

Pooling effort of all stakeholders to upscale Climate Smart and Conservation Agriculture within National Task Force on Conservation Agriculture

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Abstract:

Many parts of Madagascar have a recurrent problem of national and household food insecurity which is largely traceable to declining agricultural productivity set against a background of increasing population and climatic shocks. Climate smart Agriculture (CSA) and Conservation Agriculture (CA) are approaches to managing agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the natural resource base and biodiversity in the soil. These innovative approaches lead to more resilience of crops to dry spells resulting in improved food security and farm profitability. In the longer term there can be a decline in weeds and pests and the deterioration in soil structure and fertility brought about by poor management practices which may be stopped or reversed. Despite the benefits, there are still obstacles to the widespread adoption of CA. In order to stimulate better knowledge and understanding regarding CA based agricultural development and to coordinate all stakeholders in the Country, the National Conservation Agriculture Task Force (NCATF) has been created in 2009 as a platform comprising, at present time, 33 members from public and private sectors. The vision of this network is that appropriate agrosystems and best practices are adopted by farmers throughout the Country leading to increased production and farm profitability and sustainable farming systems. GSDM, being the focal point for NCATF, has accumulated experiences in the main agroecological zones of Madagascar. Among activities in the actual Plan of Action of NCATF are the baseline study on CA and CSA adoption, the support of Farmers Fields School (FFS) having side by side CA plots and conventional tillage, the promotion of regional platforms in Madagascar and the advocacy for CA at national and local level in terms of public policy.

Introduction

Many parts of Madagascar have a recurrent problem of national and household food insecurity which is largely traceable to declining agricultural productivity set against a background of increasing population and climatic shocks. Climate smart Agriculture (CSA) and Conservation Agriculture (CA) are approaches to manage agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the natural resource base and biodiversity in the soil. These innovative approaches lead to more resilience of crops to dry spells resulting in improved food security and farm profitability. GSDM (Groupement Semis Direct de Madagascar) as a national structure for CA diffusion in Madagascar, some active working groups, plenary presentations and a wide-ranging discussion on structural needs for the promotion of CA in SADC member countries and at regional level, participants agreed that:

- CA National Taskforces be set up, revived or enhanced as necessary in each SADC member state and
- CA Regional Working Group (CARWG) comprised of representatives from each member country (one Focal Person per country) and coordinated jointly by FAO be set up.

Under the OSRO/RAF/904/USA project, Dr Irene Kadzere, FAO Regional Emergency Office in Harare, initiate a process of exchange information and new initiative for CA diffusion with many partners from the public and the private sector. The participants agreed to settle a NCATF and organized a 2nd meeting while GSDM has been elected as the Focal point for NCATF. From there, activities have been engaged in stock taking, training of staff and farmers, quality evaluation of CA extension, implementation of demonstration plots, awareness activities and lobbying of CA in accordance to work plan jointly set up by all members. In December 2010, a National Symposium organized by GSDM with all stakeholders, gave birth to a future national strategy to scale up CA activities in Madagascar. The assistance being requested have therefore enabled the NCATF to coordinate and support the implementation of the strategy in terms of coordination, training, exchange of information, expertise and advocacy for CA enhanced visibility and capacity increased in the country.

At the completion of the OSRO/RAF (USAID) project, GSDM could maintain limited activities of NCATF by means of funding through French project as part of his activities (AFD, French Agency for Development). In 2014, a new project funded by COMESA, OSRO/RAF/307/COM, under FAO, allow the NCATF to recruit the executive secretary and to implement activities of coordination, baseline studies, demonstration plots and sensitizations of farmers in 6 locations representative to different agro-ecological situations.

1. NCATF vision

The vision of CARWG, in SADC member countries at regional level, and that of NCATF at national level, is that appropriate CA and CSA practices are adopted by farmers throughout Eastern and Southern Africa leading to increased productivity, food security, farm profitability and sustainable farming systems.

For Madagascar, the vision of this network is that appropriate agrosystems and best practices are adopted by farmers throughout the Country leading to increased production. Referring to the recommendations of a national workshop of June 2013 (or December 2010), among the most important issues are i) to built a higher capacity in training at different levels, ii) to develop an approach which involves all stakeholders at all levels, iii) to streamline CA into national policy for rural development.

2. The functions of NCATF at national and regional level

NCATF is a national platform of which the main functions will:

1. Provide a forum to facilitate linkages/networks between stakeholders for CA
2. Facilitate Training and Adoption of CA
3. Advocate / Influence Agricultural and other Policy on CA.
4. Raise issues, such a Gender relationships and how they may influence CA adoption
5. Advocacy / awareness / Information for CA dissemination
6. Provide a forum to debate and facilitate further reflective learning
7. Recommended Strategy / Protocols for Facilitation / Roll out of a CA
8. Ensure that CA Principles / Protocols are Clearly Defined
9. Define and facilitate resourcing of CA and research studies as required
10. General Guidelines as to composition of Task Force
11. Identify human resources and skills of the different stakeholders
12.

