Final Evaluation of the Project “Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali”

February 2018
Final Evaluation of the Project “Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali”

(GCP/MLI/033/LDF)
Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas

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Acronyms and abbreviations

AEDD Agency for Environment and Sustainable Development
CCA Climate Change Adaptation
CMDT Malian Company for the Development of Cotton and Textiles
FAO Food and Agriculture Organization of the United Nations
FFS Farmer Field School
GEF Global Environment Facility
IER Institute of Rural Economy
IPPM Integrated Production and Pest Management
LDCF Least Developed Countries Fund
Executive summary

1 Climate change is a reality in Mali, where the population and the economy are mainly dependent on agriculture, livestock and fishing. In the context of climate change, Mali should expect a sharp increase in the average temperature of 2°C in 2050 and 4°C in 2100, followed by a shift southward in the isopluvial lines.

2 Between 2012 and 2016 the Food and Agriculture Organization of the United Nations (FAO) – with funding from the Global Environment Facility (GEF) – implemented project GCP/MLI/033/LDF called "Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali", with an effective budget of USD 2,106,818. The overall objective of the project was to "enhance the capacity of Mali’s agricultural sector to successfully cope with climate change, by incorporating climate change adaptation (CCA) concerns and strategies into ongoing agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming". To achieve this goal, the project activities were organized into three main components: i) Piloting of improved climate-resilient agricultural practices; ii) Capacity building and promotion of improved agricultural practices through Farmer Field Schools (FFS); and iii) Climate change considerations mainstreamed into agricultural sector policies and programmes.

3 This final evaluation of project GCP/MLI/033/LDF covers all aspects related to the implementation of the project since its beginning in August 2012 until its conclusion in December 2016. The report is based on a literature review and interviews with the project managers in Rome and Bamako, as well as all those key actors involved in the field. In the western, eastern and southern regions, a sample of 11 villages and groups of producers where visited and the results of the project discussed and analysed.

Piloting of improved climate-resilient agricultural practices

4 Project GCP/MLI/033/LDF meets the needs of Mali in terms of guiding adaptation to climate change. The needs of Mali can be summarized in two points: i) How can retention of water and moisture be improved to make them available to crops, livestock and humans at the right time? ii) How is it possible to adapt to a more restricted agricultural calendar?

5 The project has favoured a holistic and inter-sectoral approach to identify, document, train and inform the various partners in the agricultural sector about CCA. Together with a working group and the Steering Committee for the project, a list of 37 good agricultural practices was defined, which serve as adaptation measures on the basis of accommodating a more restricted agricultural calendar and the retention of rainwater. The list includes any practice which causes an increase in agricultural production without harming the environment.

Capacity building and promotion of improved agricultural practices through Farmer Field Schools

6 The GCP/MLI/033/LDF project has contributed to capacity building and food security in rural areas by integrating CCA methods and techniques and the Farmer Field School approach in the agricultural sector. The facilitation of FFS has been the most important activity in terms of time and money invested.

7 In total, the project has trained and retrained 295 new facilitators, of which 166 (56 percent) are technicians from a public organization and 129 (44 percent) are producers who have become producer-facilitators in their area. In addition, 118 facilitators were trained by other projects and programmes, bringing the total to 413 facilitators. Unfortunately, the percentage of female facilitators remained very low (about 10 percent). FFS/CCA facilitators,

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1 The project has a budget of USD 2,106,818 from the LDCF/GEF and co-financing of USD 4.5 million from the Government of Mali (USD 3 million) and a combination of projects implemented by FAO (USD 1.5 million), which contribute to the objectives of the project.
in turn, trained a total of 33,646 producers through the intermediary of 1,335 Farmer Field Schools. Other projects and programmes have trained 7,471 producers in 374 FFS; thus, bringing the total number of producers trained to 41,117 distributed throughout 1,709 FFS. Women represent 29 percent of the producers trained by the project and 74 percent of producers trained by other projects.

Most of the partners in the project consider FFS to be the most effective training method for sharing practices, techniques and appropriate technology among producers. FFS, formed by 20 male and female producers who meet each week, is believed to contribute to social cohesion at a village level as a result of the intensive and sustained cooperation of members of FFS during the agricultural campaign.

Analyses of the project show a sharp increase in yields of crops on Farmer Field School plots compared to Farming Practice (PP) plots. However, the project does not have an appropriate mechanism to monitor the development and performance of the FFS producers in respect of their own fields. A true impact study would have been timely.

Climate change considerations mainstreamed into agricultural sector policies and programmes

Since the formulation of the project in 2008, many things have changed in Mali in respect of integrating adaptation to climate change in policies. As part of the 2007 implementation of the National Adaptation Programme of Action (NAPA) for Climate Change, Mali created the Agency for Environment and Sustainable Development (AEDD) in 2010, and then adopted a National Policy on Climate Change in 2011. Since then, the CCA approach has been taken into account in all programmes and projects concerning agricultural development.

The GCP/MLI/033/LDF project itself has significantly contributed to the identification and definition of ways and methods of adaptation. The operationalization of the CCA approach was carried out in a participatory and cross-sectoral manner. It resulted in the list of good agricultural practices mentioned above. The project team has also been involved in multiple public and private development programmes and projects, which testifies to the quality of their services and ensures certain continuity of capacity in the post-project facilitation of FFS and CCA.

Although the Farmer Field School approach is still not deemed to be a unique or favoured extension approach in Mali, the National Board of Agriculture urges others “to continue in the dynamic of the FFS, to adopt it, disseminate it, and to ensure that it is consistent with a mechanism that has been commonly defined.” A formal statement pertaining to the FFS approach as being a unique or favoured extension approach would allow it to become general practice in the country and would lead to better follow-up by the National Board of Agriculture and the Regional Board of Agriculture on the quality of implementation.

1.1 Conclusions

Conclusion 1. Realization of the objectives of project GCP/MLI/033/LDF “Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali” was satisfactory. The project has been implemented over the period 2011-2016 according to the pre-established logical framework and it produced the expected results with regard to the development and integration of climate change adaption policies and agricultural programmes. Today, CCA is an integral part of all programmes and projects in the agricultural sector.²

Project GCP/MLI/033/LDF was designed as a continuation of the GCP/RAF/009/NET programme on “Integrated Production and Pest Management through Farmer Field Schools” (IPPM/FFS) (2006-2010). The project effectively integrated CCA into the IPPM/FFS approach and increased the capacity in IPPM and FFS on a large-scale, namely in 180

² It is important to remember that between the formulation of the project in 2008 and its launch, policies in Mali have changed – see paragraph 3.3.1.
municipalities (out of 708), with 413 facilitators (technicians and producers), who trained a total of 41,117 agricultural producers in 1,709, predominantly looking at dry crops and market gardening. Of these, 28 percent of facilitators and 17 percent of producers were trained by partner projects and programmes.

Conclusion 2. The GCP/MLI/033/LDF project has meant that those responsible for partner organizations in the project, as well as third parties, could be well informed about CCA and FFS approaches in order to support the implementation and application of these approaches in the field.

14 The project has trained a good number of officers in the divisional structure of agricultural extension, technicians in semi-autonomous organizations (such as the Office of Niger, Office Riz Ségou and the Malian Company for the Development of Cotton and Textiles (CMDT)), focal points and leaders of farming organizations. The Steering Committee and the Working Group on Information and Knowledge in CCA were cross-sectoral in terms of composition. However, representation and participation of the producers and their organizations in these bodies could have been higher.

15 The participation of stakeholders has been satisfactory. Implementation of the project with AEDD and IER partners has experienced some problems, especially in terms of administration at the beginning of the project. On the other hand, the GCP/MLI/033/LDF project made a very satisfactory effort to develop partnerships with various programmes and projects. This has resulted in partnerships with at least eight large programmes and projects: IESA, Cotton European Union, GIZ/Resilience and Nutrition, IFDC, PAFICOT, APROCA, Better Cotton Initiative and FAO/GEF Agro-pastoral. Moreover, the FFS approach was adopted by several programmes and projects in the field without a true prior consultation at national level (for example, ICRISAT, World Vision, PASSIP). In fact, the diffusion of the approach was carried out in these cases by the intermediary for FFS facilitators at field level. Regional networks of facilitators, who were supported by the project, played an important role in consolidation.

Conclusion 3. The cost effectiveness of the implementation of the programme was adequate since the project has far exceeded the expected results, both in terms of the number of facilitators and producers trained, and number of partnerships established. However, the situation of co-financing for the GCP/MLI/033/LDF project was not understood well by the evaluation team.

Conclusion 4. Ownership of the project by the country is very satisfactory in technical and operational terms, and moderately satisfactory in political and financial terms.

16 Approaches to the dissemination of CCA practices, including through FFS, are very strong, as are the relationships with the numerous partners. The capacity of CCA and FFS has increased significantly. However, ownership of the project is moderately satisfactory in political and financial terms. The FFS approach has still not been designated a unique or favoured agricultural extension approach.

17 Financial planning for the project is moderately satisfactory. Planning, financial reporting, as well as the aspect of co-financing for GEF were not clear in the medium-term and final assessment to the evaluation teams.

18 The monitoring and evaluation system has been satisfactory with regard to the follow-up and documentation of activities, and the reporting of results. Monitoring of the impact of field training for producers was not well covered.

3 See the Mid-term Evaluation report (December 2014): “The constraints found at an administrative management level are shared between FAO and institutional partners (NBA, IER and AEDD), and have caused delays that have had a negative impact in respect of the timetable for activities to be carried out, as they were often delayed over the winter (for example, IER and NBA coordination). As for AEDD, these delays have contributed to a halt in some funding for continuing advocacy and climate proofing in the municipalities.”
Conclusion 5. Development and training in CCA and FFS approaches are medium- and long-term investments that also benefit from the setting up of many other programmes and projects. The interlocutors of the evaluation team were almost unanimous in stating that there should be a sequel to this well-conceived, well-established and well-coordinated programme.

19 Reproducibility of the actions of the project is satisfactory. CCA, FFS and IPPM approaches may well be scaled up. Many of the organizations, programmes and projects are interested in them and adopt them. However, the financing of costs related to the facilitation of FFS and the maintenance of quality requires an institutional solution that ensures sustainability, with a strong multi-year contribution from the Government of Mali based on the national budget and national and international climate funds.

1.2 Recommendations

Recommendation 1. In the context of the Maputo and Malabo agreements in terms of the budget for agriculture, the Government of Mali should become more involved so that there is more transparency regarding the available budget for agriculture (as a percentage of the national budget) and in terms of the allocation of these funds at the level of all stakeholders.

20 It is recommended that a fixed percentage in the agriculture budget is earmarked for public agricultural extension, but on the other hand, FAO could support the Government in studying and understanding how the Climate Fund (available in Mali and internationally) could be made available for agricultural extension – on the basis of CCA FFS approaches – and used for municipalities, farming organizations and communities at a local level.

Recommendation 2. Considering the importance of the FFS approach for agricultural extension in Mali, FAO and its partners in project GCP/MLI/033/FLA should consider expanding what has been gained from the CCA and FFS approaches, which have been proven on the ground in Mali. These activities deserve to be disseminated to all producers and agricultural producers, through public and private organizations.

Recommendation 3. In order to support the different frameworks, organizations and networks of facilitators, as well as to ensure the quality of their services in the Field Schools, it is recommended that the FAO, through the Country Office in Mali, as well as through technical support in other offices at regional level and headquarters if necessary, support the National Board of Agriculture in the development and implementation of a multi-year national plan for agricultural extension on the basis of FFS, and that a National Centre for FFS Extension is created.

21 The dissemination of the FFS approach should be supported by an appropriate monitoring mechanism that can help assess the quality of the facilitator training implemented, of the FFS held and of the performance of FFS participants in the producers’ fields. Impact monitoring should be integrated into such monitoring mechanism, with external validation.

Recommendation 4. The evaluation team recommends that FAO Mali supports the National Board of Agriculture in the formulation of the gender strategy for FFS that should be developed and integrated in the FFS multi-year national plan for agricultural extension.

22 A gender strategy would set clear targets for the number of women at all levels of the implementation system (percentage of personnel, of facilitators, of producers, of focal points, etc.), and would help intensify the training received by facilitators on gender issues and dynamics and the need for positive gender transformation.

Recommendation 5. As a result of the various interventions in the dissemination of the FFS approach in different contexts (rice, cotton, etc.) achieved by the various stakeholders in Mali, FAO should take part in a capitalization and assessment exercise with autonomous organizations (such as the Office of Niger, Office Riz Ségou and CMDT), farming organizations
and the National Board of Agriculture in order to work together and identify lessons to be learned from their respective multi-year experiences.

23 These same actors should further consider how to adapt the approach to the characteristics of the specific contexts of their interventions, as well as developing a strategy in mutual agreement to deal with the challenges related to the (self-) dissemination of IPPM practices.

Recommendation 6. In the case of projects funded by GEF in francophone countries, the FAO/LFE liaison office should ensure that project teams have access to documents in French (for example, guidelines and procedural documents, follow-up reports, etc.) to allow the projects to report in French as one of the official languages of the United Nations.

