

Country:	Mali
Request Identification Number:	2014-012/MLI-01

Title:	Strengthening the implementation of climate change adaptation efforts and clean development initiatives among rural communities in Mali
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Brief Summary of the Response Plan

Mali has developed policies, strategies, plans and programs for climate change adaptation and mitigation at decentralized (communal) levels. The effective participation of rural populations, particularly women and the youth to this endeavor, is vital for implementing practical and replicable actions on the ground. Achieving the overall objectives of these policies and programs will require appropriate climate technologies in strengthening the resilience of vulnerable communities and attaining clean development goals. With this regard, the government of Mali requested the CTCN technical assistance in the identification of a range of appropriate climate technologies for each of the agro climatic zones of Mali. The technologies to be proposed could be local or any foreign technologies relevant for the Malian context. The CTCN assistance will also serve to develop a tailored and ready-to-use Reference Guide. This guide will provide information on the concepts, approaches, methods and tools as well as an array of technological solutions in the agriculture sector, with some co-benefits in other associated sectors like energy, forestry and water sectors. As the identified technologies are meant to reduce communities' vulnerability, this guide will also contain information on the typology of hazards, exposure and sensitivity to help the Malian government in the management of disaster risks associated with droughts and floods. The CTCN assistance will serve to design and test a dissemination strategy for the above-mentioned guide. The CTCN assistance will conclude with key recommendations and steps that will help the Malian government in the development of a large scale funding proposal to encompass activities not covered under this CTCN assistance. The duration of this technical support from the CTCN will be 09 months and serve to achieve the following outputs and outcomes:

1. Overview of the assistance

1.1 Objectives (outcomes)

1. The wellbeing and climate resilience of communities and more specifically of the marginalized groups (youth, women, migrants, etc.) are improved as a result of the use of climate smart technologies by the communities;
2. The communities' knowledge of climate change-related problems in Mali is enhanced as a result of the use of climate smart technologies by the communities;
3. The resilience of the agro-ecosystems is improved as a result of the use of appropriate climate technologies by the communities;

4. Local and national decision makers have mainstreamed climate change in the design and implementation of development plans drawing on the lessons learnt from the CTCN assistance.

1.2 Results (outputs)

Describe the expected outputs (services or products) of CTCN technical assistance in the country and/or sector. These outputs should be directly attributed to the activities of CTCN technical assistance.

1. Identification of a range of 15-20 appropriate technologies (currently used in Mali and technologies transferred from other countries) for adapting to a changing climate at the level of the different agro-climatic and socioeconomic zones of Mali. The different adaptation sectors that technologies will be identified for include different dimensions of agriculture and food production, including market gardening and fruit arboriculture, composting, renewable energy for productive use (e.g. crop drying and processing), agroforestry, drought resilient crops, climate resilient traditional agricultural practices, sustainable irrigation practices, etc.;

2. Production of a Reference Guide that will provide additional information on the concepts, approaches, methods and tools, different technological solutions, for each of the technologies identified in output 1 as well as the way these technologies can help in the reduction of disasters associated with floods and droughts. The target audience consists of extension service providers, local and national policy makers and the community groups;

3. Design and implementation test of a dissemination strategy to facilitate the dissemination of output 2 through national and subnational levels as well as the integration of climate change issues in Local Development Plans;

4. Making recommendations and suggestions of steps to be taken (including suggestions with potential donors) to develop a large scale project and funding proposal inter alia to set up a technology information system and pilot tools and appropriate technologies in selected villages through school-fields.

1.3 Technology aspects

Provide a brief description of the technology(ies) supported by the assistance, and explain how the CTCN assistance will help identify, develop or deploy the specific technology(ies).

Technologies identified (through output 1) by the CTCN assistance and for which reference and guidance material will be developed (through output 2) will include climate technologies related to the agricultural sector. It may include, for example, composting technologies, use of biogas for cooking, solar energy for lighting, market gardening and fruit arboriculture, solar pumps for irrigation. Some of these technologies already exist in Mali. The CTCN assistance will help in identifying other technologies tested in other countries/continents and that are relevant for the context of Mali.

2. Description of the Assistance

2.1 Activities

Describe the planned activities and sub-activities to be conducted under the assistance, as well as their corresponding deliverables. For each activity, provide of brief descriptions of actions to be conducted as well as their immediate results/usefulness to achieve the expected outputs.

Use the following format:

Activity 1 - Identification of 15 to 20 appropriate technologies for the agro climatic zones of Mali

Activity 1.1 - Review of existing projects to gather existing data and experiences related to the relevant technologies

Activity 1.2 - Review and base on existing information the characterization of the different agro climatic zones of Mali. This characterization exercise will consist in collecting geographical data (boundaries with latitude and longitude), population and climatic (rainfall, temperature, wind speed) data, vulnerability profile for each of the zones. Part of this work has already been done in previous projects.

Activity 1.3 - Identify a menu of 15-20 climate change adaptation technology options for communes in the different agro climatic zones of Mali. The abovementioned guide as reference material should be focused on these technologies with a focus on the agriculture sector.

