

UNITED NATIONS DEVELOPMENT PROGRAMME

And

MINISTRY FOR COORDINATION OF ENVIRONMENTAL AFFAIRS - MICOA

Coping with Drought and Climate Change

Annual Report 2011



Submitted in March 2012

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Acronyms

- DNGA National Directorate for Environmental Management
- FDC Community Development Foundation/Organization
- GEF Global Environmental Fund
- INAM -- National Meteorology Institute
- INGC National Institute for Disasters Management
- IIAM National Institute for Agrarian Research of Mozambique
- IPEME Institute for Promotion of small and medium enterprises
- MICOA Ministry for the Coordination of Environmental Affairs
- NEX National Execution
- NGO Non Governmental organization
- NAPA National Adaptation Plan for Action
- PEDD District Development Strategic Plan
- PDPMCN Master Plan for disaster mitigation in Mozambique
- RANET Radio and Internet system
- SDAE District Services for Economic Activities
- UEM Eduardo Mondlane University
- PMU Project Management Unit
- UNDP United Nations Development Programme

1. Executive Summary

The present report covers the project implementation and progress for the 2011 year and outlines the achievements made in 2011 under the implementation of the project annual work plan The project 'Coping with Drought and Climate Change' seeks to develop and pilot a range of coping mechanisms for reducing the vulnerability of small-holder farmers and pastoralists in rural Mozambique to future climate shocks. Drought prone Guijá District was selected as a pilot site. The project is structured around four outcomes, namely: (i) livelihood strategies and resilience of vulnerable farmers in the selected pilot sites improved and sustained to cope with drought and climate change, (ii) enhanced use of Early Warning information in agricultural systems at the selected pilot sites, (iii) drought mitigation and preparedness activities integrated across sectors and programs at various levels of society, in the pilot sites, and (iv) farmers/Pastoralists outside the pilot sites replicate successful approaches to cope with drought.

The results achieved in the period of January to December 2011 are as follows: Four (4) community group associations trained in: development of Gender and Associativism and agro-Processing of exotic and native plants fruits (Fruit tree derivates preparations like Jam and cakes) Communities were also trained in business management strategies; one (1) water management committee established and trained in water harvesting systems technologies; ten (10) monitoring visits to the project sites were conducted by the by Project Management Unit during the year; two (2) Monitoring visits were conducted specifically with IPEME, to evaluate the progress of those activities established in Chivonguene and Mbalavala communities; acquisition of equipment and material for the district nursery and establishment of the district nursery, in which different plant species were established (fruit tree, forestry and agro forestry trees, including nitrogen fixing trees); acquisition of motorbike and equipment for project district office (officer furniture, computers and rehabilitation of the District project office); one monitoring visit conducted by the permanent secretary of MICOA and the Deputy Minister of MICOA; two annual steering Committee meetings conducted during the year and project field officer recruited and in operation since the beginning of the year;

The project made good progress comparing with the last year; as many activities were undertaken and visible results are seen in the communities, including mobilization of associations and groups under the implementation strategy. At community level, infrastructures on water harvesting, livestock improved infrastructures were built in the communities and are benefiting many farmers and their households. Livelihoods of communities are starting to improve through project interventions, including interventions on establishment of communities' nurseries of fruit and agro forestry trees, establishment of food crop fields, including production of vegetables for food security and nutrition. The project approach on gender equality has been successful through ensured participation of women in all project interventions, particularly in interventions related to the training of a group of women in production of food derivates from native and exotic fruits, including juice, jam and food processing. During the regional exchange visit conducted in the project site by other teams from Zimbabwe, Ethiopia, and Kenya it was emphasized that the project made progress in what refers to the achievements made compared to previous years. The engagement of community leaders and district government authorities had an impact and has contributed to the achievement of current results. The project was able to replicate many interventions made in other communities through training of trainers, who also conducted trainings to other community members in different areas. Trainings focused mainly on main interventions mentioned above; for the next year of 2012 replication actions will continue to ensure that more farmers and households benefit from project interventions and also sustainability is set up for the period after the end of the project implementation phase.

2. Situational Background

Climate Change impact represents additional constraints to Mozambique's development. The increase in the frequency and severity of droughts and floods, the change in the rain calendar, and the increase in drought periods over the last 50 years have been identified as some of the major obstacles to poverty reduction. The impact is particularly relevant in agriculture and livestock farming, and it is said that climate change effects will compromise the achievement of the Millennium Development Goals.