24 Compared to co-financing issues, the FAO/GEF liaison office ensures that the financial management approach employed is in accordance with GEF rules. In this regard, the evaluation team suggests FAO stakeholders involved in the project work together to clarify the financial aspects that currently remain obscured (including co-financing), through, for example, an internal discussion, especially in the eventuality of scaling-up the project GCP/MLI/033/LDF in the country. In all cases, it should be ensured that managers of FAO projects co-financed by GEF are informed about the financing and administrative procedures of the lender.
1. Introduction

1.1 Purpose of the evaluation

1 The overall objective of project GCP/MLI/033/LDF, entitled “Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali”,4 with an effective budget of USD 2 106 818,3 was to “enhance the capacity of Mali’s agricultural sector to successfully cope with climate change, by incorporating climate change adaptation (CCA) concerns and strategies into ongoing agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming”. To achieve this goal, the project activities were organized into three main components:

- Component 1: Piloting of improved climate-resilient agricultural practices;
- Component 2: Capacity building and promotion of improved agricultural practices through Farmer Field Schools (FFS);
- Component 3: Mainstreaming of climate change considerations into agricultural sector policies and programmes.

2 The project is funded by the Least Developed Countries Fund (LDCF) and managed by the Global Environment Facility (GEF). The LDCF is used to funding projects that meet the urgent and immediate needs of LDCs in terms of adaptation, with an emphasis on reducing the vulnerability of sectors and resources essential for social progress and national development, such as water, agriculture and food security, health, management and the prevention of disaster risk and infrastructure, as defined and prioritized in the Mali National Adaptation Programme of Action (NAPA) for Climate Change.

3 The GCP/MLI/033/LDF project took place in five regions in the south and centre of Mali. By number of municipalities, the regions of Kayes (56 municipalities; 31 percent of the total), Mopti (50; 28 percent) and Koulikoro (37; 21 percent) were the regions best served by the project; this was followed by Ségou (22; 12 percent) and Sikasso (15; 8 percent). The evaluation team visited villages in four regions; Mopti could not be visited because of the uncertain security situation in the centre and north of Mali.

4 The project was implemented on the ground by the project team in Bamako, which consists of a project coordinator, a technical assistant, a communications manager, a driver and two administrative assistants. The project team is guided in its work by the Steering Committee, chaired by the National Board of Agriculture of the Ministry of Rural Development. The Steering Committee meets once a year to discuss the annual report and the plan of activities. It has about 20 people representing among others: the Ministries of Agriculture, Livestock, and Gender, the planning and statistics cell of the rural development sector (CPS/SDR), the national office of the Food and Agriculture Organization of the United Nations (FAO), the Agency for Environment and Sustainable Development (AEDD), the Institute of Rural Economics (IER), the weather forecast in Mali (Mali-Météo), the Permanent Assembly of the Chambers of Agriculture of Mali and the National Network of the Integrated Production and Pest Management (IPPM).

5 The project was drawn up and approved by the GEF in 2008, with a launch date of March 2011 and end date of February 2015. Although the launch of the project took place in August 2011, the effective start-up of the project had to be postponed following unrest in Mali from 2012, and also as a result of the lengthy period of time taken for agreements to be signed between the multiple partners in the project. The Farmer Field Schools could only be launched in June/July 2013. Following the mid-term evaluation (in December 2014), the project was formally extended by mutual agreement with the GEF – without any additional budget – until December 2016.

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5 The total project budget amounted to USD 6 606 818, thanks to the co-financing in kind agreed by the Government of Mali (USD 3 million) and of FAO (USD 1.5 million) through other related projects and funded by Belgium, Italy, Spain, Japan and the European Commission.
In accordance with the commitments made between GEF in their role as donor and FAO as the implementing agency, a final evaluation of the project took place in March 2017 in accordance with the standards and procedures of FAO and GEF. The final evaluation had the double objective of reporting to all stakeholders and contributing to organizational learning. The evaluation reviewed key activities, results and impact of the project (expected and unexpected), as well as analysing the sustainability of results and providing recommendations. The audience targeted by the final evaluation of the project included the Government of Mali and the national authorities, the funding bodies, as well as FAO itself – at its headquarters in Rome and the national office in Bamako.

1.2 Scope of the evaluation

The final evaluation covers all aspects related to the implementation of the project since its inception in August 2012 until its conclusion in December 2016. Special attention was paid to the analysis of efforts made since the mid-term evaluation to increase the capacity of adaptation to climate change in the agricultural sector in Mali.

The evaluation identified and analysed progress made and the results of the project in the intervention zones, covering all the main activities undertaken within its framework, as well as the causes of success and failure.

The evaluation consulted all the stakeholders in the project, including project coordination, the Steering Committee, the working group on information and knowledge in adaptation to climate change, the GEF as the funding body, the head office and the national office of FAO, as well as all categories of beneficiaries and stakeholders involved in the implementation of the project, including government officials at a national and provincial level.

1.3 Objectives and evaluation questions

The objective of the final project evaluation is to assess the changes that have occurred following the intervention of FAO both at a micro and macro level, including all planned and unintentional effects. The final evaluation tries to determine to what extent the project was able to achieve its objectives and identifies any design and implementation issues that need to be improved to guide future actions in similar projects.

The final evaluation was structured around the following topics: i) the relevance of the concept and approach of the project; ii) the achievements and contributions of the project to its objectives; iii) the application of the common principles of the United Nations with regard to country programming and cross-cutting themes; and (iv) sustainability.

By referring to the above objectives, the final evaluation was guided by the following evaluation questions:

Evaluation Question 1: To what extent does the design of the project and its activities meet the needs of Mali and the Malian population in terms of climate change adaptation?

Evaluation Question 2: To what extent have the actions of FAO, within the context of this project, contributed to reaching the overall objective of “enhance the capacity of Mali’s agricultural sector to successfully cope with climate change, by incorporating climate change adaptation concerns and strategies into ongoing agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming”?

Evaluation Question 3: To what extent has the project integrated climate change aspects and/or issues into national agricultural programmes and policies?

Evaluation Question 4: To what extent have women and indigenous peoples, as well as vulnerable and marginalized groups, participated in the project?

Evaluation Question 5: What other impact has the project had, and what is the sustainability of the project interventions?
1.4 Approach and method

The final evaluation of project GCP/MLI/033/LDF is comprised of the following stages: i) document review; ii) interviews (by Skype) with the project managers and the focal point of GEF at FAO in Rome; iii) interviews (in person) in Mali with the project’s promoters and partners, target groups, some managers of organizations, FFS facilitators and any other stakeholder associated with the project; iv) analysis of the data; v) presentation of the preliminary results to the Steering Committee and to FAO Mali; and vi) the writing of the report.

The document review looked at the main documents of the project, namely: the Project Document, the inception report, the baseline study, the annual activity reports, the Project Progress Reports, the Project Implementation Reviews, the mid-term evaluation report, the FAO management response to the recommendations of the mid-term evaluation, the project terminal report; followed by reports of specific activities such as the meetings of: the Steering Committee, the Working Group on Information and Knowledge in CCA, the Open Doors Days, studies, etc. (Please see the References section for all the documents received.)

The selection of villages visited by the evaluation team was made by project coordination team, based on the following criteria: A) security aspects; B) recommendations of the mid-term evaluation; C) activities implemented in three different ecosystems (Sudanese, Sudan-Sahelian, Sahelian); D) different cultivation systems; D) taking into account the gender dimensions; E) former sites and new sites (of producers trained in 2012 and 2015); and F) the level at which technologies have been adopted (total adoption, reluctance). "The chosen sites present a diversity of results/offering the opportunity to learn lessons". The sample of villages visited by the evaluation team (a total of 11 villages: 5 in Kayes; 3 in Segou; 2 in Koulikoro; 1 in Sikasso) corresponds to the relative distribution of project activities in the different regions outside Mopti.

The interviews with the different stakeholders and people involved in the project in Mali took place in the period from 13 to 24 March 2017. Interviews involved meetings in Bamako and Ségou with officials of partner organizations or associates of the project (MDR, National Board of Agriculture, IER, Office of Niger, Office Riz Ségou, AEDD), in addition to on-site field visits. Field trips have involved 11 villages in the regions of Kayes (Béréla, Mananko, Oualia, Kounda, Komandra, Koulikoro (Dantorola, Dioïla), Ségou (Zanabougou, Cinzana, Zoumanabougou) and Sikasso (Konséguéla). (See the Programme of the Evaluation Mission in Appendix 3.) This programme was developed by the project coordination team at the request of the FAO Office of Evaluation (OED) in Rome, then carried out by the evaluation team.

In all the villages visited, exchanges lasting one to two hours each were held with FFS facilitators (technician-facilitators or producer-facilitators) and with producers benefiting from the project. The goal was to check, discuss and evaluate with them the activities carried out and the assessment of the project, donations of agricultural equipment, the impact and sustainability of actions, then prospects for the future. Where activities included horticulture, the market garden perimeter of the FFS group was visited. As appropriate, bilateral meetings were also held with officials in the intervention zone, such as the Regional Director of Agriculture, the sector leader, the sub-sector leader, the municipality and/or the network of facilitators in order to verify, discuss and analyse their positions, contributions and assessments of the project. A list of interviewees is found in Appendix 2.

The character of the interviews in the field slightly differed from one village to the other, in consultation with the focal point of the place (which convened stakeholders according to the plan established in advance by project coordination) and based on the specific activities performed in the village (i.e. dry crops, market gardening, stone barriers, reforestation, etc.) and/or depending on the kind of producers’ group (i.e. FFS group, cooperative, union, network, men/women, etc.). The issues debated were also adapted flexibly to the main points raised by the different interlocutors in order to deepen opinions and evidence.

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19 The working language was French. Interpretation of the local language (Bambara, Fula, Soninke, Kassonkhe, Minanke, etc.) into French and vice versa was generally provided by one of the FFS facilitators who was present. The degree of participation of the different members of the FFS group in each village varied from one village to another.

20 The evaluation team made sure that women participated equally in the exchanges everywhere. Where women were in the majority in a FFS group, there were often also a few (two or three) men who assisted the group with heavy field work and/or in the negotiation of the group's statutes with the local authorities. In general, the evaluation team ensured that different people (individuals, men and women) actively participated in the evaluation discussions.

21 Project activities between 2012 and 2016 involved a total of 180 municipalities in Mali (out of a total of 708 i.e. 25 percent), instead of the nine originally planned in the project document. This extension of the project took place at the request of the Steering Committee and as a result of the many requests for support by the different regions and stakeholders. The evaluation team was unable to analyse, on the basis of information made available, to what extent and with what budget each of the municipalities was provided for by the project and this had implications for the methodology and representativeness of places visited.

22 The analysis of documents and data collected during the field visit took place in the two weeks following the field visit. On the basis of the analysis, the evaluation draws specific conclusions and makes recommendations for a series of actions on the part of the Government of Mali, FAO and others to ensure sustainable development. The evaluation also draws attention to good practices and specific lessons that may be of interest to others through the implementation of similar activities.

1.5 Limitations

23 The final evaluation of project GCP/MLI/033/LDF has been limited by the following factors: lack of security in one of the project intervention zones, the limited number of days for the mission, the limited time available in each village, the dependence on project coordination in terms of the selection of villages and key actors to meet, and the impossibility of meeting some organizations and contacts (including the former focal point of the IER, the GEF focal point of the AEDD, the CPS/ex-National Board of Agriculture).

24 However, the team has benefited from conditions that have allowed serious concise and comprehensive work to be completed, that allows the achievements of the project in the field and the actual assessments of the project as mutually agreed and implemented by FAO and the National Board of Agriculture to be clearly seen. At no time did the team have the impression that their work was influenced or compromised by the stakeholders in the project. On the contrary, the evaluation team benefited from the excellent logistical and administrative support provided by the project coordination team and its partners at all times.

1.6 Structure of the report

25 Following this introduction, Chapter 2 presents the background and context of Mali and of the project; Chapter 3 analyses the five evaluation questions and their main results; and Chapter 4 presents conclusions and recommendations.

7 It should be noted that, as usual, each FFS group that was met also involved several people capable of checking the interpretations of the local language into French and vice versa, and to correct or add to them if needed.
8 In one case (at Zoumanabougou) it was difficult for the evaluation team to use more than one interlocutor. In another case (in Kounda), various members of the FFS present had a lot to discuss amongst themselves first, without a clear division of tasks or leadership, rather than answering the questions of the team. In most cases, however, the groups demonstrated a good structure and the team benefited from participative, informative and fruitful exchanges.
9 This strategy worked well everywhere, according to the team, except in the village of Dontorola where the presence of village officials made it difficult for there to be an open exchange between the team and women producers.
10 See: SC (2013), Summary of the work of the second session of the Steering Committee for project GCP/MLI/033/LDF. National Board of Agriculture, Bamako. March 2013, p. 16.
2. Background and context

2.1 Background description

26 Mali is a vast Sahelian country without direct access to the sea. The country has four main climatic zones, namely the Saharan zone (average rainfall of <200 mm per year), the Sahelian zone (200–600 mm per year), the Sudanian zone (600–1,000 mm per year) and the Guinean zone (>1,000 mm). The GCP/MLI/033/LDF project looked at the Sahelian, Sudano-Sahelian and Sudanian zones.

Figure 1: Map of eco-climatic zones in Mali

27 Mali’s economy is mainly based on agriculture and farming – two economic activities that depend on rainfall and the regularity of the seasons. Together they account for about 80 percent of the active population. In the Region of Kayes in the west of the country, mining is also important, especially for young people. However, migration to the mines diminished recently following the recent decline in prices.

