agriculture Conservation/Ecoferme techniques to create attraction and large scale adoption. Economic studies may address the cost/benefit analysis of the technologies. It would be appropriate to initiate cost/benefit analysis for the technologies tested, especially coverage of soils with straws. In addition, the team recommends a strengthening of the formalization of women and youth access to land to facilitate and ensure the development of Conservation Agriculture/Ecoferme technologies.

**5 DOCUMENTS AND REPORTS USED**

[1] CARE, Field trip to supervise activities of the 2009-2010 crop season, 2010 Report.

[2] CARE, Ecoferme Baseline Survey, Interim Report. February 2010.

[3] CARE, Supervision/Monitoring of the 2010/2011 crop season. Report, January 2011.

[4] CARE, Level of implementation of recommendations by the Steering Committee. Note without date.

[5] CARE, Meeting of the project Steering Committee in year 1, 2010 Report.

[6] CARE, Meeting of the project Steering Committee in year 2, 2011 Report.

[7] CARE, Fact-finding mission initiated by the project, 2009 Report.

[8] CARE, Trip to supervise/monitor the installation of plots under the Ecoferme technology, Report 2009

[9] CARE, Trip to see the implementation of activities, 2009 Report.

[10] CARE, Field trip by the Norwegian team, 2010 Report.

[11] CARE, Conservation Agriculture/Ecoferme Project Document, 2008-2011, January 2009 Version.