The activities of the project were harmonized with the policies of the Government of Mozambique at local, provincial, and central levels. The Strategic Plan for the Development of the District of Guijá (PEDD) and the Government of Mozambique Master Plan for Natural Disasters Preparedness and Mitigation (PDPMCN) are important reference documents. As an implementation guide, guidelines for the development of arid and semi-arid areas of Mozambique were developed. The guidelines contain two modules: (I) Activities to be developed to make water reserves available, and (II) Reforestation and food security activities. This guideline was completed in May 2011. Since the project was launched notable achievements could be seen on the ground in the communities that impact in a positive manner the lives of many households in different communities of Guija District.

Notable achievements were seen in areas of construction of water harvesting systems in many households, schools and associations; construction of improved livestock keeping infrastructures that lead to the better animal health and increase in milk and meat production, production and reforestation of dry areas and other deforested areas through forestry and agro forestry trees produced in the central district nursery and replicated, also through the agro processing of wild fruits and food which leads to the improvements on households nutrition and reduction of food insecurity situations and production of

fruits, and vegetables that are important to improve lives of many households in Guija District. The issue of droughts is starting to be minimized through the introduction of low cost mechanism for water harvesting. It is believed that till the end of the project, a visible positive impact will be achieved within communities targeted by the project and for those that were not initially targeted by the project through the replication and dissemination strategy.

At initial phase of the project it was not planned to have a project contracted field officer, but due to the need to effectively achieve the project planned results, and to have a local daily monitoring and technical support to the district implementing stakeholders, it was decided to have a full time project field personnel who would catalyze the quality of actions implemented in the field. Due to this need, a field officer was recruited and is based in guija district. His role is to daily coordinate and plan jointly with the district government implementation strategies and monitoring strategies in order to achieve the results of the project. This change had shown positive impact, from that time and the project is fully implemented and implemented by a field project contracted officer, who is responsible for reporting to the PMU all project achievements, constraints, and recommendations that need to be made in order to ensure the achievement of planned results.

3. Evaluation of Progress during the Reporting Period

The evaluation of the project follows the approach of analyzing the five project outputs according to the project log frame:

3.1. Livelihood strategies and resilience of vulnerable farmers in the selected pilot sites improved and sustained to cope with drought and climate change.

In 2011, two (2) more communities had been established, adding the total of eight (8) communities mobilized and trained in different techniques, namely four (4) communities trained in water management strategies and social technologies to build water harvesting systems) and another four (4) communities trained in pastoral strategies to manage cattle and other domestics animals), three (3) women's groups were trained in fruit Agroprocessing to prepare derivates from native and exotic fruits (in Mbalavala and Nalazi Sede communities). Awareness campaigns in different local communities were conducted during the project monitoring visits, printed materials and pamphlets on climate changes were disseminated and shared with local communities.

The district government started to produce native and exotic trees in the local established district central nursery. The objective of the trees produced in this nursery is to distribute in the latest stage to local communities within guija district, as well as to replicate the

nursery through the establishment of local communities' nurseries in different communities. From the total seedlings produced in the District central nursery (20,000 seedlings produced in total), 60% are native species and 40% are exotic species.

One of the main aim of the District nursery is to produce and introduce new agro forestry technologies, in which agriculture crops will be mixed in the same piece of farmer's fields with agro forestry species with the aim to improve soil fertility of the farmer's field through nitrogen fixed by agro forestry tree in order to reduce food insecurity among households and to increase agriculture production per hectare.



Picture 1: Sowing of seeds of native plants species during monitoring visits in the district central nursery

By promoting reforestation activities and agro forestry technologies, the project intends to contribute to mitigation of the climate change impacts in the district and to demonstrate to the communities of guijá, how they can adapt to the impact of severe droughts and climate change along with other initiatives that the project promotes (e.g. establishment of water harvesting systems, etc).

In 2011, four (4) Crops demonstration plots for cassava were established in 3 communities of Guija District, namely Chibabel; Lhomane, and Caniçado. To ensure the establishment of these demonstration plots, a series of communication and training meetings were conducted with community leaders and farmers from the above communities and demonstration sessions were done by the project field team, including support from the District Economic Activities officer, who works closely with the project field officer.

With the construction of improved livestock infrastructures it is expected that the quality of livestock keeping by local communities will be improved and also will allow livestock to increase the production of derivates such as milk, meat and the livestock health will improve much better (picture in below shows one of the many livestock keeping infrastructure build in the communities).



Picture 2: construction of improved goat keeping site in Chiuacaia community

Some of the livestock keeping infrastructures are presented below with detailed information on the measurements (dimensions/size per each infrastructure). It is important to mention that this table presents only some of the livestock keeping infrastructures established by farmers' trainers, there are many others that were established around communities through a replication strategy through farmer's trainers who trained other farmers in their own communities

Description	Size	Capacity	Name of the	Location
-		(maximum nr	beneficiary	
		of animals)	-	-
Infrastructure	20x121.70	70	José Mabunda	Nalazi-
for cows				Marulanhane
Infrastructure	12x8x1.7	50	Zacarias	Nhanguenha
for cows			Mabunda	
Infrastructure	12x6 and 2.5x2	100	Julieta	Nalazi
for goats	and 1.30		Mabunda	Marulanhane
Infrastructure	4x6 and 2.5x2	80	João Chongo	Nhanguenha
for goats	and 1.30			
Infrastructure 2x1x1		25	Domingos	Nalazi
for chicken			Mabunda	Marulanhane

Through Project partner (IPEME) training officer, a group of women were trained in agro processing native and exotic fruit into jam, juice and other nutritional derivates. Furthermore women groups were trained on food processing in Nalazi community. These groups have also replicated and disseminated their knowledge and practical skills in their own communities. During the Project fair, which was conducted in December, many of the processed products were exposed in the District project fair event and have called for attention of many participants who attended this fair.

It was realized that the work done by these groups of women is crucial as it will help many households to mitigate the issue of food insecurity, and will improve the nutrition status of many people living in these communities. Different agro processed products/derivates can been seen in the picture below, which shows the products exposed during the project fair event, conducted last December)



Picture 3: showing variety of products exposed during the project fair event in December 2011 produced through native and exotic fruits agro processing

3.2. Production of seedlings in the main District Nursery

Under the project implementation plan for 2011; it was planned to produce 52,000 seedlings be distributed within different communities of Guijá District. From the total planned at the end of the year 30,433 seedlings were produced, and some of them have been distributed in the communities. Seedlings are of forestry trees and fruit trees. The table below shows names of tree species and planned & achieved numbers of seedlings produced as of 31^{st} of December 2011.

Seedling's name	Planned number beginning of the year	Number of seedlings produced (real)
Sclerocarya birrea	20,000	8,900
Maringa Oleifera	5,000	3,000
Maphilua	2,500	500
Strychnos	2,500	500
madagascariensys		
Tintona	2,500	4,600
Tichapwa	2,500	6,000
Tinhiri	2,500	283
Adansonia digitata	1,000	150
Pinus sp.	5,000	3,000
Eucalyptus sp.	1,000	500
Lemon trees	5,000	1,000
TOTAL	52,000	30,433

Table 2. Tree species and quantity produced versus. Quantity planned at the beginning of 2011

The District Office of Economic Activities (SDAE) has been involved in the distribution of seedlings through transportation from the main District nursery to the communities and schools. The table below shows seedling's species and quantities distributed in the communities of each administrative post:

Seedling	Quantity distributed		Location		
species/nam	Schools	Communitie	Village	Locality	Administrativ
е		S			e post
Tintona sp		15	Nalazi	Nalazi	Nalazi
Pinus sp	250		Javanhane	Acordos	Chivonguene
				Lusaka	
		760	Vila	Vila	Vila caniçado
			caniçado	caniçado	
		200		Chilembene	Chilembene
		100	Dotane	Chivonguene	Chivonguene
		522	Chinhacani	Chinhacanin	Mubanguene
			ne	e	_
Sclerocarya		69	Mubanguen	Mubanguene	Mubanguene
birrea			e	_	-
		69	Mpelane	Mpelane	Mubanguene
		50	Mandzene	Mpelane	Mubanguene
		25	Vila	Caniçado	Guijá
			caniçado	-	-
		50	Quinto	Tomanine	Mubanguene

Table 3. Number of seedlings distributed per village and each school

			bairro		
			Tomanine		
Afzelia		69	Pelane	Mpelane	Mubanguene
quanzensis		69	Mubanguen	Chinhacanin	Mubanguene
			e sede	e	
		25	Quinto	Tomanine	Mubanguene
			bairro		
			Tomanine		
Tinhiri		60	Chilembene	Chilembene	Chilembene
		25	Sede	Caniçado	Guijá
			Caniçado		
		25	Quinto	Tomanine	Mubanguene
			bairro		
			Tomanine		
Tihlapswa		60	Chilembene	Chilembene	Chilembene
Subtotal	250	2193			
TOTAL		2,433			

With seedlings that are produced, reforestation of eroded and deforested areas will happen and in mid and long term it is expected that with the ownership and lead approach by local communities, who will have benefited from training sessions from the project team as replication approach will also lead to better results on reforestation and climate change adaptation and drought mitigation in Guija District in the next couple of years.

3.3. Enhanced use of Early Warning information in agricultural systems at the selected pilot sites

The preliminary work assessment between INAM, ICS and DNGA from MICOA has resulted in the annual plan specific for those activities related to the establishment of Community Radio and Meteorological station or RANET systems. These activities will be executed by National Meteorological Institute/Social Communication Institute (INAM/ICS) with MICOA in the quality of lead institution through the Project Management Unit (PMU).

These assessments have come out with a plan of 90503.77 USD, value that will cover cost for a total of four (4) activities: establishment of the community radio in the district; establishment of the climatologically post in the district; establishment of the RANET System in the community radio for awareness purposes; and training of the community agents in terms of use and interpretation of climate and meteorological information.

These activities were planned to be implemented in 2011; however, due to the procurement delayed process and other constraints, including the lost of the project

manager in the middle of the implementation year, these infrastructures have not yet been established in the district. Procurement process has started and processes of the community radio installation. Another plan focused with this output is the establishment of the bushfire and natural conservation plan for the pilot communities in the district, which will support farmers in getting important information on the negative impacts of uncontrolled fires, how to avoid them and what are the benefits of protecting natural resources existing in their communities and what is the link between these actions with the impact of the current droughts and climate change in their communities that affects directly their livelihoods, to implement these activities an equipment : Two GPS; One ArcGis-Arc view 10.0 program for software; One Complete Desk Top Computer; and office material/internet connection contract were acquired and are in place in the District.

3.4. Drought mitigation and preparedness activities integrated across sectors and programmers at various levels of society in the pilot sites

As follow up to the 2010 plan, the drinkable water, and water for 0production purposes (agriculture and pastoralist activities) in pilot sites are still priorities for the project. The hydrological results survey was presented in May. The report indicates that it is not possible to get drinkable water until 60m deep because at this altitude water is salted., That's why the study advised for the a need to open boreholes from 100 to 200m deep to get a necessary quality and quantity drinkable water. The following activities were developed during the reporting period and the following infrastructures for community water provision were established: three (3) water systems from boreholes and the use of sun panels for electricity; one (1) new dam to collect rain water for cattle; two (2) dams will be rehabilitated in another three (3) local communities; two (2) more water harvesting tanks from concrete will be built in two communities; and one (1) small scale irrigation system will be established in the district.

So far, four (4) groups have been trained in water management and building strategy for water harvesting in semi-arid region of Guijá, and another four (4) more groups are under training in the same strategy in order to mitigate the suffering of local communities, including their livelihoods, such as livestock, agricultural activities and availability of water for daily household consumption.



Picture 4: Water pump, Borehole systems with sun panels and water harvesting systems (April 2011 in – Nalazi, community, Guja district)

The above pictures taken during the visit of the deputy Minister of MICOA and the PMU monitoring visits show the water pump in the left side which is the traditional irrigation machine used by local farmers. The project unit wants to innovate this technology by use of solar panels pump machines, those which are sustainable for communities, because they don't need to use fuels which are too expensive for everyone.

The second picture from the left shows boreholes with solar panels systems used to purchase an electricity power from the machine which pumps the water to distribute for the communities. The PMU believes that the use of solar systems to provide electricity will be more suitable via traditional systems which need a use of human power to move the pump and the use of fuels without forgetting some problems of parts or accessories. The second reason why the PMU believes in this system is the advantages which this technology brings to those marginalized groups such as disabled people, people living with HIV, Children and old people without forgetting gender mainstreaming issues.

The last photo from the left shows the new innovative systems which the project has introduced in the communities, thanks to which people can collect water from the rain. The local government and communities praised the initiative of training a local team on building water harvesting systems (see comments from February 2011 steering committee in Guijá). That's why two more communities have benefited from the technology during 2011.

"There's a need to train people and build more concrete systems for rain water harvesting, because we have seen that first 4 cisterns in the communities where acceptable by communities because they can collect a large amount of water which can be used for the family for at least 5 months. During the visits in those communities trained, we believe that, people are motivated by this technology. That's why we would like the involvement of more communities in Chivonguene'' (Guijá February 2011 member of the project steering committee).



Picture 5: Steering committee members discussing the 2011 annual plan for CwD project, February 2011 in Guija district

During this meeting, the district, province and National steering committee members, have approved the annual work plan with special distinction on introduction of the new social technologies like those of water harvesting systems, subterraneous bridges, and other relevant technologies to cope with drought and climate changes. As the result, two (2) more cisterns have been proved to be built in Chivongue district and introduction of subterranean dams, which will enable water for plants growth in large farmer's communities' areas. With these technologies, it will be possible to produce vegetables during all the year even in the dry season.

Joint planning meetings were undertaken with the District Government authorities and other stakeholders under the project implementation strategy. The main objective of the joint planning and programming is to ensure transparent planning and management of the project, and prepare the government of guija district to takeover project interventions after the end of the project implementation phase through continued implementation of the same project interventions using Government funds and/or other stakeholders funds so that more communities could benefit from the results of the project and mitigation measures set up to cope with droughts and climate change. Both 2011 and upcoming 2012 annual work plans were developed jointly with all partners, including members of the district government of guija, and reflect the need and expectations of Guija communities.

Two (2) main events undertaken during in 2011, namely the regional project exchange visit with participation of teams from Zimbabwe, Kenya and Ethiopia, and the Project fair undertaken in December 2011 had positive impact on the District, as exchange of knowledge and experiences, including demonstration of good project practices to the participants. This was an opportunity for communities to learn from the visitors what other communities in other countries where the same project is implemented are doing to cope with the droughts and climate chang.Furthermore, communities and local Government members received useful advice on how the project interventions and approach can be better implemented in the next period of time.

3.5. Farmers/Pastoralists outside the pilot sites replicate successful approaches to cope with drought.

According to this output, until the end of 2012, at least 4 communities outside pilot sites will introduce coping with drought and climate change strategies tested within the project. So far, 2 families in two different communities have adopted the systems. The administrative post of Mubanguane, where the project is not being implemented, but from which farmers have been visiting the project experience in Nalazi, and first talks is that, they want to have the same training and adopt the technologies which are being implemented in other district communities or administrative posts.

Through the Faculty of veterinary from the University of Eduardo Mondlane, local communities were trained in livestock management and care building knowledge in the local cattle management communities that will replicate these trainings within different communities of the District.

With the training and establishment of the local cattle management communities committees with specific leaders (community animators) the project aims to ensure that activities/actions will continue training and introduce new technologies in the communities by interaction with the provincial services and research institutes.

The annual work plan for 2011 focused on continuing the implementation of the livestock care and keeping construction of infrastructures, as well as production of fodder trees for livestock feed. An amount of 12,000 U\$ has been put in place to conduct these activities.

The replication approach is not a problem in Mozambique, particularly in project pilot site, that's why the project believes that with interchange experiences people can learn from others farmers.

One of examples is the Nalazi site, where one of the water management committee members has adopted the technology of collecting water from the rain. The statement below testifies how the adoption impact is achieved at the community level.

"With this system, we help a family by using dams to collect rain water, .If starts raining while there's no one at home, the water will be wasted, and it can't collect much water done concrete cistern used in this project. All people would like to have these cisterns in houses, but money to buy cement and materials is not available in the community, that's why sources of yields are necessary in communities; even training of local communities in income generation, because, I think there's something which can be done for those people; they are pastoralist communities with cattle's, goats, chickens, pigs, and other natural resources which can be used for income generation." (Interviews with farmer from Dinga community, 2011) With these comments, and replication approach, the contribution of the project can be at least 30% of the indicator which says; at least 7 communities have access to safe drinkable water for domestic use, instead of boreholes, and other sources of water which will be usefully and contribute by 70%. It is worth mentioning that under all project activities the main approach used looked at sustainability of all interventions in mid and long terms, replicating training and capacity building interventions to other communities and exchange of knowledge between communities of guija district and between communities of guija and other districts and Provinces within Mozambique.



Picture 5: Replication of approach and skills sharing by local farmers

In the period from 02nd to 8th October 2011, an international regional exchange visit was conducted in Guijá with colleagues from Ethiopia, Zimbabwe and Kenya visiting project implementation sites. The main objective of this visit was to share experiences and knowledge with other countries in what refers to the implementation approach, experiences and success in the same project that is implemented in these countries. The visitors met farmers, community leaders, school teachers and pupils, and other people from community and District levels. Many project actions were visited and exchange experiences and provide advice where necessary where given by other colleagues from these countries in terms of better implementation approach, their success in order to achieve the planned results.

The first regional exchange visit took place in Zimbabwe with the same objective Mozambique participated through project manager and project focal point from MICOA, who have also exchanged their experience and knowledge in relation to the project under implementation in Zimbabwe and what would be useful to be taken and implemented in Mozambique. Next year (2012) the exchange visit was planned for September and will take place in Ethiopia under the same implementation approach and same views and experiences will be shared. Exchange visits constitute a better opportunities for project

officers and farmers share their experiences and contribute for the achievement of effective results and sharing of best practices, that can also be documented through video, newsletters and through other tools at Regional and Global levels under the coping with the droughts and climate changes efforts conducted and lead by UNDP.

4. Gender Mainstreaming

Most of activities implemented under this project looked at the gender aspect in terms of benefits among women and men. Activities related to agriculture, fruits and food processing and livestock keeping are mostly lead by women in all communities, particularly activities on fruits and food processing under implementation through training of a group of women in the communities and also looking at the sustainability of actions, within these groups a number of women lead are chosen to replicate and disseminate the knowledge into another communities in Guija District. Water harvesting infrastructures, District nursery management team and other actions are also involving women in the beneficiary groups. A Project fair event organized in December 2011 has shown how women and men are equally involved in the project activities and preliminary results were seen during the event in terms of equality of beneficiaries among men and women.

The involvement of both groups men and women, particularly those discriminated groups in the communities is one of the approaches, where specific discriminated groups and activities are still being identified, according to the baseline study, which has shown that women are 60% responsible for family taking care of agriculture, and pastoralist activities, and the plan of mobilizing groups of women's (60% of local farmers) is being taken care by IPEME, where people are being trained in terms of Associative aspects Gender and income generation strategies.



Picture 6: Water harvesting training process in Magimiss community (CWD; March 2011 in Magimiss community)

In total there are 60 households involved in gender mainstreaming, number that is still not enough to reach the target as shown in log frame indicator .Taking into account that communities are not static but dynamic (every day there's a new birth and death and immigration process), there's a plan to conduct a specific study to identify gender mainstreaming in project pilots sites, and recommend specific activities to respond to this issue.

However, there's an involvement of all groups in the pilot site, even in those activities which historically considered of being of male or female. The project approach explains that, it is possible to divide specific tasks for women, men; Children disabled people and people living with HIV. An good example, shown by the last training conducted by consultants enterprise, with the purpose of introducing new social technology for coping with drought and climate changes, this trainings conducted until now had involved 25% of women, 10% of youth, 45% men, 10% disabled, 10% people leaving with HIV, as strategies of replication of approach in the communities.

5. Risk Management

Programmatic and Financial Risks: on the programmatic side of the project, the loss of the project manager in October 2011 who passed away, had negative impact on the project implementation speed and focus. The project had to stop for a couple of weeks, and many programmatic issues and planning, including procurement process already started had to be rechecked, all the project implementation structure (Project Management Unit) had to be reestablished through indicating a new staff who will take over the project implementation actions, knowing that this appointed staff has other tasks that also have to delivery results. The process for recruitment new project manager normally takes longer and the project needs to restart its activities without waiting for a new officially recruited project manager. On the financial risk side, it is important to mention that the finance assistant for the project recruited in the beginning of the implementation phase left the project leaving a lack in the project management side.

The process to recruit a new financial assistant was launched, and two suitable selected candidates did not accept the contract as they have other better offers, this has affected the project implementation side. To manage this issue, a finance and administration officer from MICOA was asked to support the project in delivering finance and administration response, knowing that he also has tasks that are many and also needs to be delivering within MICOA. This had an impact due to the delays on reporting and also delivering some urgent tasks that were crucial and had an impact on the project management side.

During these first months of 2011, the constraints faced were as follows: the lack of Financial and administrative assistant delayed many processes; reporting timeframe was not followed. This has lead to the project financial delays in reporting calendars which affect the performance of the project when compared with other UNDP country projects under implementation in terms of scoring and the deadlines follows. The project management team had to monitor pressure the financial assistance from MICOA who has other tasks to report within the Ministry. It is expected that in 2012, a continuous and

daily follow up and monitoring will need to be conducted to the financial assistant from MICOA, while we are expecting to recruit a project finance assistance that is under recruitment process within procurement unit. This will be accompanied by guidelines on how easy monthly and quarterly reports can be produced and this support will be provided by the project management unit with joint support of MICOA focal point.

Regular and heavy rains during the first season (November 2010-March 2011) have impact on the regular implementation process of activities. As many roads an inaccessible when it rains in to the main project communities and sites. This also have an impact due to the crops produced in the communities, seedlings and other interventions are affected and flooded by water which leads to the negative results and impacts of the planned project results. Due to the climate change impact that are already foreseen in the project areas some planned results might not be achieve as planned and risk mitigation measures will always be considered during the project implementation phase through the project management team and District stakeholders joint planning, implementation and monitoring work.

It is important to mention that the project implementation strategy has not been changed. The main approach used in order to overcome current difficulties and challenges as mentioned above are through direct and regular support to the finance assistance in MICOA in terms of providing necessary advice on how easily can be produced monthly and quarterly financial reports that will be used to compile an annual financial report. With the loss of the project manager who passed away in October 2011, the project management team will be supported through coordination of project activities by two indicated UNDP staff who will temporarily lead project implementation actions while the new project manager is not in place.

6. Partnerships

This project aims to boost as much as possible potential in terms of capacity building of the District Authorities, partners, including local communities through a partnership strategy that works with all district players in the area of development. The project works with different partners within the district and at Provincial and national level (Government partners, NGO's, CSOs and local communities). The aim is to implement different activities in the district in a coordinated manner, and avoid overlap of the actions in the same areas of implementation outside the project implementation areas. Also the project intends to focus all actions on sustainability in medium and long terms. That is why all the training and capacity building actions developed within the project aim to leave capacity to the District personnel, for those to disseminate and replicate all the experiences and knowledge into other areas within or outside project targeted areas.

This approach is always mentioned during the debriefing sessions/meeting with the District Government Authorities, and also with other partners. The idea is that in the period after the end of the project, all the actions and knowledge developed during the project implementation lifetime should continue being implemented with the same approach using people/beneficiaries who will serve as trainers at that time and achieving

as many people as possible and also use these trainers to share experiences on how to Cope with the droughts and climate change in other communities within Guija District or within Gaza Province, including also other communities/Districts at National level that are also affected negatively by severe droughts and other climate change factors.

NGO's such as Samaritans purse and World relief have been consulted by the PMU, so that, they can recommend some communities where they are not working as a strategy to avoid duplication of activities. Thanks to this consultative process in Nhanguenha community, the World Relief has proposed the PMU, to build other water infrastructures instead of boreholes because they have a plan to establish one borehole. In other communities Pandzane in Nalazi, the NGOare training groups of women in income generation strategies where they train people to prepare derivates from native fruits such as jam, juice, cakes, and other products.

As a result of our partnership, we have invited those NGO's for the2011 steering committee meeting where they could share their experiences and budgets for specific activities. This idea was a result, of borehole established in Nhanguena by World Relief, which didn't work for more than two weeks and brokendown without a chance for maintenance until now.

In relation to partnerships a with the private sector, it is important to refer that joint activities were conducted with a private consultant company, in particular related to a series of studies and a training session of the community members to construct different infrastructures, e.g. water harvesting systems, livestock keeping improved infrastructures were constructed. On the building water harvesting systems; support for community training for building and operating water harvesting Systems. On this it is important to refer that for all activities related to the establishment of water harvesting systems in Guija District in 2011, parallel trainings were conducted by the contracted company that trained trainers groups that replicated training knowledge and water harvesting infrastructures in their communities.

In 2012, the project will replicate the same infrastructures in other communities that were not defined in the beginning of the project. The same strategy has been used to replicate by the trainers from the project. 2012 will the year, in which the project will seek into replicating the same knowledge and livestock keeping infrastructures in other communities.

One of the key challenges that exist in the next couple of months while the project is implemented is to ensure that all partners at provincial and district levels are well engaged with the project interventions and a common approach and the word is spread to communities, so that at the end of the project implementation period, interventions will continue and be replicated into other communities within guija district and outside guija district and Gaza province. Project documentation and exchange visits and experiences will need to be conducted in 2012, so that the replication and sustainability approach is

guaranteed, and partners own project interventions and knowledgement, including best practices from this project.

7. Challenges, Responses and Lessons Learned

During the rainy season, access to communities is difficult, and in some cases, is impossible due to the quality of the roads and the level of water within the access ways to communities. This has been a challenge, as in most of cases key activities directly related to community members and require the use of these roads. Efforts are made in those communities, in which the access is still possible using other roads even if the distance is much further.

In order to build sustainability and ensure continued implementation of project interventions in the period after the end of the project, it is crucial to build capacity of district authorities, community leaders and members, so that when the project ends, skills are left and replication approach is implemented into another communities within and outside Guija District.

Exchange visits have shown their importance in providing opportunities to the participants to share their experiences, and to learn from other people from what they do. This is an opportunity for communities to improve the quality of implementation technologies and methods in various fields and contribute for them to be better prepared to adapt to the impacts of droughts and climate change in the medium and in the long term.

The procurement process for different aspects needs to be improved in terms of timing and delivery, as this contributes to the quality and quantity of results expected and planned in the beginning of the project implementation phase. Most of the procurement process delays have negative impacts on the project delivery rate and can influence the evaluation rate of the project interventions and teams. Strategic reforms need to be made on the procurement side, so that implementation of those activities that require procurement is accelerated and results are quickly achieved in the planned period. It seems to be a general issue within UNDP globally, but if possible, flexible approach needs to be quickly adopted if feasible results are to be achieved.

8. Conclusions and Way Forward

It is important to refer that interventions on the establishment of water harvesting systems have shown positive results, even considering that these are the first interventions in this area since the project was launched. These infrastructures have positive impact on the household's livelihoods since during the drought period water is available at least for drinking and irrigation of crops, particularly vegetables. Since during rainy season, a lot of water is available and now communities are able to collect this to be consumed during the period of water scarcity. This helps communities, particularly women and children to avoid walking long distance to look for water and also livestock and food security levels are reduced as even the drought periods communities are able to produce minimum food for consumption of the households.

Positive results are seen also on fruit and food agro processing activities that are implemented in the communities involving group of women. This activity is showing preliminary results as women are now able to agro process native and exotic fruits and food to be consumed during food scarcity periods mitigating food insecurity and deaths within households. This activity was shown and demonstrated during the project fair event conducted in December 2011 in guija District, where group of women brought their agro processed products into the fairs and have testimonies during the event on how happy are with this initiative and what the impacts that are seen since the project was started.

Another project positive results is that by involving women in this type of activities and in other project intervention already mentioned in the document, the number of women involved directly in the project implementation actions is higher and gender approach has been fully addressed in the project areas leading to the same communities to have lead women in the associations and committees where the project is currently implemented.

9. Prior issues/challenges expected to be addressed in the coming year

Under the implementation strategy of the project, the main priority issues/challenges are to ensure that all activities to be implemented in the next coming year should focus on replication interventions and capacity building to the government institutions and partners working in the same district as the project is and ensure that ownership is left after the end of the project. This is a real challenge as many efforts will need to be done by the project team to sensitize all stakeholders on the need to adopt current interventions to cope with droughts and climate change, and local Government authorities should consider in the upcoming years to use the allocated public funds to conduct activities on climate change adaptation and to conduct awareness to the local communities on the need to replicated and own all activities and interventions implemented in their communities. The Government should use this project as a pilot initiative to be replicated not only within other communities of guija district, but also outside guija district and also where possible to use best practices from this project and results to look for or raise possible funding to implement other activities on climate change adaptation so that other communities benefit from interventions done within this project and livelihoods within guija communities are improved throughout other communities at provincial and national levels.