28 The regularity of rainfall and the flooding and receding of rivers, as well as the distribution of rains across the Malian territory, determines the progress of the agricultural season and the need and duration of migration. Irrigation is applied as an adaptation strategy, especially in rice production (wintering, flood and recession) and in market gardening (overwintering and/or off-season).

29 In the context of climate change, Mali should expect a clear increase in the average temperature from 2°C in 2050 and 4°C in 2100, followed by a shift southward in the isopluvial lines. The resulting changes will include (and already include the fact that climate change is fully underway) an increase in evapotranspiration, a restriction of the duration of overwintering, delayed sowing dates, less rainfall and often poorly distributed, delayed harvest dates, and a general decrease in water availability and moisture for humans, animals and crops.

11 Off-farm, the informal sector is important and predominantly affects the “small jobs” in towns and villages. Formal employment is usually limited to the staff of institutions (including the State), and development projects and programmes. The tourism sector has been in crisis since 2012 as a result of the increase in unrest in the north and centre of Mali. The war in northern Mali has created jobs in the security sector (military, police, self-directed brigades, caretaking, etc.) but these are not so-called “productive” jobs.

Today, the population of Mali is estimated at around 16 million. The population rate is increasing by approximately 3 percent per year. Mali is among the least developed countries in the world. Poverty and food insecurity are common, the education of the population is low and life expectancy is short. In terms of human development, Mali ranked 175th of 188 countries. Any adaptation to climate change must therefore go hand in hand with economic and social growth. The actions of the project must become part of the sociocultural context and local customs which are characterized by the roles and quite different status of men and women.

The needs and necessities of the Malian population, in all its diversity, are high in the short-term: food security, finances, education and health. In a way, this puts into perspective the urgency afforded by the population to the effects of climate change as such, since these changes are spread over a very long period. On the other hand, to remain sustainable, all economic and social growth in Mali necessarily relies on methods and techniques that are adapted to climate change.

2.2 Description of the project

Mali is located in a very fragile geographical area subject to climate fluctuations that are characterized by prolonged droughts, giving rise to a need to strengthen the capacity of producers to develop production systems that are more resilient to drought and the collateral effects of the climate.

As noted above, project GCP/MLI/033/LDF, entitled “Integrating Climate Resilience into Agricultural Production for Food security in Rural Areas of Mali”, with an effective budget of USD 2 106 818, aimed to “enhance the capacity of Mali’s agricultural sector to successfully cope with climate change, by incorporating climate change adaptation concerns and strategies into ongoing agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming”.

Project GCP/MLI/033/LDF focuses on adaptation in the agricultural sector and it relies on several programmes and previous projects, including the United Nations Development

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15 The total project budget amounted to USD 6 606 818, thanks to the co-financing in kind agreed by the Government of Mali (USD 3 million) and of FAO (USD 1.5 million) through other related projects and funded by Belgium, Italy, Spain, Japan and the European Commission.
Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas

Programme (UNDP)/GEF project “Improving the capacity for Adaptation and Resilience in the face of Climate Changes in the Agricultural Sector in Mali”(2010-2014) and the FAO sub-regional programme “Integrated Production and Pest Management through Farmer Field Schools (IPPM/FFS)” (2006-2010). The Mali component of the Integrated Production Pest Management/FFS project was based in turn on the public agricultural extension system and Farmer Field School trials carried out in Mali since the beginning of the 2000s.

At the time of the design of project GCP/MLI/033/LDF (in 2008), Mali did not have any policies, programmes or institutions specifically dedicated to climate change adaption. The Agency for the Environment and Sustainable Development was set up in 2010. The Ministry of Agriculture at the time did not favour the Farmer Field School approach; the FFS approach was considered to be one of the approaches available in the field.

The same observation goes for FAO, who also considered the FFS approach to be one of various possible approaches to agricultural extension. Although FAO had already supported trials, projects and programmes of Farmer Field Schools in about 90 countries around the world, it has not favoured the FFS approach in its policy as such.

There was no particular gender strategy for project GCP/MLI/033/LDF. It should be noted that FAO only adopted a mandatory gender policy document in 2013, i.e. well after the formulation, approval and start of project GCP/MLI/033/LDF. Gender aspects will be set out in further detail in Section 3.4.

2.3 Logical framework

The overall objective of project GCP/MLI/033/LDF was to “enhance the capacity of Mali’s agricultural sector to successfully cope with climate change, by incorporating climate change adaptation concerns and strategies into ongoing agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming”. The project is based on a succinct logical framework (see Annex 3).

To achieve this goal, project activities were organized into four main components:

**Component 1:** Drive forward climatically-resilient and improved agricultural practices:
- develop a CCA approach based on good agricultural practices and indigenous knowledge;
- develop training materials on CCA;
- identify and disseminate short-cycle seed varieties that are tolerant to climatic variations.

**Component 2:** Strengthen capacities and expand improved agricultural practices through the Farmer Field School approach:
- train the trainers and IPPM facilitators in CCA;
- facilitate FFS/CCA;
- establish a climate adaptation fund and support local initiatives.

**Component 3:** Integrate climate change aspects and/or issues into programmes and policies in the agricultural sector:
- strengthen inter-sectoral coordination mechanisms;
- strengthen institutional capacity in CCA;
- integration of CCA in policies and programming in the agricultural sector.
**Component 4:** Monitoring and management of the project:

- create a cross-sectoral Steering Committee for the follow-up of the project;
- create a project management cell for the implementation of the project;
- set-up a monitoring and evaluation system.

The Theory of Change of project GCP/MLI/033/LDF is shown in Figure 3. The project aims to improve food security in rural areas by integrating CCA methods and techniques and the Farmer Field School approach in the agricultural sector. Partners in the project consider FFS to be the most effective and efficient training method for sharing practices, techniques and appropriate technology among producers. FFS is believed to contribute to social cohesion at a village level as a result of the intensive and sustained cooperation of members of the FFS during the agricultural campaign.  

**Figure 3:** Theory of Change of project GCP/MLI/033/LDF

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2.4 **Project funding**

The project budget amounted to a total of USD 6.6 million of which USD 4.5 million of co-financing is from the Government of Mali (USD 3 million) and from FAO (USD 1.5 million). However, the effective budget of project GCP/MLI/033/LDF was USD 2.1 million, which is the equivalent of the LDCF managed by GEF, object of this evaluation.

The evaluation team was not able to access detailed financial reports from the project and is therefore not able to judge its financial management. From interviews with some FAO key informants, it is clear at least that the financial and administrative management of this project merits internal discussion in order not to repeat the same mistakes in other projects. On the one hand, the disbursement of funds did not follow the pace of agricultural campaigns on several occasions, which slowed down or blocked some seasonal activities.

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19 See, for example: FAO (2016), Part I: Key principles of Farmer Field School, p. 14.

20 The GEF-funded activities are supposed to be “additional”, in terms of adaptation to climate change, to activities already undertaken at field level. The activities already undertaken are considered as “co-financing” for the project subject to this evaluation. However, it should be noted that there were no financial flows from these programmes and projects to the evaluated project. The effective budget of the project amounted to USD 2 106 818, which is the contribution made by the GEF regarding LDCF funds.
because of their rural nature. Besides, the internal rules of FAO (on the maximization of the funds managed by the FAO representation in Mali) in fact led to significant delays in disbursement.\textsuperscript{21}

43 The policy of FAO and GEF regarding co-financing is not well understood by the evaluation team.\textsuperscript{22} Co-financing was supposed to have been made in kind by the Government of Mali and a number of international projects.\textsuperscript{23} The last Project Implementation Review of FAO states that in 2014, half-way through, only 10 percent of co-financing payments had been made.\textsuperscript{24} However, according to the Project Implementation Review, at the end of the project in December 2016, more than USD 4.8 million had been paid, which is 7 percent more than planned. This raises issues to be clarified.

44 With regard to co-financing, the GEF said the following\textsuperscript{25} 26: “In the context of adaptation projects financed by the Least Developed Countries Fund (LDCF), co-financing refers to the cost that would be incurred for a normal development scenario. This amount is considered as the base case for the project and it constitutes co-financing; above this amount, the full cost of adaptation represents the additional cost, which is supported by the special fund. The idea behind the concept of co-financing is to use the resources of the LDCF to facilitate adaptation to climate change in the context of a greater intervention intended to aid development. In this case, co-financing may include development aid (from a bilateral or multilateral source) governmental budget lines, and contributions from NGOs and local groups in cash – or in the form of grants, loans, flexible loans – or in kind. By using funding from the LDCF to systematically integrate adaptation measures into large-scale investment projects, it is possible to achieve a greater impact by leveraging synergies and taking advantage of economies of scale”.

45 However, the project coordination team assured the evaluation team that the co-financing regulations of the GEF differ from those of other funding bodies. As co-financing, the GEF would accept all efforts provided by other projects aimed at climate change adaptation, and which work in the same areas as the GCP/MLI/033/LDF project. The GEF would therefore be based on a joint implementation with other projects (co-implementation), rather than on co-financing by other projects.

46 The fact remains that the evaluation team remains uncertain regarding the merits of the co-financing amounts calculated and reported in the progress report. It is recommended that FAO hold a discussion among the units involved in the management of project GCP/MLI/033/LDF to reassure themselves that the rules of the GEF have been completely understood and implemented.\textsuperscript{27}

2.5 Mid-term Evaluation

47 The mid-term evaluation was held at the end of 2014.\textsuperscript{28} It gave light to a number of weaknesses in terms of the design and implementation of project GCP/MLI/033/LDF, including:

\begin{itemize}
\item \textsuperscript{21} See: Steering Committee (2013), Summary of the work of the second session of the Steering Committee for project GCP/MLI/033/LDF, National Board of Agriculture, Bamako. March 2013, p. 16.
\item \textsuperscript{22} The team received the annual Project Implementation Reviews. Although such reviews include the amounts of co-financing per organization, they do not clarify what the contributions have been for the project.
\item \textsuperscript{23} Co-financing can come from other projects/initiatives that use and share a similar approach, and/or that are implemented in the same areas of intervention as the GEF project, and/or during the same period. Co-financing can be also provided in kind, for example by making available the time of FAO staff in the country. Co-financing is not therefore about a disbursement of money but rather about integrating and finding synergies with other initiatives or projects.
\item \textsuperscript{25} See: GEF (2011), Access to Resources of the Fund for Least Developed Countries (LDCF). GEF, May 2011, p. 36.
\item \textsuperscript{26} According to the team in Mali, the only working language of the GEF is English. This has complicated the management of the project: all reports in Mali for the GEF were first written in French and then translated into English. There was also no uniformity between the FAO and GEF reporting formats and so two reports were prepared for each reporting period.
\item \textsuperscript{27} This is particularly the case with a view to the development of a joint FAO/GEF collaboration in the future.
\item \textsuperscript{28} See: FAO (2014), Mid-term Evaluation for Project GCP/MLI/033/LDF. December 2014, p. 52.
\end{itemize}
• the lack of integration of Component 3 – integration of CCA in the policies, programmes and projects running in the agricultural sector in Mali;
• the need to update the project in light of political changes; this includes taking into account the decentralized authorities (municipality, PDSEC, etc.) and the implementation of CCA policies in Mali;
• the way in which the activities planned with Mali-Météo were not implemented, as well as the creation of a fund to support local CCA initiatives;
• the low level of integration of the gender dimensions in the project;
• the lack of an awareness advocacy strategy and communications that highlight the achievements of the project on a political and technical level.

The conclusions and recommendations of the Mid-term Evaluation were well received by the project partners. All recommendations have been accepted by the management board for the project.29

3. Evaluation questions: key results

3.1 Evaluation Question 1: To what extent does the design of the project and its activities meet the needs of Mali and the Malian population in terms of climate change adaptation?

Key result 1

The project design meets the needs of Mali in terms of guiding adaptation to climate change. Project GCP/MLI/033/LDF has favoured a holistic and inter-sectoral approach to identify, document, train and inform the various partners in the agricultural sector about climate change adaptation.

The growing techniques recommended to deal with climate change can, in principle, be actioned by everyone who has access to the land.

3.1.1 The CCA approach

49 The aim of project GCP/MLI/033/LDF is to integrate climate change adaptation into the Farmer Field School approach and into policies and agricultural programmes in general. Within the project activities, the emphasis has mainly been on the integration of CCA in the decentralized system of agricultural extension at a national, regional, sectoral, and sub-sectoral level. In addition, the project looks to build CCA partnerships with semi-autonomous and public organizations and with other programmes and agricultural development projects. However, the CCA partnership with civil society and the private sector was not favoured.

50 In light of the continuation of the IPPM/FFS programme, which for the last decade has been led by FAO and the National Board of Agriculture in Mali, project GCP/MLI/033/LDF has focused on the extension and development of Farmer Field Schools throughout all of Mali. The FFS approach is perceived by many stakeholders as the most effective and preferred approach to agricultural extension. The institutionalization of CCA in the agricultural sector therefore takes place by disseminating the FFS approach.

51 The project is part of the National Policy on Climate Change which aims to contribute to sustainable development and to the fight against poverty by providing appropriate solutions to the challenges of climate change in several areas, mainly including agriculture, water resources, forests, energy, transport, land management, health, the environment, industry and mining. As a strategic planning tool, the National Policy on Climate Change is designed to encourage a synergy of actions so that interventions consistent with the effects of climate change can be undertaken.

52 The project design meets the needs of Mali in terms of guiding adaptation to climate change. In terms of technology, the needs of Mali are clear and can be summarized in two points: i) How can retention of water and moisture be improved to make them available to crops, livestock and humans at the right time? ii) How is it possible to adapt to a more restricted agricultural calendar?

53 Project GCP/MLI/033/LDF has favoured a holistic and inter-sectoral approach to identify, document, train and inform the various partners in the agricultural sector about CCA. A list of 37 good agricultural practices was defined, which serve as adaptation measures on the basis of accommodating a more restricted agricultural calendar and the retention of rainwater. The list includes any practice which causes an increase in agricultural

production without harming the environment. The approach used to create the list has been inclusive of different State structures.

54 The final evaluation team acknowledges the efforts made by project coordination to take into account the recommendations of the Mid-term Evaluation. The team believes that the project was able to remedy the majority of weaknesses identified in the design and implementation of the project (which had been stated in 2014), and they had been able to obtain edifying results, both in terms of quantity and quality.

3.1.2 Target groups

55 The project is based on the achievements of the IPPM/FFS programme in Mali, which already had its own policy for identifying and involving target groups, including women and vulnerable groups. It should be noted that one of the admission criteria for facilitators is the ability to read and write, making this role harder to access for women and producers who are capable but illiterate. The issue of gender aspects will be revisited in Section 3.4.

56 In the project, emphasis was placed on the decentralized system of agricultural extension, by strengthening the existing core of Farmer Field School trainers and facilitators. The evaluation team deems this choice to be pertinent in the context of Mali. Farmer organizations have been involved from the top via the Permanent Assembly of the Chambers of Agriculture of Mali and locally on-site through collaboration with specific farmer organizations that are well-established in their area (for example, in Bla). In addition, capable individual producers have been trained as producer-facilitators, regardless of their affiliation to the farmer organizations. Civil society and the private sector were not targeted by this project explicitly; this could change in the future.

57 The cultivation techniques recommended to deal with climate change can, in principle, be actioned by everyone who has access to the land. At the heart of it, there are farming practices that do not require large monetary investments. However, certain practices are restrictive with regard to workload (especially organic fertilization of fields) and/or regular observation of crops (analysis of the agro-ecological system within a framework of IPPM practices). Some other practices require community efforts (such as setting up stone barriers) making them more applicable in some places than in others, depending on the social cohesion of the village or hamlet.

58 All stakeholders met at field level were clear and unanimous in stating that this project is welcome, useful, productive and adapted to the context (technical, social, economic, financial, environmental), and that it merits a follow-up so that a greater number of male and female producers are trained in good agricultural practices and climate change adaptation.

59 The evaluation team notes that if a project of this kind is intended to focus on women producers, it is appropriate to place special emphasis on market gardening (rainy season and off-season) as this is traditionally an area in which women are more interested and involved.

3.2 Evaluation Question 2: To what extent have the actions of FAO, within the context of this project, contributed to reaching the overall objective of "enhance the capacity of Mali’s agricultural sector to successfully cope with climate change, by incorporating climate change adaptation concerns and strategies into ongoing agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming"?

Key result 2

The actions deployed by FAO in this project effectively contributed to building the capacity of the agricultural sector in dealing with climate change. This strengthening took place on several levels: A) at a national level, for the National Board of Agriculture and in an inter-sectoral way; B)
Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas

at the level of the decentralized system for agricultural extension; C) at a regional level, through the networks of facilitators and partnerships with other organizations; and D) at a local level, through the creation of a critical capacity of knowledge and expertise in participatory agricultural extension that is adapted to the situation. The impact of the actions deployed by FAO on programmes and policies in the agricultural sector will be discussed in Section 3.3.

3.2.1 Letters of Agreement

60 The implementation of project GCP/MLI/033/LDF has been very well documented. (See Appendix 1 – Bibliography of major list of documents produced.) The reports were generally clear, detailed and of good quality. The project coordination has clearly tried to quantify the project activities and outcomes as much as possible. However, the financial reports were not shared with the evaluation team.

61 For the implementation and management of the project, the Letter of Agreement were signed between the FAO Regional Office in Accra (Ghana) and the project partners in Mali; namely the governing structure of the National Board of Agriculture,32 the Agency for Environment and Sustainable Development33 and the Institute of Rural Economy34 (see Table 1). Out of the total budget for project GCP/MLI/033/LDF (namely USD 2.1 million), approximately USD 1 million was made available to partners for the implementation of the project. This includes fees paid to technician-facilitators from the decentralized system of agricultural extension, who were paid for each FFS on a monthly basis.

Table 1: Amounts transferred to the partners in the project, according to the Letters of Agreement

<table>
<thead>
<tr>
<th>Organization</th>
<th>DNA</th>
<th>AEDD</th>
<th>IER</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FCFA</td>
<td>USD*</td>
<td>FCFA</td>
<td>USD*</td>
</tr>
<tr>
<td>Currency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2012</td>
<td>44 993 650</td>
<td>85 735</td>
<td>7 613 050</td>
<td>14 507</td>
</tr>
<tr>
<td>2013</td>
<td>77 780 700</td>
<td>153 985</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>178 009 538</td>
<td>366 697</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>2015</td>
<td>217 937 778</td>
<td>299 000</td>
<td>7 500 000</td>
<td>12 703</td>
</tr>
<tr>
<td>2016</td>
<td>31 415 111</td>
<td>43 100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>550 136 777</td>
<td>948 517</td>
<td>15 113 050</td>
<td>27 210</td>
</tr>
</tbody>
</table>

62 The remainder of the project budget (approximately USD 1 1 million35) would have been used by FAO inter alia for the following expenses: payment of members of the project coordination (as consultations), costs of vehicles and travel, meetings and workshops at a national level, international technical assistance, communications, agricultural equipment, consultations, impact assessment, mid-term and final evaluations, etc.

63 During the first few years, the implementation of project GCP/MLI/033/LDF suffered from cumbersome administrative procedures and delays in the disbursement of funds.36 This negatively affected activities, especially in 2012 and 2013.

35 The amount in the text is a deduction.
36 See: FAO (2014), Mid-term Evaluation for Project GCP/MLI/033/LDF. December 2014, p. 52. According to the Steering Committee (2013): the reported difficulties consisted of: i) the late signing of protocols, which took place in July 2012 for the National Board of Agriculture, August 2012 for the AEDD and September 2012 for the IER, and the slowness in dealing with requests from the partners. These factors weighed heavily on the smooth running of the activities (...); ii) the specificities of the financial management of FAO, which limit the level of funds that can be authorized by an FAO representative upon signing. This factor has slowed the implementation of the activities.
3.2.2 CCA teaching materials

64 Under Component 1, the project initially developed, in a participatory way through the Working Group on Information and Knowledge in CCA and various national workshops, an approach to climate change adaptation. The CCA approach is based on good agricultural practices already used to deal with hazards and climate change; these include farming practices (fertilization of the soil, soaking of seeds, agro-ecological analysis of the production system, etc.), land development (Zai system, stone barriers, grassed strips, reforestation, assisted natural regeneration etc.) and improved varieties of dry crops and horticulture.\(^{37}\) The CCA approach developed was driven, among others things, by a study of endogenous knowledge of CCA.\(^{38}\) On the other hand, the project could have saved time and money if we had known and taken advantage of the United States Agency for International Development (USAID) manual that had already been released in 2014 "Profiles of Agricultural Management Practices - Agricultural Adaptation to Climate Change in the Sahel".\(^{39}\)

65 The project summed up the CCA approach in four technical data sheets.\(^{40}\) Technical data sheets were circulated among the partner organizations, as well as during the Open-Door Days, etc. The evaluation team believes that the technical data sheets provide a good summary of a number of methods and techniques available in rural areas for climate change adaptation. However, the presentation of the technical data sheets and the list of CCA practices for VAC seemed poor. The lack of visualization made the information difficult to access for the target groups and especially for those who were partially or fully illiterate.

3.2.3 Early seed multiplication

66 The project initiated seed multiplication of early and resilient varieties that were identified beforehand by the Institute of Rural Economics, especially in terms of corn, sorghum and off-season tomato. These varieties are well adapted to an effective shortening of the agricultural calendar as they had demonstrated a certain tolerance compared to climatic variations.\(^{41}\)

67 The project contributed to building the capacity for multiplications of varieties at field level. The multiplication of early varieties was conducted by seed producers who were trained\(^{42}\) and certified by the National Seed Service of the National Board of Agriculture. Altogether, 70 seed producers have been trained by the project in order to have enough quality seeds to hold different FFS under this project. A total of 872 seed producers have also been listed by the project in three agro-climatic areas of intervention for the following crops: millet, sorghum, sesame, rice, maize, cowpea, groundnut and market gardening.\(^{43}\)

3.2.4 Training of facilitators

68 Facilitation of the Farmer Field Schools has been the most important activity of project GCP/MLI/033/LDF in terms of time and money invested (Component 2). First, 12 IPPM trainers were retrained in adaptation to climate change. Then, the project has trained and

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43 See: FAO (2017), Final Report for Project GCP/MLI/033/LDF. FAO. February 2017, p. 31. The evaluation team could not verify these results on the ground in the absence of information prior to the interviews.
retrained facilitators from their organization, either technician-facilitators employed by the public system of agricultural extension, or producers-facilitators that were identified and appointed for this purpose by their FFS group or farming organization. Facilitation of the FFS was then supported by a financial contribution to the project to the amount of CFA 25 000 per month per FFS for the duration of the campaign (three to five months depending on the crop), and with a maximum of two to three FFS per facilitator per campaign.

69 The GCP/MLI/033/LDF project relied, as planned, on using master-trainers, FFS facilitators and focal points created as part of the IPPM/FFS project (2006-2010). A total of 880 key actors (master trainers, facilitators, focal points), including 85 women (10 percent), received refresher training through the project on tools for setting up and monitoring FFS/CCA.44

70 The different retraining and training sessions for facilitators were based on the FFS/CCA training manual which was prepared by the project coordination team.45 The manual consists of 30 forms of one to three pages each; these summarize the essence of the training module.46 The manual is quite simple; it only sets out the outlines for each module (introduction, objective, educational objectives, equipment required, method, keywords to remember, summary, area of application). As such, it is not a stand-alone document for dissemination beyond those people participating in the facilitator training. The manual would not be followed from A to Z by the facilitator; the modules are optional. The topics are diverse and relevant. They include, among others: the agricultural calendar, erosion control, fertilization of soils, agro-ecological analysis, management of crops, economic analysis, gender and conflict management. The manual was written in French and then translated into Bamanankan for producers-facilitators.

71 In total, project GCP/MLI/033/LDF has trained 295 new facilitators, of which 166 (56 percent) are technicians from a public organization and 129 (44 percent) are producers who have become producer-facilitators in their area (see Table 2). In addition, and as co-financing to this project, another 118 facilitators were trained by other projects and programmes, bringing the total of FFS/CCA facilitators trained to 413 people.47

<table>
<thead>
<tr>
<th>Facilitators trained</th>
<th>By the project</th>
<th>By other projects</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>in FFS/CCA</td>
<td>Men Women Total</td>
<td>Men Women Total</td>
<td>Men Women Total</td>
</tr>
<tr>
<td>Total</td>
<td>272 23 295</td>
<td>101 17 118</td>
<td>373 40 413</td>
</tr>
<tr>
<td>% of the total</td>
<td>92% 8% 100%</td>
<td>86% 14% 100%</td>
<td>90% 10% 100%</td>
</tr>
</tbody>
</table>

Source: FAO (2017), Final Report for Project GCP/MLI/033/LDF

72 Project data regarding the training of facilitators and producers differentiates between men and women. Women constituted only 10 percent of the total (40 of 413) FFS/CCA facilitators who were trained. This is disappointing since it is well below the percentage of female facilitators (18 percent) in the previous IPPM/FFS programme (2006-2010).48 The percentage of women among producer-facilitators is even lower (3 percent; 4 out of 129). For more information on gender imbalance see Section 3.4.

73 It should be noted that facilitator-technicians are quite often moved around by their organizations, which does not help maintain the FFS approach in the places they are leaving.

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44 See: FAO (2017), Final Report for Project GCP/MLI/033/LDF. FAO. February 2017, p. 31. The evaluation team could not verify these results on the ground in the absence of information prior to the interviews.
46 The manual for project GCP/MLI/033/LDF is in addition to the Guide for Facilitators of Farmer Field Schools, published by FAO in 2014.
However, they are usually not lost in terms of the project, since they can be used to support the winning over of new intervention municipalities. The situation is the same for political decision makers who are trained in FFS, such as the focal points of the organizations and the heads of sectors and sub-sectors.

### 3.2.5 Training of producers

Over the course of the project, FFS/CCA facilitators trained a total of 33,646 producers through the intermediary of 1,335 FFS (see Table 3). Other projects and programmes have also trained another 7,471 producers in 374 FFS, thereby raising the total to 41,117 producers trained through the intermediary of 1,709 FFS.

<table>
<thead>
<tr>
<th>Table 3: Number of facilitators trained – by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers trained</td>
</tr>
<tr>
<td>in FFS/CCA</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>% of the total</td>
</tr>
</tbody>
</table>

Source: Annual reports for project GCP/MLI/033/LDF

Two-thirds of producers trained by the project were trained in two years alone (2014 and 2015; about 10,000 a year) out of the five years of the project. This points to the fact that the project had a very slow start. However, in 2016, the project had no more budget for the payment of allowances to FFS/CCA facilitators. The FFS held in 2016 were mainly thanks to the goodwill of facilitators who made their time available to producers, sometimes paying the fuel for their means of transport out of their own pockets.

Women represent 29 percent of the producers trained by the project and 74 percent of producers trained by other projects. This large percentage difference is probably due predominantly to the even more pronounced orientation of the other projects to market gardening, where women still represent the large majority.

### 3.2.6 The impacts of the FFS approach

The project has endeavoured to track and quantify the differences in yields between Farmer Field School plots and the Farming Practice plots. This is commendable. It convincingly shows that the FFS plots result in a better, or even much better yield. The project reported an improved average crop yield of between 21 and 77 percent for sorghum, millet, rice, corn, sesame and cotton; and of 97 percent for hybrid seeds of sorghum, in relation to seeds of local varieties. This can be explained by the use of improved varieties, certified seeds and the good agricultural practices applied to the FFS plots. However, there could be other explanations as well, such as the care given to the FFS plot in comparison to the Farming Practice parcel; in other words, the time and effort spent and the amount of input set-up.

To ensure a correct comparison of the impact of the techniques learned in FFS on crop yields, the impact on producer fields must be studied. This is where the methods and techniques learned must first give rise to evidence. Are they applicable to the actual scale of the field of the producer in effort, time and money invested? Are the results as good in

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49 The data in the Table differs slightly from the totals presented in the final report.


the field of the producer, as they are on the FFS plot? In any case, what are the reasons, and what implications should this have for a regular review of a training system in FFS/CCA, for the manual and for the facilitation of FFS/CCA?

79 However, project GCP/MLI/033/LDF collected data in 2016 through the various Regional Boards of Agriculture and the FFS networks on the performance of crops in so-called adoption fields at a producer level. The final report thus referred to the adoption of FFS/CCA “by 14,414 producers over 9,144 ha, all crops included, with rates of improvement in yields of 16 percent for corn in Banamba, 24 percent for millet in Togou and 19 percent for sorghum in Cinzana”. The evaluation team takes note of this positive data but considers it to be relatively unreliable due to the lack of a clear and impartial methodology in collecting the data. The team believes that the project does not have an appropriate mechanism to monitor the development and performance of the FFS producers in respect of their own fields. A true impact study by the IER for the duration of the project, for example, would have been timely.

80 On the other hand, a final impact study was running at the time of the final evaluation. The team was not informed of the research protocol. However, it notes that there was no baseline study that could serve as a reference for the interpretation of quantitative data collected by the impact study. The baseline study\(^{52}\) that is available is rather a descriptive study of the contexts and features of different villages that have been subjected to contextual analyses; for example, it does not contain basic data on base yields from producer fields.

3.3 Evaluation Question 3: To what extent has the project integrated climate change aspects and/or issues into national agricultural programs and policies?

Key result 3

Since 2011, Mali has had a Climate Change Action Plan which led to the creation of a dedicated organization (the AEDD) and the creation of the Mali Climate Fund. Today, climate change adaptation is integrated into all programmes and projects concerning agricultural development.

The Farmer Field School approach is not always declared to be a privileged extension approach, but many stakeholders at field level promote and support it through FFS facilitators. Monitoring of FFS in semi-autonomous organizations requires evaluation and support.

3.3.1 Integration of CCA approach in policies

81 The final goal of the project is the integration of climate change adaptation in all policies, programmes and agricultural projects in Mali (Component 3). The project therefore provided specific activities for the integration of CCA. These were not only aimed at the National Board of Agriculture, but also at many other organizations and stakeholders in the agricultural sector.

82 The project document took into account the integration of CCA in the agricultural sector but did not explicitly cover the integration of the Farmer Field School approach. However, it was implied by FAO and proponents of the FFS approach that this is the most effective in training the rural world in agricultural practices and techniques. In all cases, it is as a result of the Mid-term Evaluation, which recommended a better liaison between Components 1 and 2 of the project on the one hand, and Component 3 on the other; the project has also favoured the integration of the FFS approach in the policies, programmes and agricultural projects in Mali – in order to facilitate adaptation to climate change.

83 Since the formulation of the project in 2008, much has changed in Mali with regard to integrating climate change adaptation in policies. The main reference document for the old agricultural policy, the Framework Law on Agriculture, approved in 2006, made no

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reference to climate change or adaptation. However, as part of the 2007 implementation of the National Adaptation Programme of Action (NAPA) for Climate Change, Mali created the Agency for Environment and Sustainable Development in 2010, and in 2011 adopted a National Policy on Climate Change. Since then, the CCA approach is used in all programmes and projects concerning agricultural development. The operationalization of the CCA approach was carried out in a participatory and cross-sectoral manner, resulting in a list of good agricultural practices (see Sections 3.2.2 and 3.2.3).

3.3.2 Integration of FFS approach in policies

In addition to the CCA approach, project GCP/MLI/033/LDF worked to improve recognition of the FFS approach at national level; one way was by organizing Open Door Days in different regions, a workshop at the National Assembly in 2014 and a workshop on Extension Strategies for the FFS approach held in April 2016. Given the comparative advantages of the FFS approach, it was agreed at the last workshop “to retain the FFS developed by the FFS/IPPM/CCA programme and to disseminate them on a wider scale”. It was recommended that managerial level staff had access to documents on the FFS/IPPM/CCA approach and that a synergy of action was developed with other stakeholders to better disseminate the FFS/IPPM/CCA approach. The Director of the National Board of Agriculture urged everyone involved "to continue in the dynamic of the FFS, to adopt it, disseminate it and to ensure that it is consistent with the mechanism that has been commonly defined".

Nevertheless, the Farmer Field School approach is not always declared formally to be a favoured or a unique extension approach in Mali. To date, the National Board of Agriculture has not dared to impose the approach on other parties involved. This creates uncertainty around the proper use of the denomination ‘FFS’. In fact, at field level, several programmes and projects ‘copy’ the FFS approach, sometimes also using the same name. When this happens the quality of the FFS approach must be ensured. When the approach is given another name, the multitude of approaches and/or terminology makes it confusing, both to producers and decision makers. A formal statement pertaining the FFS approach as being a unique or favoured extension approach would allow better follow-up by the National Board of Agriculture and the Regional Board of Agriculture on the quality of implementation.

The FAO Country Office in Mali actually considers the FFS approach to be the favoured approach for agricultural extension nowadays. All FAO projects incorporate the FFS approach one way or another; either in the form of a field school for producers, an agro-pastoral field school, a field school for production and life, a forester field school, etc.

3.3.3 Integration of FFS approach in programmes and projects

The team for project GCP/MLI/033/LDF was involved in several programmes and projects; for example, in the project to improve resilience and nutrition of vulnerable groups in Bandiagara (GCP /MLI/041/GER), and the second FAO/GEF project on agro-pastoralism (GCF/MLI/038/LDF). This ensures a certain continuity of capacity in facilitating FFS in Mali after the project for the benefit of the dissemination of good agricultural practices in adaptation to climate change across the country.

The FFS approach has also been incorporated in several programmes and development projects without specific consultation with the National Board of Agriculture and IPPM/FFS programme, i.e. ICRISAT and World Vision programmes. In fact, nowadays many programmes and projects rely at a field level on the capability to facilitate, that was meanwhile created by the IPPM/FFS programme and project GCP/MLI/033/LDF. This is underlined by the Head of sector at DRA in Kayes: “In general, we find a clear difference in performance between technicians who have been trained in the FFS approach and those who have not. Our best technicians all went through the FFS approach. This is seen at field level”.

3.3.4 Integration of FFS approach in Office of Niger and Office Riz Ségou

To better understand the ownership and sustainability of the FFS approach by partners of various FFS projects supported by FAO in Mali, it is important to review the experience of semi-autonomous organizations, such as the Office of Niger (ON), Office Riz Ségou (ORS) and the Office and the Malian Company for the Development of Cotton and Textiles (CMDT).

However, thanks to efforts supported by FAO in Mali for nearly 20 years, the FFS approach has become one of the agricultural extension methods for these three semi-autonomous development organizations. These organizations now have their own teams of FFS facilitators.

Partnership with the Office of Niger, for example, involved campaigns from 2009/10 to 2011/12, but the impact is still visible in the reports and activities of the ON. In 2015/16, the ON trained a total of 541 rice producers in CEP (including 115 women; 21 percent) in 41 FFS, and 450 market gardeners (including 354 women; 79 percent) in 27 FFS. These numbers are important but still low given the fact that the ON works with 70,000 family farms. “Yes, the FFS have been disseminated, but it is not easy without means. The FFS continue at their own expense”. Among the advantages of the FFS, the ON cites: i) reduced quantity of seeds; ii) control of natural enemies; iii) control of the use of inputs; iv) greater yields; and v) lower cost production. Among the constraints of FFS, the ON cites: i) lack of labour, especially for transplanting; and ii) lack of funds to finance facilitation of FFS by producer-facilitators.

The Office Riz Ségou also leads FFS. About 90 percent of its agents (22 out of 25) have been trained in FFS by projects supported by FAO. As part of project GCP/MLI/033/LDF, the ORS has trained a total of 2,164 producers (including 1,148 women; 53 percent) in total of 63 FFS (45 rice; 18 market gardening) between 2013/14 and 2016/17. The evaluation team notes, however, that the number of FFS is declining for reasons unknown: 24 in 2014/15, 15 in 2015/16, and 6 in 2016/17. In addition to FFS, the ORS also reported other results related to CCA and promoted by the project; namely: the recovery of degraded lands, erection of stone barriers, living hedges and eucalyptus. Through the various activities, the submersion rice yield would have improved from 1.5 to 3.5 tons per hectare.

3.3.5 Partnership with the CMDT in terms of cotton

The partnership with the CMDT has evolved in a different way. This partnership began at the time of the IPPM programme (2006-2010) and was then expanded as part of two projects funded by the European Union and the African Development Bank. The CMDT also works with the Better Cotton Initiative which promotes the training of cotton producers in IPPM and then sells the cotton from these producers via the CMDT as “Better Cotton”.

An internal evaluation of the cotton project funded by the European Union concluded that producers trained in FFS have increased their income by 38 percent compared to...
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producers who have not been trained. “Trained producers have expressed almost complete satisfaction with the training. It has enabled them to improve their knowledge, but above all their practices in terms of planning, exploitation practices, management of soil fertility, pest management, quality management of cotton seed, all things having contributed to the increase in yields and incomes”.62 63

However, the CMDT always advocated calendar control and the use of synthetic insecticides. It also experimented with pest management (‘Lutte sur Seuil’): this is a method that requires a standard treatment of fields at the beginning of the season, before treating them according to the evolution of crop pests. The CMDT is not in favour of the IPPM approach to pest management based on AESA and/or control by biological treatment, which makes its adoption difficult for producers, even though they are convinced of its benefit.

Indeed, there is a conflict between the CMDT and IPPM/CCA cotton producers. IPPM cotton producers, especially those organized within the Union Niéta de Bla, claim that the CMDT requires them to take cotton insecticides. Those who do not will lose access to synthetic fertilizers. The CMDT criticized IPPM producers for a decrease in the quality of the cotton, which they said was due to poor control of cotton pests. In fact, the cotton produced by IPPM producers has always been the first choice according to the project coordination team. Yet, IPPM producers confirm that there was a spontaneous diffusion of biological control methods by people who were not trained in them, which could have had a negative effect on the quality of the cotton. However, they are asking the CMDT not to penalize the IPPM cotton farmers by forcing them to buy a product they do not want to. So far, this problem has not yet been resolved.

With a view to the above, the evaluation team made a recommendation to the National Board of Agriculture to start dialogue between the CMDT and the cotton producers so that this conflict is resolved soon. In fact, the CMDT and IPPM producers have a common interest in guaranteeing the quality of seed cotton by channelling the spontaneous spread of IPPM practices. A future joint training programme in FFS and CCA could ensure the quality of what IPPM is and make the cotton more profitable for producers, while adapting to climate change and maintaining the quality of the cotton.

3.4 Evaluation Question 4: To what extent have women and indigenous peoples, as well as vulnerable and marginalized groups, participated in the project?

Key result 4

The evaluation team recognizes that project GCP/MLI/033/LDF operates in a context where gender equality is not a principle that is already established, and that very few women are active in management structures in rural areas. The team considered that taking responsibility for gender issues in the entire project has been slow and limited. Without a pre-established project strategy for gender issues, the number of women among the project coordination, the Steering Committee, the Focal Points, master-trainers and facilitators has remained very low.

Women were better represented in field schools (38% of the total) due mainly to FFS in market gardening. Women involved in the project felt strengthened by the training. Some were able to increase their status with the authorities.

3.4.1 Policy on gender

In its general meaning, Gender refers to taking into account different groups and layers of the population in the design, formulation, decision-making, implementation and distribution of income or profits. Gender concerns women and men, but also groups

63 Those findings correspond with those of FFS/CCA training through project GCP/MLI/033/LDF.
defined by age, ethnicity, socio-economic status, disability, disease, etc. As part of this final evaluation, the team focused mainly on aspects related to the involvement of women in all activities of project GCP/MLI/033/LDF.64

99 FAO aims to achieve equality between men and women in sustainable agricultural production and rural development in order to eliminate hunger and poverty. Five objectives have been formulated for 2025.65

- women and men participate equally as decision makers in rural institutions and in shaping laws, policies and programmes;
- women and men have equal access to and control over decent employment and income, land and other productive resources;
- women and men have equal access to goods and services for agricultural development, and to markets;
- women’s work burden is reduced by 20 percent through improved technologies, services and infrastructure;
- the share of total agricultural aid committed to projects related to women and gender equality is increased to 30 percent.

100 Since 2010 the Government of Mali has also implemented a National Gender Policy. Pursuant to this policy, the Department of Agriculture recommends that all research and development projects and programmes ensure that 30 to 40 percent of women are included as beneficiaries and that 10 to 20 percent of managed land is awarded to women and young people. See Annex 5 for further information on gender issues in Mali.

101 Following recommendations of the project Mid-term Evaluation, the coordination team for GCP/MLI/033/LDF made the following diagnosis in relation to gender.66

- there are very few women in management. Some prefer to stay in the cities than ride mopeds and go out and advise producers;
- at farmer organization levels, very few women can read or write and this does not facilitate their capacity building to be able to share their knowledge with others;
- housework and the remoteness of the FFS sites from the village mean that women are unable to participate in any early activities of the FFS. The criteria for the FFS remind us to consider the accessibility of FFS for women;
- customs, traditions or any other social burden mean that women don’t speak or speak very little in the presence of men: it is a long-term task in some circles to bring about this change of behaviour.

102 The first planning document for project GCP/MLI/033/LDF on gender was dated 2015/16.67 Orientation was on the inclusion of gender in various teaching materials (manual, modules, etc.), and the participation of women in training, workshops and exchange visits. The document makes explicit mention of different lines of production aimed at the strong presence of women, namely; horticulture, some crops (for example baobab, Moringa, gourd), small livestock and the marketing of products. There was then a focus on alleviating the workload of women through donations of agricultural equipment.

3.4.2 Achievements of the project with regard to gender

103 The evaluation team used a list of indicators to analyse project GCP/MLI/033/LDF in terms of gender. The following was determined:

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64 In the area of intervention, there are no so-called special “indigenous” groups to take into account. The notion of “vulnerable” would go beyond women to include the disabled, the elderly, etc. However, in general, it is certain (and understandable) that intensive and costly training must be directed towards able-bodied individuals, young adults and people of average age.


The project reports specifically on the participation of women compared to men;

b. There was no analysis of the needs of women prior to the project;

c. The project did not have clear objectives (targets) regarding gender;

d. The project team did not include any woman – except for the admin team;

e. The group of master-trainers did not include women;

f. The focal points were all men;

g. Among the facilitators trained in FFS, only 10 percent were women (40 out of 413). The previous IPPM/FFS programme (2006-2010) accounted for 18 percent of female facilitators;68

h. Women were better represented in FFS: 38 percent of the total FFS participants (15,437 out of 41,117); proportion equal to that of the IPPM/FFS programme (2006-2010). Note that the participation of women has been lower during the training sessions held by project GCP/MLI/033/LDF (29 percent) than those of the project partners (73 percent). The choice of crop (cereal vs vegetables) could be one explanation for this;

i. The project promotes equal participation of women in FFS. The evaluation team noted that this was not always evident on the ground; on the one hand because of habits and customs, but also sometimes because of the facilitators’ behaviour. Facilitators should actively use the room for manoeuvre that they have in order to increase participation of women;

j. The training manual includes a module on gender. It is a separate module (number 24 out of 30) which is also fairly theoretical. It does not provide the facilitator with real tools to integrate gender into FFS;

k. The Support Fund for Local Initiatives, implemented by the project, seems to have especially brought benefit to women through FFS on market gardening. The support consisted of agricultural equipment (carts, wheelbarrows, watering cans, etc.). Sometimes the support included a water pump or the construction of wells for market gardening;

l. Equal mixed groups are not usual in Mali at field level. However, a deliberate policy of the project to encourage groups of mixed composition (women and men) in cereal FFS has resulted in women being clearly involved and participating in these FFS;

m. Traditionally, the market gardening FFS consist mainly of women. Their training, as well as the granting of farming equipment has been much appreciated by women who were able to improve their access to the means of production, increase their production, develop transformation of the products and improve marketing of the products;

n. The project has contributed in a very positive way at local level by allocating administrative titles to women for assigned plots (ten cases reported).69

104 The evaluation team recognizes that project GCP/MLI/033/LDF operates in a context where gender equality is not an already established principle and that very few women are active in management structures in rural areas. The team considered that taking responsibility for gender issues in the entire project has been slow and limited. Any follow-up of the project should include a clear gender strategy, from the design of the project through its conclusion.

105 The evaluation team believes that project GCP/MLI/033/LDF was generally accessible to different groups and segments of the population. The team listened to some testimonies that the multi-year IPPM programme70 would have favoured in particular large producers and managers of organizations and farmers organizations. The team considered it likely that better trained people were more interested in participating in FFS and the training sessions. The selection criterion for facilitators who were able to read and write well certainly played a role. However, on the basis of the interviews and information collected, the team does not believe that only the affluent members of the village would have been eligible for the FFS.


70 With the IPPM programme following the same approach to dissemination as project GCP/MLI/033/LDF, the evaluation team considered this evidence to be relevant and important in terms of involving the different groups of the population.
3.5 Evaluation Question 5: What other impact has the project had, and what is the sustainability of project interventions?

Key result 5

The methods and techniques recommended for climate change adaptation are customized to suit the localities and are usually accessible to the population. FFS promotes a more intensive use of locally available resources at a lower cost. It also promotes the empowerment of producers. Producers trained in FFS state an increase in their crops at home, a reduction of monetary costs associated with production and an improvement in their net income.

Through this, FFS then contributes to the local economy, social cohesion and food security. However, the project was lacking an appropriate mechanism to analyse the real impacts of CCA and IPPM/FFS methods and techniques on field producers.

3.5.1 Impact and sustainability of agricultural practices

The methods and techniques recommended for climate change adaptation are customized to suit the localities and are usually accessible to the population. Erosion control and good agricultural practices should be distributed among all male and female producers, regardless of their socio-economic, cultural or political affiliation, or their ability to read and write.

The evaluation team is of the opinion that the former groups who have benefited from IPPM/FFS training are more organized and better prepared than groups who have just started with FFS through this CCA project. Whilst on the one hand learning takes time, on the other the dissemination of the FFS approach on a large-scale could have compromised the quality of facilitation and the content of the training for new people if it is not matched by a good monitoring system for quality checks on FFS.71

3.5.2 Impacts and sustainability in economic terms

FFS promotes a more intensive use of locally available resources at a lower cost. FFS is investing in human capacity to produce in a more advanced way. FFS aims to add value to available resources (soil, water, organic matter, etc.), for the benefit of the local economy.

On the FFS plots there is good proof of best performance of early seeds and good agricultural practices. Producers trained in FFS also testify to an increase in their crops at home, a reduction of monetary costs associated with production and an improvement in their net income.

With thousands of producers trained in FFS, the Union Nieta de Bla claims that the application of the IPPM/FFS approach helped massively reduce the use of synthetic pesticides (8,697 litres used instead of the expected 181,408 litres). This translates into a reduction of costs in cotton treatments of about CFA 40 million over nearly 26,000 ha72 – all of which benefits the local economy.

However, not much is known about the real impact of CCA and IPPM/FFS methods and techniques on the fields of producers. To what degree are they applied in the fields? Why? What does this mean for the dissemination of FFS and the FFS mechanism? Project GCP/MLI/033/LDF did not have a true monitoring and evaluation tool available, compared with adoption in an actual field; the only one used to be self-reporting. Studies such as the

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71 For example, in one case, the team came across a can of herbicides on a market gardening perimeter. In another case, the FFS group spent two years consecutively analysing the effects of fertilizer micro-dosing on an FFS plot. These are clues that the IPPM/FFS approach is not always well understood everywhere.

internal evaluation of project GCP/RAF/482/EC on cotton[^73] help to see things more clearly. It would be better to provide a monitoring and evaluation mechanism for their impacts in the project and compare it to an external evaluation.

112 The promotion of market gardening, through training and agricultural equipment granted by project GCP/MLI/033/LDF, has helped many women increase their market gardening income. The project usually worked with groups of established market gardeners who had access to a perimeter. The focus on good agricultural practices and the calculation of profitability help producers better create and manage their resources. None of the market gardening groups feared problems of selling the product in the event of increased production. Some groups and female producers spoke of their need for a storage location, while others voiced a desire to be trained in conservation and product transformation.

113 The support fund for local initiatives established by project GCP/MLI/033/LDF has supported a total of 34 local initiatives amounting to CFA 28 551 825 (USD 41 082), with consideration of CFA 3 250 680 (10 percent of the total). It is about investing in the effective implementation of the lessons learned in FFS. Agricultural equipment was made available to a group or cooperative, which guarantees a certain degree of sustainability. However, technical support provided for motor-driven pumps has not been on point; several groups testified that their motor pump broke down without the capacity required to draw water (from the surface or underground).

### 3.5.3 Impact and sustainability on a social level

114 The FFS approach is a very participatory approach and includes methods of adult literacy and tools to strengthen the dynamics of the group. FFS participants are motivated and willing to learn in order to improve or even to professionalize their management of the agricultural holding. The repetitive nature of the field school sessions during the campaign created specific links between its members. These new links will also influence the social dynamic outside FFS, between members and villagers.

115 The training of facilitator-technicians and producer-facilitators also has more direct social impacts. There are many managers who have gone through IPPM training and who today occupy other positions elsewhere. A good number of producer-facilitators have also taken on other responsibilities, either in their municipalities or within a farming organization. IPPM training is appreciated by participants and the skills and personal qualities created during the training are also shared by the community and by third parties.

### 3.5.4 Impact and sustainability on an environmental level

116 The methods and techniques promoted by project GCP/MLI/033/LDF are sustainable in environmental terms. The project promotes the development of production and – depending on the case in question – a decrease in planted acreage. The project facilitates the recovery of degraded lands and encourages people to fight against soil erosion.

117 IPPM cultivation practices are compatible with the health of producers, their families, their animals and the ecosystem. They avoid pollution of soils, areas and water with synthetic pesticides. The approach promotes the use of non-harmful biological treatments.

118 IPPM cotton producers, trained in FFS, testify that their health has improved thanks to the abandonment of synthetic pesticides. Female market gardeners claim that their health and that of their children has improved significantly thanks to the consumption of vegetables and fruit, which are now brought into the homes. Garden produce gives them more energy and strength, and their children fall sick less often.

3.5.5 Impact and sustainability on an institution level

119 Nowadays climate change adaptation is integrated in policies and programmes in the agricultural sector. Project GCP/MLI/033/LDF has significantly contributed to the identification and inter-sectoral definition of ways and methods of adaptation. The big challenge now is the implementation of these activities by the Government, the decentralized organizations, municipalities and communities; however, financing of activities is generally not insured.

120 The FFS approach is recognized today as the most effective method to train facilitators and producers in the knowledge and know-how of good agricultural practices. Its independent dissemination through organizations, programmes and projects is limited by costs related to the facilitation of FFS and by how cumbersome certain practices are. In addition, semi-autonomous organizations do not yet promote diffusion of the FFS approach to equity, as evidenced by the case of Office of Niger and Office Riz Ségou. The conflict between the CMDT and IPPM producers regarding access to cotton fertilizers requires rapid consultation and resolution.

3.5.6 Dissemination of the approach

121 Project GCP/MLI/033/LDF first looked at a public and decentralized agricultural extension system. However, dissemination of the IPPM approach by technician-facilitators is dependent on the funds available for agricultural extension. None of the people contacted could tell us about the percentage of the budget nor the amount available annually in the national budget for agricultural extension.

122 At a field level, it was clear to the evaluation team that the decentralized structure of agricultural extension is lacking in resources at all levels and working conditions are often wretched. The lack of public funds available at field level meant that public technicians often rely on the funding of various projects and programmes of other organizations in the area to be functional. Today, technician-facilitators are not able to guarantee the sustainability of their public service over public funds.

123 For example complementary solutions should be looked for in order to make the FFS/CCA approach more sustainable at field level. The FFS/CCA programme should consider focusing on the training of producer-facilitators in the future; for example, in the ratio of three producer-facilitators for each technician-facilitator (at the moment the ratio is one to one). In principle, the producer-facilitator may better ensure the sustainability of the approach at field level. Information is often best passed from one producer to another, and they are stable and better integrated in their communities. The producer-facilitators give a better perspective of sustainability and the FFS approach at a local level.

124 In the future, farmers organizations will be the most appropriate structures to ensure the sustainability of the approach. Union Niéta de Bla is showing the way, taking into account the cost of facilitation of a number of FFS by facilitator-producers in the area.

125 Self-diffusion of methods and IPPM techniques is not to be encouraged. Some methods and techniques are easy to learn, such as seed drilling or soaking the seeds before sowing. However, so-called ‘wild’ (without prior training and monitoring) diffusion of techniques such as the production of manure and biological treatment of cotton risks compromising the desired impact in the producer fields and therefore product quality, thus also impacting on relationships with the organizations responsible for product sale.
4. Conclusions and recommendations

4.1 Conclusions

Conclusion 1. Realization of the objectives of project GCP/MLI/033/LDF “Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali” was satisfactory. The project has been implemented over the period 2011-2016 according to the pre-established logical framework and it produced the expected results with regard to the development and integration of climate change adaption policies and agricultural programmes. Today, CCA is an integral part of all programmes and projects in the agricultural sector.  