Regional platforms will be initiated to cover the main agro-ecological zones of the Country. At present time regional CATF have been initiated in the Androy-Anosy regions with the CTAS (Centre Technique Agro-écologique du Sud) initiated by a project funded by EU as focal point. More platforms will be initiated especially in the Vakinankaratra area (highlands and Middle West), in the South East (rain forest area), the Eastern region (rain Forest) etc...

3. Expected impacts and Outcomes

The Project contributes to the overall development goal of the COMESA-EAC-SADC Programme of addressing the impacts of climate change in the south eastern Africa and Indian Ocean regions through successful adaptation and mitigation actions which also build economic and social resilience for present and future generations.

For Madagascar, the project development goal would be to enhance household and national food security while combating the potential impact of climate change by promoting sound and sustainable farming practices.

The project outcome would be that CA and CSA more widely supported and implemented in Madagascar.

4. Composition of Malagasy NCATF

Members of Malagasy NCATF are from both public and private sectors (table 1). Thirty eight members are recorded at present time. GSDM is acting as the focal point and FAO contracting with COMESA for all activities including the executive secretary.

5. Plan of action for 2014

Plan of action for 2014 comprises a baseline study for CA and CSA, support for reference plots or Farmers 'fields Schools (FFS) for training and exchange visits, visibility activity. Table 2 summarizes the main activities for the rainy season 2014/2015. These activities are implemented by farmers associations (PLAE/GLAE), NGO (FAFIALA, AGRISUD), private organization specialized in CSA and seeds (SD

MAD) and one training center in Agriculture (CRFPA), cooperative (ANDRI-KO). All of them have to host either farmers or other types of visitors (technicians, projects...) as part of their engagements.

Conclusions

In the past, most of CSA diffusion was project driven with a short timeframe (less than 3 years). NCATF aims to upscale CSA and CA by means of a pooling effort of all stakeholders including public and private sectors which goes for a longer time than the timeframe of a project. It is expected that a platform including farmers' organizations, technicians, and policy makers both at national and local level will allow increasing and sharing experiences both in terms of constraints and opportunities.

Table 1 : Members of Malagasy NCATF (38 members)

Institution	Acronym
Ministerial institutions	Agriculture (MINAGRI), Environment and Forestry (MEF), Livestock
United Nation agency	FAO, UNDP,
NGOs, Associations, Group	GSDM, AGRISUD, AVSF, ANAE, CARE, CRS, CI, FIFAMANOR, FAFIALA, GSRI, GRET, HARENA SAHAZA, SYNAAA, ICPM, INTER AIDE, MNP, RTM, WCS, WWF, FEKRITAMA, AGRISUD
Cooperative	ANDRI-KO
Engineering/company	BRL, SDMAD, VERAMA
Research center	FOFIFA, LRI, CIRAD,
University	ESSA, Faculty of Sciences
Project/Program	PN BVPI, PLAE, AD2M

Focal Point: GSDM

Secretariat: FAO

Table 2 : Reference plots and FFS in the main agro-ecological zones under NCATF supervision

N°	Agroecology area	Partners	Reference plots (ha)	FFS (ha)	Total (ha)	Crops installed under CSA/CA technologies
1	North (Andapa)	PLAE/GLAE	2	-	2	Bean, soyabean, upland rice under CA, hedgerows, fruit trees, agroforestry
2	Middle West (Mandoto)	FAFIALA	1,12	1	2,12	Upland rice, maize on mulch of Stylosanthes; rainfed rice under bad water management (RMME)
3	Middle East (Ambatondrazaka)	ANDRI-KO	2,8	20	22,8	Maize +legume cover crops, upland rice, Arachis sp, erosion control fallow, Stylosanthes, Rice/ vetch or mucuna, collection of cover crops
4	Rain forest South East(Manakara)	SDMAD	1,75	-	1,75	Cassava on basket compost, vegetable, maize + Stylosanthes , agroforestry, SRI, tree nursery and Arachis under coffee
5	Uplands Haute Matsiatra	AGRISUD	-	10	10	Drip irrigation vegetables, hedgerows , composting, SRI, organic fertilization
6	Uplands Itasy	CRFPA ILOFOSANA	2,5	4	6,5	Maize, upland rice, cassava, soyabean + Stylosanthes, Brachiaria, oat, mucuna; agrosforestry and forestry