Activity 1.4 - In the above characterization exercise, a particular attention will be put on communes and villages to serve as pilot zones and field schools for testing technologies at a later stage. This will be based on selection criteria. The selection criteria will take into account the appropriate technologies identified, the climate conditions and vulnerability profile of the pilot area.

Deliverables	Delivery date
Menu of 15-20 climate change adaptation technology options for vulnerable communes in Mali - to prioritize based on factors such as climate threats, financial cost, adaptation benefits, available resources locally, etc. These technologies may be locally existing or brought from other similar contexts.	1 st Feb 015
List of selected villages that will serve as pilot. These villages will be selected based on agreed selection criteria.	1 st Feb 015

Activity 2 - Production of the Reference Guide

Activity 2.1 - Selection of tailored information to be included in the reference guide based on the specificity of the target audience. This reference guide will be based on the proposed menu of adaptation technologies and will focus primarily on the sectors

of Agriculture/food production with co-benefits for the sectors of Energy, Water, Forestry and Health. This guide will also contain a selection of tailored information - typology of climate hazards such as drought, flooding, etc.; occurrence zones, exposure and sensitivity to the hazards as well as a menu of relevant adaptation technology options, existing institutional frameworks to manage these risks, etc.

Activity 2.2 - Redaction and edition of the reference guide in a user-friendly version style. This guide will be produced and printed in both electronic and hard copies in French and other relevant local languages.

Deliverables	Delivery date
Tailored information to be included in the reference guide	1 st April 015
Edited electronic version of the reference guide	1 st June 015
Hard copies on the reference guide.	1 st Aug. 015

Activity 3 - Designing and testing of a dissemination strategy to help integration of climate change issues into local development plans and community decision-makers/ leaders practices

Activity 3.1 - Design of a sound dissemination strategy for the Reference Guide

Activity 3.2 - Identification of other communication tools in addition to the production of the reference guide to better disseminate the information. These may include involvement of local traditional authorities, community radios, posters, TV channels, face-to-face meetings, ITCs.

Activity 3.3 - Testing of the dissemination strategy through training activities or training of trainers to ensure the outputs are useful - making recommendations following the test.

Deliverables	Delivery date
Dissemination strategy for the Reference Guide	1 st Aug 015
Set of additional communication tools - apart from the reference guide - to be used for the dissemination of the information gathered. These could include involvement of local traditional authorities, community radios, posters, TV channels, face-to-face meetings, ITCs, etc. depending on the context.	1 st Aug 015
A report highlighting the main results achieved after testing the dissemination strategy in selected zones.	End of Sept 015

Activity 4 - Making recommendations and suggestions of steps to be taken (including suggestions with potential donors) to develop a large-scale project and funding proposal.

Activity 4.1 - Making recommendations on the way forward to seek support from different sources on the development of an online technology information system that will serve as decision-making tool."

Activity 4.2 - Making recommendations on steps to be taken in the development of a larger project proposal to pilot and test the identified technologies.

Deliverables	Delivery date
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Recommendations and suggestions to develop new request to the CTCN and to develop large-scale project and funding proposal.

End of Sept 015

2.2 Expertise required

List the expertise required to successfully implement the assistance and reach the expected objectives.

Activities	Type of expert/field of expertise needed
Activity 1 Identification of 15 to 20 appropriate technologies for the agro climatic zones of Mali	Climate change expert who will characterize the different agro climatic zones of Mali
	Technology expert who will link the characterized zones with potential appropriate climate technologies
Activity 2 Production of the adaptation technology Reference Guide (with focus on agriculture sector) - The target audience consists of extension service providers, local and national policy makers and the community groups	Climate change adaptation technology expert
Activity 3 Design and test of a dissemination strategy	Communications experts
Activity 4 Making recommendations and suggestions of steps to be taken (including suggestions with potential donors) to develop a large-scale project and funding proposal	Proposal development expert

2.3 Main partners

List and describe the role of in-country partners who will be involved in the implementation of the assistance in the country.

Institution	Designation	Expected role
National Designated Entity (NDE)	Mali Meteorological Office	Lead agency for facilitation, coordination and collaboration pertaining with CTCN to support activities
Regional and communal extension services	To be determined in the selected zones of work	Organization and supervision of community groups, dissemination of assistance results

National Direction in charge of Women promotion	DNPF	Mobilization of women groups
Local administration	Mayors and counsellors	Facilitation of administrative formalities Mainstreaming of climate change into local development plans
Local community groups	Community organizations	Participation in the choice of villages for testing the technologies and selection of field-school sites.
Local NGOs	To be determined in the selected zones of work	Experience sharing, dissemination of assistance results
National Agency in charge of Environment and Sustainable Development; National Direction in charge of Water and Forests; National Direction of Agriculture; Permanent Assembly of Malian Chambers of Commerce; National Direction in charge of Livestock and Hydraulics;	AEDD, DNEF, DNA, APCCM, DNEH	Linkages with existing intuitional framework
Universities and research centers	University of Mali, specialized research centers	Research and uptake
Media groups	ORTM, community radios	Communication, outreach and information-sharing
Youth associations	Union Nationale des Jeunes du Mali	Mobilization of the youth

2.4 Synergies

Identify past and ongoing public and private sector initiatives at the local, national or regional level that the response will specifically build on and link to.