Project GCP/MLI/033/LDF was designed as a continuation of the GCP/RAF/009/NET programme on “Integrated Production and Pest Management through Farmer Field Schools” (IPPM/FFS) (2006-2010). The project effectively integrated CCA into the IPPM/FFS approach and increased the capacity in IPPM and FFS on a large-scale, namely in 180 municipalities (out of 708), with 413 facilitators (technicians and producers), who trained a total of 41 117 agricultural producers in 1 709, predominantly looking at dry crops and market gardening. Of these, 28 percent of facilitators and 17 percent of producers were trained by partner projects and programmes.

Conclusion 2. The GCP/MLI/033/LDF project has meant that those responsible for partner organizations in the project, as well as third parties, could be well informed about CCA and FFS approaches in order to support the implementation and application of these approaches in the field.

The project has trained a good number of officers in the divisional structure of agricultural extension, technicians in semi-autonomous organizations (such as the Office of Niger, Office Riz Ségou and the Malian Company for the Development of Cotton and Textiles (CMDT)), focal points and leaders of farming organizations. The Steering Committee and the Working Group on Information and Knowledge in CCA were cross-sectoral in terms of composition. However, representation and participation of the producers and their organizations in these bodies could have been higher.

The participation of stakeholders has been satisfactory. Implementation of the project with AEDD and IER partners has experienced some problems, especially in terms of administration at the beginning of the project. On the other hand, the GCP/MLI/033/LDF project made a very satisfactory effort to develop partnerships with various programmes and projects. This has resulted in partnerships with at least eight large programmes and projects: IESA, Cotton European Union, GIZ/Resilience and Nutrition, IFDC, PAFICOT, APROCA, Better Cotton Initiative and FAO/GEF Agro-pastoral. Moreover, the FFS approach was adopted by several programmes and projects in the field without a true prior consultation at national level (for example, ICRISAT, World Vision, PASSIP). In fact, the diffusion of the approach was carried out in these cases by the intermediary for FFS facilitators at field level. Regional networks of facilitators, who were supported by the project, played an important role in consolidation.

Conclusion 3. The cost effectiveness of the implementation of the programme was adequate since the project has far exceeded the expected results, both in terms of the number of facilitators and producers trained, and number of partnerships established. However, the situation of co-financing for the GCP/MLI/033/LDF project was not understood well by the evaluation team.

74 It is important to remember that between the formulation of the project in 2008 and its launch, policies in Mali have changed – see paragraph 3.3.1.

75 See the Mid-term Evaluation report (December 2014): “The constraints found at an administrative management level are shared between FAO and institutional partners (National Board of Agriculture, IER and AEDD) and have caused delays that have had a negative impact in respect of the timetable for activities to be carried out, as they were often delayed over the winter (for example, IER and National Board of Agriculture coordination). As for the AEDD, these delays have contributed to a halt in some funding for continuing advocacy and climate proofing in the municipalities”. 
Conclusion 4. Ownership of the project by the country is very satisfactory in technical and operational terms, and moderately satisfactory in political and financial terms.

Approaches to the dissemination of CCA practices, including through FFS, are very strong, as are the relationships with the numerous partners. The capacity of CCA and FFS has increased significantly. However, ownership of the project is moderately satisfactory in political and financial terms. The FFS approach has still not been designated a unique or favoured agricultural extension approach.

Financial planning for the project is moderately satisfactory. Planning, financial reporting, as well as the aspect of co-financing for GEF were not clear in the medium-term and final assessment to the evaluation teams.

The monitoring and evaluation system has been satisfactory with regard to the follow-up and documentation of activities, and the reporting of results. Monitoring of the impact of field training for producers was not well covered.

Conclusion 5. Development and training in CCA and FFS approaches are medium- and long-term investments that also benefit from the setting up of many other programmes and projects. The interlocutors of the evaluation team were almost unanimous in stating that there should be a sequel to this well-conceived, well-established and well-coordinated programme.

Reproducibility of the actions of the project is satisfactory. CCA, FFS and IPPM approaches may well be scaled up. Many of the organizations, programmes and projects are interested in them and adopt them. However, the financing of costs related to the facilitation of FFS and the maintenance of quality requires an institutional solution that ensures sustainability, with a strong multi-year contribution from the Government of Mali based on the national budget and national and international climate funds.

4.2 Recommendations

Recommendation 1. In the context of the Maputo and Malabo agreements in terms of the budget for agriculture, the Government of Mali should become more involved so that there is more transparency regarding the available budget for agriculture (as a percentage of the national budget) and in terms of the allocation of these funds at the level of all stakeholders.

It is recommended that a fixed percentage in the agriculture budget is earmarked for public agricultural extension, but on the other hand, FAO could support the Government in studying and understanding how the Climate Fund (available in Mali and internationally) could be made available for agricultural extension – on the basis of CCA FFS approaches – and used for municipalities, farming organizations and communities at a local level.

Recommendation 2. Considering the importance of the FFS approach for agricultural extension in Mali, FAO and its partners in project GCP/MLI/033/FLA should consider expanding what has been gained from the CCA and FFS approaches, which have been proven on the ground in Mali. These activities deserve to be disseminated to all producers and agricultural producers, through public and private organizations.

Recommendation 3. In order to support the different frameworks, organizations and networks of facilitators, as well as to ensure the quality of their services in the Field Schools, it is recommended that the FAO, through the Country Office in Mali, as well as through technical support in other offices at regional level and headquarters if necessary, support the National Board of Agriculture in the development and implementation of a multi-year national plan for agricultural extension on the basis of FFS, and that a National Centre for FFS Extension is created.

The dissemination of the FFS approach should be supported by an appropriate monitoring mechanism that can help assess the quality of the facilitator training implemented, of
the FFS held and of the performance of FFS participants in the producers’ fields. Impact monitoring should be integrated into such monitoring mechanism, with external validation.

**Recommendation 4.** The evaluation team recommends that FAO Mali supports the National Board of Agriculture in the formulation of the gender strategy for FFS that should be developed and integrated in the FFS multi-year national plan for agricultural extension.

A gender strategy would set clear targets for the number of women at all levels of the implementation system (percentage of personnel, of facilitators, of producers, of focal points, etc.), and would help intensify the training received by facilitators on gender issues and dynamics and the need for positive gender transformation.

**Recommendation 5.** As a result of the various interventions in the dissemination of the FFS approach in different contexts (rice, cotton, etc.) achieved by the various stakeholders in Mali, FAO should take part in a capitalization and assessment exercise with autonomous organizations (such as the Office of Niger, Office Riz Ségou and CMDT), farming organizations and the National Board of Agriculture in order to work together and identify lessons to be learned from their respective multi-year experiences.

These same actors should further consider how to adapt the approach to the characteristics of the specific contexts of their interventions, as well as developing a strategy in mutual agreement to deal with the challenges related to the (self-) dissemination of IPPM practices.

**Recommendation 6.** In the case of projects funded by GEF in francophone countries, the FAO/LFE liaison office should ensure that project teams have access to documents in French (for example, guidelines and procedural documents, follow-up reports, etc.) to allow the projects to report in French as one of the official languages of the United Nations.

Compared to co-financing issues, the FAO/GEF liaison office ensures that the financial management approach employed is in accordance with GEF rules. In this regard, the evaluation team suggests FAO stakeholders involved in the project work together to clarify the financial aspects that currently remain obscured (including co-financing), through, for example, an internal discussion, especially in the eventuality of scaling-up the project GCP/MLI/033/LDF in the country. In all cases, it should be ensured that managers of FAO projects co-financed by GEF are informed about the financing and administrative procedures of the lender.
5. Appendices

Appendix 1. List of documents consulted


Ag Hamba, A. 2017 (March). *Situation des producteurs formés en CEP (2013-14-2016-17). Résumé*. Office Riz Ségou (ORS), Ségou (Mali).


BCI. 2012 (October). *Better Cotton au Mali : Indicateurs de résultats des deux premières saisons*. (Presentation (.ppt) during the meeting of the Committee of BCI National Stakeholders in Mali).


CMDT. 2012 (October). *Politique et Stratégie Nationale sur la Production du Coton au Mali*. (Presentation (.ppt) during the meeting of the Committee of BCI National Stakeholders in Mali).


DNA. 2012. *Proposition de cadre de partenariat intégré. Entre le projet « Améliorer la capacité d’adaptation et la résilience face aux changements climatiques dans le secteur agricole » à travers son coordinateur et les points focaux désignés ci-après par la Dynamique Régionaux sur le Changement Climatique (DRCC).*

DNA. 2014 (September). *Proposition de stratégie et plan de communication du projet GCP/MLI/033/LDF.* Project GIPD/ACC, Direction Nationale de l’Agriculture, Bamako.

DNA. 2014 (October). *Gestion des équipements et intrants mis à la disposition des Organisations Paysannes (OP) par le projet à travers le Fonds d’Adaptation basé sur la demande et soutenu par chaque commune bénéficiaire. Note Technique.* Project GIPD/ACC, Direction Nationale de l’Agriculture (DNA), Bamako.


DNA. 2016 (March). *Journée d’Échange Inter-paysanne du 17/04/2016 à Sitatoumou, Commune de Bedougouba, Cercle de Kita.* Bamako.


DNA. 2016 (December). *Assistance technique pour la formation des producteurs de sésame du partenariat avec l’IFDC dans le cadre du projet 2SCALE-PROSEMA, par l’approche Champ École des Producteurs.* Bamako.


DRA-Mopti. 2017 (March). *Partenaires intervenant dans le cadre des changements climatiques.* Mopti (Mali).


FAO/GEF. 2008 (22 December). Integrating climate resilience into agricultural production for food security in rural areas of Mali. Project document.


IER. 2012 (December). Rapport d’atelier du Projet GCP/MLI/033/LDF/GEF sur le « Menu des pratiques d’Adaptation aux Changements Climatiques mises à jour pour le pilotage à travers les CEP ».


ON. 2012 (March). Formation des producteurs en GIPD. Ségou (Mali).


Appendix 2. List of people interviewed (in chronological order)

<table>
<thead>
<tr>
<th>Name</th>
<th>Role/Organization</th>
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<tbody>
<tr>
<td><strong>Italy - Skype</strong></td>
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</tr>
<tr>
<td>Ms Anne-Sophie POISOT</td>
<td>Senior Expert in Sustainable Production and project coordinator, Production and Plant Division (AGP), FAO, Rome</td>
</tr>
<tr>
<td>Mr Stefano MONDOVI</td>
<td>Agricultural Officer, assistant to the project coordination, Production and Plant Division (AGP), FAO, Rome</td>
</tr>
<tr>
<td>Ms Geneviève BRAUN</td>
<td>Programme Officer, FAO GEF Coordination Unit, Investment Centre Division, FAO, Rome</td>
</tr>
<tr>
<td><strong>Mali</strong></td>
<td></td>
</tr>
<tr>
<td>Mohamed SOUMARÉ</td>
<td>National Coordinator, FAO/IPPM/CCA project. FAO-Mali, Bamako</td>
</tr>
<tr>
<td>Souleymane COULIBALY</td>
<td>Technical Assistant, FAO/GIPD/ACC project. FAO-Mali, Bamako</td>
</tr>
<tr>
<td>Moustapha SISSOKO</td>
<td>Head of Communication, FAO/IPPM/CCA project. FAO-Mali, Bamako</td>
</tr>
<tr>
<td>Maciré TOUNKARA</td>
<td>Driver, FAO/GIPD/ACC project, FA-Mali, Bamako</td>
</tr>
<tr>
<td>Yahaya KANE</td>
<td>Focal Point IPPM/CCA, Permanent Assembly of the Chambers of Agriculture of Mali (APCAM), Bamako</td>
</tr>
<tr>
<td>Abdoulaye KEITA</td>
<td>Head of the Training Department, Permanent Assembly of the Chambers of Agriculture of Mali (APCAM), Bamako</td>
</tr>
<tr>
<td>Siaka FOFANA</td>
<td>National Director, National Board of Agriculture (NBA), Ministry of Agriculture, Bamako</td>
</tr>
<tr>
<td>Oumar SANOGO</td>
<td>Head of the Riz APRAO project, National Board of Agriculture (NBA), Ministry of Agriculture, Bamako</td>
</tr>
<tr>
<td>Meeting with the Working Group on Management of Information and Knowledge in Adaptation to Climate Change (WG/CCA), Ministry of Agriculture (17 people; 2 women).</td>
<td></td>
</tr>
<tr>
<td>Mama KONÉ</td>
<td>Focal Point IPPM/CCA, Institute of Rural Economy (IER), Bamako</td>
</tr>
<tr>
<td>Mamourou DIOURTÉ</td>
<td>Director of Research and Head of Dry Crops, Institute of Rural Economy (IER), Bamako</td>
</tr>
<tr>
<td>Modibo SYLLA</td>
<td>Head of Research and Development (R&amp;D), Institute of Rural Economics, (IER), Bamako</td>
</tr>
<tr>
<td>Adama BALLO</td>
<td>Manager of economics courses, Institute of Rural Economics (IER), Bamako</td>
</tr>
<tr>
<td>Amadou GADCON</td>
<td>Head of Scientific Publishing, Institute of Rural Economy (IER), Bamako</td>
</tr>
<tr>
<td>Daniel Siméon KELEMA</td>
<td>Technical Adviser for the GIZ National Programme for Sustainable Small-Scale Irrigated Agriculture (PASSIP), Bamako</td>
</tr>
<tr>
<td>Ms Fatouma DIAMA SEID</td>
<td></td>
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<tr>
<td><strong>Meeting with FAO in Mali, Bamako</strong></td>
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<tr>
<td>Youssouf Djimé SIDIBÉ</td>
<td>Permanent Secretary, Association of African Cotton Producers (APROCA)</td>
</tr>
<tr>
<td>Modibo TOURÉ</td>
<td>Head of representative programmes at FAO in Mali, Bamako</td>
</tr>
<tr>
<td>Abdoulaye BERTHE</td>
<td>Secretary General, Ministry of the Environment, Sanitation and Sustainable Development (MEAD), Bamako</td>
</tr>
<tr>
<td>Drissa TRAORE</td>
<td>Technical Adviser, Ministry of the Environment, Sanitation and Sustainable Development (MEAD), Bamako</td>
</tr>
<tr>
<td>Seydou Idrissa KEITA</td>
<td>Technical Adviser, Ministry of Agriculture, Bamako</td>
</tr>
<tr>
<td>Boureïma CAMARA</td>
<td>National Director, Agency for the Environment and Sustainable Development (AEDD), Bamako</td>
</tr>
<tr>
<td>Youssouf Djimé SIDIBÉ</td>
<td>General Secretary, Association of African Cotton Producers (APROCA), Bamako</td>
</tr>
<tr>
<td>Siako FOFANA</td>
<td>National Director, National Board of Agriculture (NBA), Ministry of Agriculture, Bamako</td>
</tr>
<tr>
<td>Issa SAMANKÉ</td>
<td>Head of Agriculture, Ministry of Agriculture, Kita</td>
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</tbody>
</table>
### Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas

**Hamady BAH**  
Master-Trainer IPPM/CCA and Technical Agent of the Ministry of the Environment, Kita

**Amadou TOURÉ**  
Head of monitoring, Agricultural sector, Kita

**Abdoulaye DIÉBA**  
CCA facilitator, Agriculture sector, Kita

**Aboubakar SIDIKI SYLLA**  
CCA facilitator, Agriculture sector, Kita

Meeting with members of the FFS/CCA at Béréla; 35 people including about 15 women. Trials on sorghum in 2015/16 and 2016/17; improved variety and micro-dose fertilizer. Recipient of ten carts.

Meeting with members of the Association of Women Market Gardeners at Mananko; about 33 people including about 25 women. Established in 2001, then market gardening since 2006 with the support of three wells of the Association for Global Development (ADG). Trained by the IPPM programme in rice and market gardening. Trained by the CCA project. Beneficiary of agricultural equipment from the CCA project; including a motor pump, carts, ploughs, etc. Total number of members of the Association: 54 persons.

**Sambou Mariko SISSOKO**  
Mayor of Oualia, Bafoulabé, Kayes

**Mady DEMBELE**  
Chief of sector Bafoulabé, National Board of Agriculture (RBA), Kayes

**Moustapha DEMBELE**  
Sector agent, Regional Board of Agriculture, Kayes

**Sambou SISSOKO**  
President of market gardeners of Oualia, Bafoulabé, Kayes

Meeting with members of three market gardening FFS/CCA at Oualia; about 25 people, including 20 women. One of the FFS was also the beneficiary of a pump.

**Moussa N’Golo TRAORÉ**  
Regional IPPM/CCA Focal Point for Regional Board of Agriculture (RBA), Kayes

**Oumar COULIBALY**  
Secretary General of the municipality of Kounda

**Idrissa JAFFA**  
First deputy of the Mayor of Kounda

**Boukary COULIBALY**  
Head of Division Bafoulabé and PASSIP Focal Point, Regional Board of Agriculture, Kayes

**Nousanbi DIALLO**  
Head of the village of Kounda

**Demba DABO**  
Head of Sub-sector Lontou and FFS/CCA facilitator

**Abdou TOURÉ**  
CCA facilitator at Kounda

Meeting with facilitators and members of market gardening and cereal FFS in Kounda; total of 20 people, including eight women.

Meeting with the Association of Market Gardeners in Komandra; about 20 people, including 11 women. The two FFS in Komandra received for CCA, a pump (needing repair), two ploughs, four oxen, two asses, two carts, six wheelbarrows, 20 rolls of chicken wire, six shovels, ten buckets, ten sprinklers, peaks.

**Yaouba KONÉ**  
Regional Board of Agriculture (RBA), Kayes

**Kita LANSANI**  
Head of Sector Kolokani, Kayes

**Djori KONÉ**  
IPPM/CCA facilitator, Kolokani, Kayes

Meeting with the local authorities, facilitators and members of FFS dry crops (sorghum/corn) and market gardeners at Donkorola; about 45 people including 30 women

**Baba TOGOLA**  
Agri-business councillor, project 2SCALE, International Fertilizer Development Centre (IFDC), Bamako

**Amadou OUADIDJE**  
Country representative and coordinator for project 4C Cotton, International Fertilizer Development Centre (IFDC), Bamako

**Cheick Amadou DIARRA**  
Monitoring and Evaluation specialist, FDP micro-dose project, International Fertilizer Development Centre (IFDC), Bamako

**Salif KONARÉ**  
Head of Sector Dioïla, Koulikoro

**Sambou SIDIBÉ**  
President of the producer-facilitator network, Dioïla

**Adama Diouma DOUMBIA**  
Producer-facilitator, Dioïla

**Lassina SOUNTOURA**  
Focal Point and producer-facilitator

Meeting with the Balemaya Ton cooperative of women market gardeners in Dioïla Socoura North; 26 people, including 24 women. The market gardening FFS at Balemaya was the CCA beneficiary of fences, pails, watering cans, ploughs and carts. The cooperative has a water tower and solar panels donated by the NGO Sécours Saoudien (Saudi Aid). The water tower does not provide sufficient water, perhaps due to lack of capacity of solar panels. There is also a borehole of drill diameter of 8-10 metres of depth, and seven traditional wells.
Meeting with the FFS facilitator in Zanabougou, representatives of ten villages in the area with FFS implemented in their locality under the support of a producer-facilitator, then six students doing an internship with the FFS facilitator. Total: about 50 people, including 30 women.

Meeting with the technician-facilitator of the Cinzana sub-sector, seven producer-facilitators and five IPPM/CCA producers from different villages in the Cinzana sub-sector. Total 13 people, including two women-producers.

Meeting with the Secretary General of the Union Niëta de Bla, four facilitator-producers three IPPM/CCA producers and four IPPM/CCA producers in the village of Zoumanabougou. Total: 12 people, including four women.

Meeting with the mayor of Konséguela and the Sabaliton Cooperative of women market gardeners in the Niantiola district in Konseguela. Total: 25 people, including 19 women. Visit to the second market garden perimeter they have put in place.

Steering Committee for project GCP/MLI/033/LDF on CCA, National Board of Agriculture (18 people; 2 women).

All the other technician-facilitators, producer-facilitators, and producers met at Béréla and Mananko (Kita group), Oualia (Bafoulabé group), Kounda and Komanta (Kayes group), Dantorola (Kolokani group), Dioïla (Dioïla group), Zanabougou and Cinzana (Ségou group), Zoumanabougou (Bla group) and Konséguela (Kountiala group).

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Sunday, 12 March</td>
<td>Evaluation team meeting in Bamako. Review of documentation.</td>
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<tr>
<td>Monday, 13 March</td>
<td>Meeting with the Coordinator and the Technical Assistant for the FAO/IPPM/CCA Programme. Courtesy visit to FAO Mali. Security briefing at the UNDSS. Meeting with the Permanent Assembly of the Chambers of Agriculture in Mali.</td>
</tr>
<tr>
<td>Tuesday, 14 March</td>
<td>Courtesy visit to the National Director of Agriculture. Meeting with the manager for rice at the National Board of Agriculture. Meeting with Coordinator for the FAO/IPPM/CCA Programme. Meeting with the Working Group on Management of Information and Knowledge in Adaptation to Climate Change Meeting with the Institute of Rural Economics (IER). Meeting with the GIZ Technical Adviser for the National Programme for Sustainable Small-Scale Irrigated Agriculture. Meeting with the representative of FAO in Mali and their assistant.</td>
</tr>
<tr>
<td>Wednesday, 15 March</td>
<td>Meeting with Coordinator of the FAO/IPPM/CCA Programme Meeting with the Secretary General and the Technical Assistant of the Ministry of the Environment, Sanitation and Sustainable Development. Meeting with the Technical Assistant of the Secretary-General for Agriculture at the Ministry of Rural Development. Meeting with the Director of the Agency for the Environment and Sustainable Development (AEDD) Meeting with the Secretary General of the Association of African Cotton Producers. Meeting with the National Director of Agriculture.</td>
</tr>
<tr>
<td>Thursday, 16 March</td>
<td>Trip to Bamako-Kita. Meeting with the Head of the Agriculture Sector, a master-trainer and two facilitators. Visit to FFS/CCA in the village of Berela. Lunch at Kita. Visit the Association of Women Market Gardeners in the village of Mananko. Debriefing with the Head of the Agriculture Sector and the master-trainer in Kita.</td>
</tr>
<tr>
<td>Friday, 17 March</td>
<td>Trip: Kita-Oualia-Kounda-Komantra-Kayes. Meeting at Oualia with the Mayor of Oualia, the head of the sector for Bafoulabé, the agent for the sector and the president of market gardeners for Oualia. Visit a market garden area on the river, together with three groups of members of the FFS market gardeners. Meeting at Kounda with the Regional Focal Point IPPM/CCA of Kayes, the Secretary General of the municipality, the Village Chief, the focal point of the PASSIP project, the sector leader and local focal point of Kounda, the head of the sub-sector of Lontou, facilitators and members of the market gardening and grain FFS in Kounda. Meeting at Komantra with the Regional Focal Point IPPM/CCA of Kayes, the sector head, the Village Chief and members of the market gardening and grain FFS in Komantra. Quick look at the market gardening perimeter, which looks over the Senegal River and the Manantali hydroelectric dam at Mahina. Meeting in Kayes with the Regional Director of Agriculture and the Regional IPPM/CCA focal point.</td>
</tr>
<tr>
<td>Saturday, 18 March</td>
<td>Trip: Kayes-Kolokani-Bamako. Meeting with the head of the sector of Kolokani and with the facilitator and representative of the Kolokani Chamber of Agriculture. Meeting at Dankorola with the Village Chief, the facilitator and a representative of the Chamber of Agriculture, and the members of the dry crop FFS and Dankorola market garden.</td>
</tr>
<tr>
<td>Sunday, 19 March</td>
<td>Reading time for project documentation. Work at the hotel on the analysis of the data, the interim report and the debriefing at FAO.</td>
</tr>
<tr>
<td>Monday, 20 March</td>
<td>Meeting with the Agri-business adviser for the 2SCALE project and then a courtesy visit to the IFDC country representative and the person responsible for monitoring and evaluation of the FDP micro-dose project. Trip: Bamako-Dioïla. Meeting with the head of the sector of Dioïla, the president of the network of producer-facilitators, the focal point of the producer-facilitators and a technician-facilitator. Visit to the market garden perimeter of the Balemaya Ton association at Dioïla Socoura North. Trip: Dioïla-Ségou. Meeting with the Regional Director of the National Seed Service in Ségou.</td>
</tr>
<tr>
<td>Tuesday, 21 March</td>
<td>Meeting with the Regional Director and the focal point of the National Board of Agriculture in Ségou. Meeting with the Zanabougou facilitator, six students on placements and approximately 45 representatives of FFS members from ten villages in the Zanabougou area who have benefited from technical support from a producer-facilitator. Meeting with the Deputy Director, the head of the Outreach Division and the focal point of the Office Riz Ségou, Ségou. Meeting with the Director of Support for Rural Society, the Chief and Deputy Chief of the Extension-Training Division of the Office of Niger, Ségou.</td>
</tr>
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### Wednesday, 22 March

Trip: Ségou-Cinzana-Bla-Zoumanabougou-Koutiala. Meeting with the technician-facilitator of the Cinzana sub-sector, seven producer-facilitators and five IPPM/CCA producers from different villages in the Cinzana sub-sector. Visit the market perimeter of the village of Kondogola. **View of the market perimeter at Cinzana Centre North.** Meeting with the Mayor of Cinzana and his support adviser for development. Meeting with the Secretary General of the Union Niéta de Bla, facilitator-producers and IPPM/CCA producers in the village of Zoumanabougou.

### Thursday, 23 March

Trip: Koutiala-Konséguela-Koutiala-Ségou-Bamako. Meeting with the Mayor of Konseguela. Visit the Sabaliton Cooperative of women market gardeners in the Niantiola district in Konseguela. Visit the second market garden perimeter. Meeting with the Secretary General of Konseguela Municipality. Meeting with the head of the Koutiala sub-sector from the Regional Board of Agriculture. Return to Bamako.

### Friday, 24 March

Meeting of the Steering Committee for project GCP/MLI/033/LDF on climate change adaptation. Presentation of the preliminary results of the final evaluation of the CCA project. Debriefing with the representative of FAO Mali and their deputy. Meeting with the Head of Planning and Research for the Environment and Sustainable Development Agency (AEDD) Work meeting between members of the evaluation team. Travel back to the Netherlands.
6. **List of Annexes**


- Annex 1. Terms of Reference
- Annex 2. Evaluation Matrix
- Annex 4. Evaluation according to GEF criteria
- Annex 5. Gender dimension in the Malian agricultural sector