- The Scaling-up of Renewable Energy Program (SREP): learning from this project on how to move from pilot tests to scaling up.
- Agro meteorological assistance to rural communities to improve decision-making: building on the agro meteorological data gathered under this project.
- The project for improving capacity to adapt to and withstand the effects of climate change in agriculture: using the vulnerability profile and adaptation options identified in this project.
- The Field Schools project: building on lessons learned from this project in the identification and setting up of field schools.
- The project for managing natural resources and climate change: learning from resilience and exposure studies derived from this project.

- o The project to integrate climate adaptation in development planning: learning on barriers - and how to overcome them - to mainstream climate change into development plans.

The assistance will build on other past/ existing projects that will be identified during the course of the assistance, especially during the implementation of activity 1.

2.5 Timeline

Provide a timeline for the CTCN technical assistance and list specific milestones for each activity. The timeline shows the roll out of the activities and sub-activities to be conducted, throughout the whole duration of the assistance

This technical assistance is expected to last nine (09) months starting from January 2015. A detailed timeline is indicated in Annex 1.

2.6 Indicative budget

Provide an indication on the maximum amount of resources required to implement the assistance.

The maximum amount of resources required to implement the assistance will be USD 100,000. A detailed budget is under preparation by the RET.

2.7 Risk identification and mitigation

Identify risks that could jeopardize the realization of project outcomes and expected impacts, their probability and how the assistance will mitigate these perceived risks.

Risks	Consequence	Probability	Mitigation
Limited or delayed availability of funding for implementation of the other activities not supported by the CTCN	Delayed CTCN assistance	Medium	Starting with CTCN assistance where possible. CTCN assistance includes specific recommendations to encourage/identify funding sources for activities following-up the assistance
Limited or no uptake of CTCN assistance results in designing development plans	Lesser impact of the CTCN assistance	Medium	High involvement of decision makers in the implementation of the CTCN

			assistance and embedding that assistance into on-going processes and development agenda in Mali. Decision-makers are considered are important targets in the dissemination strategy
Identification of technologies is duplicating previous reports and not adding value to the country	Lesser impact of the CTCN assistance	Medium	The identification of technology will build on previous work Linking the identified technologies with the ecological context of the target zones; bringing foreign technologies in
Reference guide is not read and not used by local communities	Lesser impact of the CTCN assistance	Low	Testing of the dissemination strategy for the guide will result in recommendations for wider dissemination of the guide

2.9 Monitoring and Reporting

Provide information on how the monitoring and reporting for the project will be constituted.

The monitoring and reporting of the CTCN assistance will be conducted in close collaboration with the beneficiary populations. A memorandum of understanding will be agreed between the project team and local communities and dedicated people will be identified to collect monitoring data. A reporting form will be developed and used by the communities for interim reports on the progress of the CTCN assistance and progress of the overall project.

3. Long-term impacts of the assistance

3.1 Expected climate benefits

Describe the long-term results (impacts) produced by CTCN assistance, including its contribution in mitigating and adapting to climate change. If possible, insert specific targets.

- Communities in the assistance area are more aware of the role of clean technologies in addressing climate change and managing disasters in Mali;
- Communities in the target area are expected to engage in low carbon development by using cleaner technologies in the agriculture sector;
- Local and national decision makers are mainstreaming climate change in the design and implementation of development plans;
- The wellbeing and climate resilience of youth and women groups are improved;
- Clean technologies, green jobs and green enterprises are promoted in Mali.

3.2 Co-benefits

Describe the anticipated economic, social, and environmental co-benefits of the assistance.

The assistance is expected to:

- Generate co-benefits especially in the energy, water and health sectors in the sense that using green technologies (especially clean cooking, solar energy for water pumping, etc.) by women may reduce health problems on women and children;
- Reduce GHG emissions by the use of green technologies;
- Alleviate poverty in the target communes by creating income generating activities, allowing better food production and overall food security;
- Other projects ongoing or future are expected to build on the results of the CTCN assistance.

3.3. Post-assistance plans and actions

If possible, provide indications on specific actions and plans that the country can implement, to make use of the assistance outputs, and to ensure that it will create the expected climate benefits described above.

- Mali intends to use the CTCN assistance as a start for a bigger project and will get support from the CTCN to identify possible funding sources;
- Use the reference guide through other projects (where relevant), to disseminate it as part of these projects;
- Mali intends to build on its Technology Needs Assessment report and Action Plan to develop new requests to CTCN building on experience from this assistance;

- o In order to inform a wider audience in Mali about the services of the CTCN, the Mali NDE intends to organize a debate on the national TV channel;
- o Suggest post-project monitoring and evaluation (M&E) activities to measure the impact of the assistance, as well as the impacts of related subsequent actions.

4. Formal agreement and signatures

Signatures of the requesting country

For the NDE

Name: *Birama Diarra*

Title: *END - MALI - Directeur des Applications météorolo-
giques et climatologiques.*

Date: *27/12/2014*

Signature:



Signatures of the CTCN

For the CTCN Director

Name:

Title:

Date:

Signature:

