

## Section I: Identification and JP Status

### Environment Mainstreaming and Adaptation to Climate Change

#### Semester: 1-11

Country	Mozambique
Thematic Window	Environment and Climatic Change
MDGF Atlas Project	
Program title	Environment Mainstreaming and Adaptation to Climate Change
Report Number	
Reporting Period	1-11
Programme Duration	
Official Starting Date	
Participating UN Organizations	<ul style="list-style-type: none"><li>* FAO</li><li>* UN-HABITAT</li><li>* UNDP</li><li>* UNEP</li><li>* UNIDO</li><li>* WFP</li></ul>

#### Implementing Partners

- \* Civil Society Organisations, e.g. IUCN Rural (target) communities
- \* District government of Chicualacuala (SDAE District Service for Economic Activities (formally the department of agriculture)
- \* DNA (National directorate for water)
- \* Gaza Provincial Directorate of Energy
- \* INAM (National Meteorological Institute)
- \* INGC (National Disaster Management Institute)
- \* ME (Ministry of energy)
- \* MICOA (Ministry for the Coordination of Environmental Affairs)
- \* MINAG (Ministry of Agriculture)
- \* MOPH (Ministry of public works), incl.
- \* National Directorate of Renewable Energy
- \* SDPI District Service for Planning and Infrastructures)

### Budget Summary

#### Total Approved Budget

	FAO	\$2,513,457.00
UNEP	\$1,338,527.00	
UN-HABITAT	\$1,169,972.00	
UNIDO	\$1,011,330.00	
UNDP	\$694,051.00	
WFP	\$272,663.00	
Total	\$7,000,000.00	

#### Total Amount of Transferred To Date

	FAO	\$1,898,901.00
UNEP	\$1,020,000.00	
UN-HABITAT	\$865,750.00	
UNIDO	\$721,816.00	
UNDP	\$532,500.00	
WFP	\$193,000.00	
Total	\$5,231,967.00	

### Total Budget Committed To Date

	FAO	\$1,483,010.00
UNEP	\$803,736.00	
UN-HABITAT	\$849,785.00	
UNIDO	\$665,433.00	
UNDP	\$532,502.00	
WFP	\$223,348.00	
Total	\$4,557,814.00	

### Total Budget Disbursed To Date

	FAO	\$1,393,890.00
UNEP	\$518,124.00	
UN-HABITAT	\$709,904.00	
UNIDO	\$530,340.00	
UNDP	\$348,463.00	
WFP	\$215,092.00	
Total	\$3,715,813.00	

### Donors

As you can understand, one of the Goals of the MDG-F is to generate interest and attract funding from other donors. In order to be able to report on this goal in 2010, we would require you to advise us if there has been any complementary financing provided in 2010 for each programme as per following example:

Amount in thousands of U\$

Type	Donor	Total	For 2010	For 2011	For 2012
Parallel	N/A				
Cost Share	N/A				
Counterpart	N/A				

### DEFINITIONS



## Section II: JP Progress

### 1 Narrative on progress, obstacles and contingency Measures

Please provide a brief overall assessment (250 words) of the extent to which the joint programme components are progressing in relation to expected outcomes and outputs, as well as any measures taken for the sustainability of the joint programme during the reporting period. Please, provide examples if relevant. Try to describe facts avoiding interpretations or personal opinions

#### Progress in outcomes

Outcome 1. Government, civil society, communities and other stakeholders informed, sensitized and empowered on environment and climate change issues

A comprehensive programme of training and technical and managerial support to government partners and rural communities has resulted in increased awareness of environmental and climate change issues that impact on local, provincial and national development. As a result of a range of activities carried out by this JP and other projects (mainly NGO's and UN agencies) climate change has become firmly established on the national development agenda as a cross-cutting theme which is being mainstreamed in poverty reduction plans, disaster management and food security plans and strategies. In Chicualacuala District, rural community perceptions of cc and its impact on their lives have been heightened, where before the JP, no one knew what climate change was or how it affected them. Now, rural communities are empowered to participate in district planning activities

Outcome 2. Government capacity at central and decentralized levels to implement existing environment policies strengthened

Largely as a result of the JP, decentralised development planning now reaches right down to the level of the 9 localities in Chicualacuala district where members of the numerous communities that make up the localities participate proactively in the elaboration of the district development plan, which, now includes environmental and cc considerations. At the provincial and central levels, on-going JP technical assistance and support has strengthened the capacity of development planners and the technical staff of partner institutions to gather and analyse information linked to climate change and elaborate and implement plans and policies which integrate environment and climate change issues.

Outcome 3. Climate proofing methodology mainstreamed into government development plans, UN / donors' programming and local stakeholders' activities and investments

When the JP began, hardly anyone in Mozambique knew what climate proofing was. Through seminars, training sessions and meetings conducted by the JP and government partners, climate proofing is reaching a wider audience, particularly among government staff responsible for development planning. Although there is still some way to go in order to successfully mainstream climate proofing, significant advances have been made in which the JP has played, and continues to play, a catalysing role.

Outcome 4. Community coping mechanisms to climate change enhanced

Significant progress has been made to assist rural communities in Chicualacuala adapt to climate change, notably prolonged and abnormal dry periods. The JP has invested much time and effort in setting up a community based forestry management system which has now begun to show results in safeguarding forest resources from the current overexploitation. Investments in irrigation in communities close to the Limpopo River have produced significant increases in food and cash crops for hundreds of farming families. The installation of rainwater harvesting systems in the houses of some of the most vulnerable families is helping strengthen their adaptive capacity to climate change.

Outcome 5. Communities' livelihood options diversified

Initiatives directly attributable to the JP livelihood diversification intervention include the introduction of integrated fish farming, beekeeping, the expansion of irrigated food and cash crop production and the establishment of a steadily expanding, community based network for improved animal health provision. The installation of renewable energy systems (solar and biogas) by the JP in rural communities offer the benefits as light, clean drinking water, hot water and electrical energy for small businesses in a district where the lack of water is the biggest development constraint and where there is no mains electricity.

### **Progress in outputs**

#### 1.1 Environment priorities and indicators reflected in planning frameworks and budgets at district and community level:

The JP provides on-going support to INGC (National Institute for Disaster Management) in the elaboration of annual disaster relief contingency plans. It works with staff from SETSAN (Secretariat for Food Security and Nutrition) and has trained them in how to conduct food security studies in the districts (district profiles) and analyse the results. The JP is provided assistance to INAM (National Meteorological Institute) in the installation of a new meteorological station in Chicualacuala and training of their technical staff in the use and maintenance of the meteorological equipment purchased by the JP. This station will become operational over the next few months and begin to generate climatic data. The data will be used to strengthen early warning systems, provide weather forecasts for farmers and contribute to a national climatic database.

#### 1.2 GIS-based data and maps on climate change vulnerability for risk areas

As a result of support and training given by the JP, INGC technicians produced risk maps (in report form) for 5 districts in the Limpopo River Basin and other districts in the Zambeze River Basin, replicating the experience gained in Chicualacuala. SETSAN, with the support of the JP, prepared district development profile reports for the same 5 districts in the Limpopo River Basin. The aim (of INGC) is to produce risk maps and development profiles for all 32 districts in the country that are classed as arid or semi-arid.

#### 1.3 Training programmes on disaster and climate change prediction, including interpretation of maps and application of monitoring data for early warning purposes

The Manual “Guardar a água da chuva” is finalized and published. The Manual was distributed to those present at the 8th PMC. Part of the materials will be handed over to INGC - D’Aridas to disseminate the manual in other arid and semi-arid areas of the country. A provincial seminar took place in May, organised by INGC with JP support and funding, to disseminate the results of risk mapping and district development profiling in 5 districts in the Limpopo River Basin. The information from these exercises (reports) was shared and debated in the presence of 4 District Administrators, representatives from SETSAN, members of the Gaza provincial government, UN agencies and other stakeholders. Using the risk maps and district profiles as a reference, participants were introduced to techniques for developing planning in arid and semi-arid zones, shown how to interpret district profile reports and introduced to climate proofing and its role in development planning.

#### 1.4 Knowledge and experience sharing within the different groups (UN agencies and beneficiaries)

The main studies completed in this reporting period were: the risk maps and district development profiles, the territorial planning guideline for Chicualacuala (see section 4.3), and the sustainable ecosystem management report focusing on water resources in Chicualacuala (see section 4.5). Information from these reports has been shared through seminars or workshops in which government staff and representatives of beneficiaries participated.

A joint monitoring exercise took place in March where a team comprising UN agency focal points, government partner focal points and provincial and district government staff

visited JP supported activities in Chicualacuala and discussed the pros and cons with the respective beneficiaries. This provided an excellent opportunity for the exchange of views and experiences.

Two exchange visits have taken place between the 3 communities (Ndombe, Chissapa and Mapuvule) where integrated fish culture systems have been introduced, to exchange experiences, lessons learnt and best practices.

#### 2.1: National Disaster Preparedness plan and other relevant plans revised/updated to include climate change and environment aspects

As a direct result of the JP, the new Chicualacuala (five year) development plan includes environmental and climate change aspects. The continuing support that the JP gives to INGC and SETSAN has ensured that these issues are now being mainstreamed in both disaster preparedness and food security plans. This is an on-going process throughout the duration of the JP and one which will continue with other sources of funding beyond the lifetime of this JP.

#### 2.2 Early warning and communication system enhanced in the Gaza province:

The JP has already provided assistance to the community radio station in Chicualacuala to expand their transmission radius from 35 to 80 kms thereby reaching many hundreds of extra listeners. The installation of the new Chicualacuala meteorological station is about to take place after many months of delays purchasing the necessary equipment which had to be imported. INAM has selected staff who will live in Chicualacuala (in a house/office that is being rehabilitated by the JP) and run the meteorological station. Data collected by the station will be disseminated through RANET (Radio/internet) both locally and at the national level providing a weather forecast for farmers and information that will contribute to early warning systems, mainly on droughts and floods.

#### 2.3 Authorities, civil society and other relevant actors trained to incorporate and report on environmental and climate change risk events:

The information reported in 2.1 and 2.2 above is part of an on-going programme of assistance from the JP that is raising awareness and building capacity amongst government partners to mainstream, implement and report on environmental and climate change risk events. Furthermore, training provided to the INGC local disaster risk committees (CLGRCs), district government planners and community leaders in the 9 localities in Chicualacuala district are contributing to the incorporation of these events in district level plans and strategies.

#### 3.1 Tools for climate proofing of risk zones in the Limpopo River Basin developed:

Preparations are at an advanced stage (in coordination with UNEP, Kenya) for the “week in focus”, a national workshop (26 de 28 July) which will provide an introduction to climate proofing development planning for high level government officials, policy and decision makers, including international donors in Mozambique. The workshop will be attended by GoM, UN, civil society and the Ambassador of Spain. Meanwhile climate proofing activities being carried out at the field level include the implementation of a community based forestry management plan, agro-forestry, conservation agriculture, integrated fish culture and rainwater harvesting. Through the collaboration with INGC and University of Cape Town to study the possible impacts of climate change in Limpopo river basin, the range of downscaled scenarios have been expanded through the development of an additional set of scenarios representing drier climates. The various scenarios have been run through the agricultural and hydrological models. These results form the basis for estimating the projected impacts of climate change in each of the districts of the Limpopo basin, and when combined with identified vulnerable livelihoods and communities will be used to target hotspots in the development of the climate proofing strategy for the river basin. This work has been delayed due to problems with fund transfer from INGC to University of Cape Town.

### 3.2 Assessment of climate proofing approaches carried out

This will be addressed in the “week in focus” seminar described above. The seminar modules will examine existing plans and the extent to which they incorporate climate change responses. It will use case studies to illustrate how to integrate climate change into national development plans. Including a discussion on barriers to mainstreaming, opportunities for adaptation and financial mechanisms available to support mainstreaming.

### 3.3 Stakeholders trained on climate proofing

The above mentioned “week in focus” seminar will serve both to inform and train senior decision makers in climate proofing and, using examples from other countries, show them how climate proofing can be mainstreamed into plans and policies. The INGC seminar described in section 1.3 above introduced district administrators and other government stakeholders to climate change and provided some examples of the practical application of climate proofing measures at the district level using examples from experience of the JP.

The first draft of a training manual on participatory planning for climate change has been produced this semester. It is being shared with government partners and will be revised and finished over the next few months.

### 4.1 Inventory of strategies and coping mechanisms currently in use by communities and in the Limpopo River Basin

The JP is assisting farmers broaden their coping mechanism strategy through the promotion of a range of cc adaptation activities in the areas of rainwater harvesting and water development, agriculture, irrigation, forests, livestock health and production, beekeeping, fish farming. Following the recommendations of the report from the study into coping strategies produced in 2010 the JP has been promoting the below listed additions to existing coping mechanisms in target communities.

1. In collaboration with IIAM (Agricultural Investigation Institute of Mozambique), demonstration plots in agro-forestry and conservation agriculture have been set up in three communities. Demonstrations were also given in Improved dairy hygiene in milk collection and treatment.
2. Half of the planned 100 household rainwater harvesting systems have been completed. Technical difficulties were encountered with the building of the first of the planned 4 communal systems but these have not been overcome and the first tank of 90,000 litres should be completed by the end of August 2011.
3. On-going training of livestock keepers in health and production has resulted in better tick control and lower mortality. While this is hard to quantify, most farmers are now sensitised (convinced) that spraying and vaccinating their animals reduces deaths.

### 4.2 Community based natural forest resource management system established:

A community based forest management plan was produced in 2010. This year, the main parts of the plan have been shared with the 15 community management committees currently being set up by the JP. Twenty four community based forest guards were selected by their respective (15) communities. They were trained by the provincial forestry service (JP funded) and equipped with uniforms and bicycles by the JP. They were officially recognised by the District Government and the Provincial Forestry Service at a ceremony held in Chicualacuala in June 2011. They are now working in their respective villages, through the management committees and in collaboration with the district forestry service. The JP continues to provide technical and managerial assistance to these communities.

### 4.3 Territorial planning mechanisms at community level introduced:

Chicualacuala Land Use Plan: the second public consultation meeting was held on May 5th in Vila Eduardo Mondlane. The District Administrator was present as well as other members of the government, heads of Administrative posts and localities, traditional leaders, technicians of MICOA/DNAPOT and from DPCA Gaza and civil society members. The objective was to present the preliminary results of the planning exercise and discuss the opportunities and development problems of the District. A District Land Use Plan has been developed and presented to the District Government in Chicualacuala for approval and submission to the Provincial Government for final ratification. The territorial plan is designed to act as a spatial guide for the District Government in the implementation of its PESOD (District Economic and Social Development Plan). For instance, the Land Use Plan indicates where best to build schools, water points and roads, shows areas at risk of flooding and prone to drought, presents soil and vegetation maps for agriculture, livestock and forest management etc.

The process of improvement of the registry system and land cadastre has started, the strategy and methodologies to be followed have been agreed between the provincial and district authorities. A technician has been nominated to be responsible for the demarcation and legalization process. Capacity building on the improvement of the land registry and cadastre system this semester included: - Survey of the situation at the District and Province levels conducted ; - Methodology and implementation strategy discussed and agreed at District and Provincial levels; - Support material was delivered to SDPI and a training carried out on the procedures to conduct the work.

The JP is assisting INGC to build a Centre for Multiple Use Resources (CERUM) where INGC will test and demonstrate a range of technologies adapted for use in semi-arid zones. The land (6 hectares) ceded by the district government has been securely fenced in this reporting period. A store for building materials has been erected on site, building materials have been brought from Chokwe and Maputo and building is about to begin.

#### 4.4 Agro forestry practices introduced and applied at the community level:

Agro-forestry is being promoted in all 4 of the irrigation units being supported by the JP. Fruit and/or fodder trees have been planted in rows in the fenced community fields. Vegetables or cereals are planted in the alleys between the rows. Further demonstrations have been set up in a collaborative venture with IIAM. There are limits to the expansion of this type of activity which can only be effectively conducted in fenced areas because of invasion of the plots by cattle and goats where there are no fences.

In this reporting period, 15,500 fruit and cashew saplings have been purchased for distribution to 127 families that requested them. Half of these have already been distributed and planted. Protecting the saplings against animals is a major challenge. Providing sufficient water for the establishment of the trees in this semi-arid district is another problem that the JP is addressing through the water development component of the programme (rainwater harvesting, improved efficiency of water use and boreholes).

Only one of the (3) community nurseries is currently producing saplings for distribution. This nursery was built by the JP and is being managed by the NGO, UNAC, with technical advice from IIAM foresters. This year it has produced 2300 saplings (moringa, cashew, mango, cow peas and chanfuta) of which 1,710 have been planted in a fenced, communal field for the benefit of over 100 families involved in the Mahatlane farmer association. The other two nurseries set up by the communities with project support have been abandoned (at least temporarily) by the communities whose members wish to be paid for the work of tending the trees. The JP is not prepared to pay community members for trees produced for their own benefit.

The idea of the live-fencing of gardens and fields recommended by a technical backstopping forestry officer has been dropped as it has not proved possible to obtain sufficient quantities of suitable planting materials.

#### 4.5 Multipurpose integrated water resource management systems created:

Fifty of the planned 100 household rainwater harvesting systems have been installed, 25 systems in Eduardo Mondlane town and 25 systems in Mapai town. Thirty systems have ferro-cement tanks, each of 2,500 litre capacity and 20 systems have metal tanks of 900 litres capacity. Each system comes complete with gutters and drain pipes channelling the rainwater into the tanks. The beneficiary families were chosen by the District Government as being among the most vulnerable families (single parent households, elderly, sick, supporting AIDS orphans etc). Each family has received training from the JP technician in the use and maintenance of the system. Work on the installation of the remaining 50 household systems is underway.

The sites for installation of the 4 planned communal water harvesting systems have been chosen (schools) but none has yet been completed. Work began on the first one, sited at a primary school in Eduardo Mondlane town in 2010, but technical problems delayed completion. A decision was taken not to begin the remaining systems until the problems with the first system had been resolved. Thankfully, work on the first system resumed this semester and a second, at another primary school in Eduardo Mondlane town, was started. Both of these systems should be completed in the next few weeks. When these are completed, construction of two communal systems will begin in Mapai town.

The drilling of the planned boreholes (at least 5 excluding one already completed) has also proved problematic for the JP. A geo-hydrological study conducted by the JP in 2009 indicates the recommended sites for the boreholes. However, despite the availability of this information, attempts by the contractor to make boreholes at two of the chosen sites (Chicualacuala B and Mahatlane) failed to give the expected results. At Chicualacuala B, the contractor hit hard rock deposits which prevented him reaching water. In Mahatlane, the yield of water in the shallow borehole which the contractor managed to drill is very small (about 1,000 litres per hour). However, Mahatlane is one of the most water deficient villages in the area and a decision was taken to install a solar system and mount storage tanks to store this water. The tanks (and tower) are complete. The solar system will be installed soon, equipped with accumulators to permit 24 hour pumping of water.

Despite these difficulties, the JP is going ahead with the borehole programme and fully expects to have at least 5 systems operating by the end of the programme. The planned water points for cattle and the installation of the solar systems depends on the successful opening of these boreholes.

The manual on water harvesting produced at the end of last year in coordination with the arid land unit within MICOA (DARIDAS) has been finalised and handed over to DARIDAS for use in community based training. The manual is illustrated and uses very simple language to present definitions and some techniques for water collection, conservation and management. Undoubtedly the manual will be a powerful tool to be disseminated in other arid and semi-arid Districts of the country.

The water study "Report on Assessment of the Potential of Rainwater Harvesting and Identification of Suitable Technologies for Rainwater Harvesting in Chicualacuala" has been translated into Portuguese and distributed to government partners and other stakeholders.

The JP is still exploring ways to conduct works to expand the storage capacity of selected natural water catchments. However, heavy plant is necessary for this work and the costs are prohibitively high for this non-budgeted activity which was a request from the district government.

As a contribution to the development of the district water resource management plan, an assessment report on ecosystem status in the district has been finalized. This indicates key ecosystem services that need to be protected in order to continue to provide livelihood benefits. A training of facilitators for the development of the district water resources management plan has been conducted, and the participatory process for developing the plan will be taking place in late July.

#### 4.6 Sustainable conservation agriculture practices introduced and efficiency in small scale irrigation systems improved:

Conservation agriculture is being promoted in 4 communities where fencing protects the fields from invasion by cattle and goats. Almost all agricultural land is unfenced which places limitations on the promotion of conservation agriculture. No-till systems have not been adopted by farmers to whom the practice is unacceptable. Farmers ask: "if we stop

ploughing the fields what shall we do with our oxen and ploughs that earn us money?”. The JP has had more success in the promotion of the use of animal manure and mulching in agriculture which farmers accept as beneficial to the soil and the crops. IIAM demonstration plots in conservation agriculture showed that manured, mulched fields withstand dry conditions (conserve moisture) better than bare soils but the trials were affected by a prolonged dry spell and yields of all plots were low. IIAM follow-up to demonstrate the results and benefits of the trials was weak. Training in farmers associations and how they should work was given in 4 communities where irrigation, forest management and livestock improvement activities are being supported by the JP. The aim was to improve organisational and decision making abilities of the farmers associations working with the JP. 210 families participated in the training, more than half of them represented by women. This semester, the JP provided a water pump, irrigation pipes and other irrigation equipment to the community in Chissapa and assisted in the fencing of 27 hectares of land on the banks of the Limpopo river where the community is being assisted to produce irrigated crops.

#### 4.7 Prospects of biogas generation and composting using waste manure as coping mechanisms to climate variability determined:

50 persons have been trained in solar and bio-gas technology, including provincial and district government administrators and technicians. Solar water pumping systems are working in three villages. Delays in the drilling of boreholes has prevented the expansion of these systems; the target is to mount 8 solar units on existing or JP assisted boreholes.

#### 5.1 Options for livelihood diversification identified:

A study report was produced in 2010 which provides recommendations for livelihood diversification. The recommendations which the JP has been able to respond to are the accelerated production/purchase and distribution of fruit trees, promotion of meat drying technologies (see section 5.4 below) and the installation of extra water points for cattle which will be built near to the new boreholes.

#### 5.2 Inventory and feasibility assessment of potential renewable energy sources carried out:

50 persons received training this semester in the user and management of solar power and bio-gas. Construction of the first bio-gas digester, in the village of Mepuza, is underway. The community have dug a large hole where the bio digester will be built. They have also prepared 35,000 clay bricks which will be used to build the digester. When finished, the bio-digester will produce gas to power a generator which will provide electricity to small rural workshops, the school and health post in Mepuza. This pilot project will be the first of its kind and scale in Mozambique. A second digester will be built at the slaughter house in Mapai and bio digest the wastes from the slaughter house to provide lighting and hot water for the building. These experiences will be documented and shared with interested parties within and outside Mozambique.

#### 5.3 Animal husbandry grazing and veterinary service coverage improved:

15 more community animal health workers (CAHWs) were trained this semester and they will receive veterinary kits shortly. The JP has trained a total of 36 CAHWs from over 15 communities in Chicualacuala. This work has been conducted with the veterinary services and the national NGO, UNAC, which also has a rural development project in Chicualacuala.

The number of preventative and curative treatments given to animals has increased greatly and there are strong indications that mortality has decreased as a result. Monitoring of a sample of 8 CAHWs supported by the JP show that 14,478 animals, mostly cattle, were treated between 15 December 2010 and 15 May 2011. Training has been given in pig keeping and duck keeping to livestock keepers in the two communities where the integrated fish farming pilot project is taking place. Training in animal husbandry was given in 7 villages. The topics included in the training were:

- Corral construction and hygiene for cattle, goats, pigs and poultry
- Feeding, including supplementary feeding with moringa, leucaena, sesbania produced in the tree nurseries, crop residues (stover from cereals), brans etc.
- Breeding, including selection of breeding females and males, castration of excess and undesirable males (goats and cattle)
- Health and hygiene

A LoU has been signed with the Provincial Veterinary Service (SPP) to support them in two cattle vaccination campaigns this year in Chicualacuala. According to date supplied by the SPP a total of 67,726 cattle will be vaccinated against blackleg, anthrax and food and mouth disease.

#### 5.4 Agro-processing and marketing activities developed:

The slaughter house under construction in Mapai town is still not finished as a result of delays by the contractor. The revised date for finishing the work is now the end of August 2011, 10 months later than planned! The slaughter house has yet to be equipped and its management put out to tender.

Training in agro-processing and nutrition was given to 117 farmer group/association members from 7 villages; over 50% of participants were women.

Proposals for farmer training in the production of biltong (dried meat) have been received from two consultants. A decision on which one to choose has already been taken. The training will take place, initially in 4 communities in Chicualacuala, within the next three months.

#### 5.5 Use of animal traction promoted to encourage land preparation and transport:

Contrary to what is stated in the project document, animal traction, both with cattle and donkeys is widely used in Chicualacuala. Farmers are well versed in the use of animals and, while some improvements to traditional techniques are possible, it has been noted from training given earlier in the JP that farmers resist change and continue to practice their own ways. For this reason, no further training has been given in this reporting period.

#### **Measures taken for the sustainability of the joint programme**

All activities are planned and carried out in coordination with, and usually with the participation of, government partners. Field based activities in target rural communities only take place if the respective communities are willing to participate actively and accept ownership of the intervention.

The JP places a strong emphasis on training and capacity building for rural communities and government partners. The transfer of technical, planning, and organisational skills to these stakeholders is part of the JP strategy to ensure that they acquire the knowledge and skills needed to successfully continue with the activities after the JP finishes. Through encouraging the active participation of the government and rural communities, the JP strives to promote a strong sense of engagement and ownership of the various interventions. In the remaining time available, the JP will, as part of its exit strategy, steadily hand over the responsibility for management of the principal activities to government staff and community leaders while continuing to provide support where necessary. This process has already begun but in some cases it is being complicated by delays in the completion of some of the activities which will only be completed during the extension phase of the JP.

**Are there difficulties in the implementation?**

Coordination with Government  
Administrative / Financial  
Joint Programme design

**What are the causes of these difficulties?**

External to the Joint Programme

*Difficulties in coordinating with Government are caused by a number of factors some of which are external to the JP and some not, for example:*

- a) The JP is working a long distance from the provincial capital in remote rural areas where government services are weak or non-existent and communication is poor*
- b) Although the JP (thanks to MDG-F) has shown great flexibility in responding to government requests for unbudgeted, unplanned activities, some government officials feel that the JP does not respond to what they would like to see being carried out. Delays in implementation exacerbate the feeling of discontent held by some officials.*

*UN administrative procedures are notoriously slow and delay the timely implementation of activities.*

*Flaws in the prodoc, partly as a result of inadequate community involvement/consultation at the design stage, and therefore an inadequate understanding of the challenges that the JP would face, and what would be achievable or not, led to unrealistic expectations within such a short period of time.*

Other. Please specify

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**Briefly describe the current difficulties the Joint Programme is facing**

Coordination with Government

While the JP strives to coordinate effectively with the provincial and district government, there are so many activities taking place at the same time, particularly in Chicualacuala, that are invariably some lapses in coordination from the JP side. In a similar vein, the government sometimes does not coordinate effectively, giving inadequate notice of its programmes, (i.e field visits) and delaying in responding to requests for information or support in specific areas. The capacity of the government partner ministries/institutes varies a lot. Those that are better organized collaborate better with the JP and vice versa.

#### Administrative/financial

Since the beginning of the JP, slow, bureaucratic administrative procedures, particularly those associated with procurement and contracting are creating delays in the implementation of various key activities in the JP. This is especially the case for the non-resident agencies whose procurement is handled by UNDP. Various meetings have been held with partner UN agencies to try to speed up these process but to little effect.

Completion of the JP Results Framework with Financial Information that must be attached to this report is always a challenge for the UN agencies whose accounting procedures are not tailored to providing financial information following the format of an activity based budget. Submission of this financial information to FAO for compilation is always late. This means that the six month report nearly always misses the deadline for submission to MDG-F

#### Programme design

There are various flaws in programme design which complicate implementation. It was designed to be implemented in various districts in the Limpopo River Basin but, on request from the Government, focuses mainly on Chicualacuala district which is the most isolated and difficult district in which to work. The project document does not mention who will carry out the large number of field based activities with which each of the agencies is charged. Attempting to coordinate these activities from Maputo, even with government partner support, proved impossible and 3 of the 6 agencies now have field staff in Chicualacuala. This has markedly improved the speed of implementation and should have been done at the beginning of the JP. In this type of programme, an inception phase (6-12 months) would be useful during which the prodoc and the budget would be revised to reflect the actual situation on the ground

#### **Briefly describe the current external difficulties that delay implementation**

The major external difficulty is the distance and isolation of Chicualacuala (over 500 kms from Maputo) where poor roads, a lack of communication, poor living and working conditions and a widely disbursed rural population make delivery of JP interventions time consuming and expensive.

#### **Explain the actions that are or will be taken to eliminate or mitigate the difficulties**

To overcome the difficulties coordinating with government the JP has moved to offices within MICOA to be closer to government colleagues. The MICOA focal point has become the main chairperson for the PMC's and as such is taking a much more active role in the JP than before. A joint monitoring mission to Chicualacuala was conducted in this reporting period(it had been planned for a long time but took time to organise). It comprised government and UN focal points as well as government technical staff from the provincial and district level and community leaders. The mission provided the opportunity for the major stakeholders to visit and discuss some of the most important JP interventions thereby helping to broaden the understanding and overcome some of the misconceptions of certain government colleagues. The JP office in Chicualacuala will move to premises within the District Service for Economic Activities (SDAE) when the partition of the office space is completed with JP funds.

## 2 Inter-Agency Coordination and Delivering as One

### Is the joint programme still in line with the UNDAF?

Yes true  
No false

### If not, does the joint programme fit the national strategies?

Yes  
No

### What types of coordination mechanisms

The PMC meetings are one of the main tools used for JP coordination between UN agencies and government partners. At these meeting, annual work plans are formulated and progress in implementation of the plans is monitored and supervised.

Regular meetings between the UN agencies and government focal points, usually to discuss specific joint activities (i.e CERUM or meteorological station), helps improve coordination and joint delivery by: creating and reinforcing synergies, reducing duplication of effort through learning from each other and reducing transaction costs through resource sharing which also permits the more effective use of time and human resources.

A Technical Water Advisory Committee has been formed in Chicualacuála with JP support. It is chaired by a district government official and serves to coordinate the activities of the various UN agencies involved in water development activities in this this JP. It has met three times, twice in this reporting period.

### Please provide the values for each category of the indicator table below

Indicators	Baseline	Current Value	Means of verification	Collection methods
------------	----------	---------------	-----------------------	--------------------

Number of managerial practices (financial, procurement, etc) implemented jointly by the UN implementing agencies for MDF-F JPs	0	More than 10	<ul style="list-style-type: none"> <li>1)JP reports (with financial information supplied by all agencies)</li> <li>2)Procurement process for meteorological equipment</li> <li>3) Integrated fish farming activities</li> <li>4)CERUM construction</li> </ul>	<ul style="list-style-type: none"> <li>1)Request reports from JP management team</li> <li>2)JP files</li> <li>3) Site visit</li> <li>4) Site visit</li> </ul>
Number of joint analytical work (studies, diagnostic) undertaken jointly by UN implementing agencies for MDG-F JPs	0	About 20	Availability of study reports, training course materials, exchange visit reports	Request these materials from the JP management team or government partners
Number of joint missions undertaken jointly by UN implementing agencies for MDG-F JPs	0	More than 20	Interviews with UN partner focal points, the JP coordinator, government focal points, rural community partners	Interviews with UN partner focal points, the JP coordinator, government focal points, rural community partners

### 3 Development Effectiveness: Paris Declaration and Accra Agenda for Action

#### Are Government and other national implementation partners involved in the implementation of activities and the delivery of outputs?

Not Involved      false  
 Slightly involved      false  
 Fairly involved      true  
 Fully involved      false

#### In what kind of decisions and activities is the government involved?

Management: procurement  
 Management: service provision

#### Who leads and/or chair the PMC?

The PMC is co-chaired by the RC (or her representative) and the focal point person of the lead government implementing partner, MICOA. In practice the MICOA focal point leads

and chairs the meetings.

**Number of meetings with PMC chair**

Nine PMC meetings have taken place, including one extraordinary meeting. The current PMC chair (MICOA focal point) has chaired the last two meetings. Before that, the meetings were normally chaired by the FAO Representative (lead agency) in substitution for the RC.

**Is civil society involved in the implementation of activities and the delivery of outputs?**

Not involved            false  
Slightly involved        false  
Fairly involved            true  
Fully involved            false

**In what kind of decisions and activities is the civil society involved?**

Policy/decision making

*The JP partner NGO, UNAC, that created and trained a number of farmer associations including those working with the JP, manages the Mahatlane forestry nursery and distributes seedlings to community members. UNAC also monitors the 12, JP trained, UNAC equipped, community animal health workers in the villages in which UNAC (and the JP) work.*

*IUCN has been contracted by UNEP to conduct some of the JP water development activities, such as rainwater harvesting and assisting the government with the elaboration of the district water management plan.*

Management: service provision

*The JP partner NGO, UNAC, that created and trained a number of farmer associations including those working with the JP, manages the Mahatlane forestry nursery and distributes seedlings to community members. UNAC also monitors the 12, JP trained, UNAC equipped, community animal health workers in the villages in which UNAC (and the JP) work.*

*IUCN has been contracted by UNEP to conduct some of the JP water development activities, such as rainwater harvesting and assisting the government with the elaboration of the district water management plan.*

Management: other, specify

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*IUCN has been contracted by UNEP to conduct some of the JP water development activities, such as rainwater harvesting and assisting the government with the elaboration of the district water management plan.*

**Are the citizens involved in the implementation of activities and the delivery of outputs?**

Not involved        false  
Slightly involved    false  
Fairly involved      false  
Fully involved        true

**In what kind of decisions and activities are the citizens involved?**

Policy/decision making

*The citizens are mainly the hundreds of rural families that manage the various JP activities in coordination with JP and government staff. Through their leaders and through the various farmer associations and management committees that the JP is helping them create, they take plan and implement activities. They take decisions on how things should be organised and run. They resolve problems or difficulties in the implementation of activities, organise visits and training sessions for JP staff, government or other parties. They participate in training sessions, workshops and seminars. They attend meetings and actively participate in exchange visits.*

Management: service provision

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Management: other, specify

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**Where is the joint programme management unit seated?**

National Government

*The JP management unit has its principal office in the city of Chokwe, which is the gate way to the north of Gaza where Chicualacuala is situated. The office is in a private house rented for this purpose.*

*However, in 2010, responding to a recommendation of the mid-term review the JP opened another office in premises made available by MICOA (rehabilitated by the JP). This has now become the main office for the JP management unit.*

*In Chicualacuala, the JP has a field office which is in a house belonging to the government that the JP rehabilitated. JP field staff live and work from this house. In line with mid-term review recommendations, this office/house is soon to move to a district government office which first must be partitioned (large space to be divided in half) using JP funds.*

By itself

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#### **Current situation**

The JP's main office is now in MICOA. The Chokwe office is used when JP staff are on regular missions to Chicualacuala and to store equipment for the project. A decision will be taken in the next few weeks on whether the Chokwe office will be retained or closed during the 12 month extension that MDG-F has just approved for the JP.

Materials are being purchased to partition the government office in Chicualacuala to where the JP field office will relocate when the work is completed.

## **4 Communication and Advocacy**

**Has the JP articulated an advocacy & communication strategy that helps advance its policy objectives and development outcomes?**

Yes        false  
No         true

**Please provide a brief explanation of the objectives, key elements and target audience of this strategy**

A written strategy does not exist. However advocacy and communication activities are being conducted as part of project implementation. Advocacy and communication take place through various channels: the PMC, regular meetings between UN agencies and Government partners, through training workshops and national and provincial seminars (e.g week in focus that will take place in July 2011), through the dissemination of study reports and training materials, through publicity materials such as posters, through joint field visits and joint monitoring missions. No person among the UN agencies linked to this JP, or government partners has volunteered to supervise a space for the JP on "teamworks", citing a lack of time due to other work commitments as the reason.

**What concrete gains are the advocacy and communication efforts outlined in the JP and/or national strategy contributing towards achieving?**

Increased awareness on MDG related issues amongst citizens and governments

*Training of teachers, planners, community leaders, members of disaster management committees, members of district and village level advisory councils, government technical and administrative staff, municipal staff and farmers is contributing to a raised awareness of MDG related issues. Awareness of environmental and cc issues and their likely impact on medium and long-term development is now significantly greater among this large group than it was before the JP started.*

*National TV and newspaper coverage of the MICOA led, JP supported, environment and climate change training workshop for municipal planning staff helped increase national awareness of these issues and their impact.*

Increased dialogue among citizens, civil society, local national government in relation to development policy and practice

*Training of teachers, planners, community leaders, members of disaster management committees, members of district and village level advisory councils, government technical and administrative staff, municipal staff and farmers is contributing to a raised awareness of MDG related issues. Awareness of environmental and cc issues and their likely impact on medium and long-term development is now significantly greater among this large group than it was before the JP started.*

*National TV and newspaper coverage of the MICOA led, JP supported, environment and climate change training workshop for municipal planning staff helped increase national awareness of these issues and their impact.*

**What is the number and type of partnerships that have been established amongst different sectors of society to promote the achievement of the MDGs and related goals?**

Faith-based organizations	
Social networks/coalitions	
Local citizen groups	15
Private sector	
Academic institutions	2
Media groups and journalist	
Other	2

**What outreach activities do the programme implement to ensure that local citizens have adequate access to information on the programme and opportunities to actively participate?**

Capacity building/trainings

*Capacity building of government partners staff and of rural households is a key part of the sustainability strategy of this JP. Numerous training workshops, seminars, exchange visits and practical demonstrations have taken place and continue to take place as the JP progresses. A exit strategy is being worked out as part of the planning of activities for the final year of the project (12 month extension)*

## **Section III: Millenium Development Goals**

### **Millenium Development Goals**

#### **Additional Narrative Comments**

**Please provide any relevant information and contributions of the programme to de MDGs, whether at national or local level**

The main MDG addressed through this project is n° 7, "Ensure Environmental Sustainability". Aspects of environmental management and climate change adaptation have/are been mainstreamed in government plans and policies as a result of the mainstreaming activities conducted by this and other projects.

At the field level, improvements in natural resources management (e.g forests, soils and pastures) fostered by the JP during its implementation have raised the sensibility of rural families to the need to conserve these resources. Water harvesting and water resource development activities (e.g boreholes, expansion of more efficient, irrigated crop production, water resource management plan) assist the district to manage the environment more sustainably in the face of drought exacerbated by climate change.

Training in climate change adaptation, climate proofing etc reinforces the capacity of government colleagues to plan and implement environmental programmes and policies.

**Please provide other comments you would like to communicate to the MDG-F Secretariat**

A three year time frame for implementing this type of JP is unrealistic. In future, a five year, phased approach (with achievable, clearly set, yearly milestones) would likely be more sustainable and leave a greater impact. Given the ever changing situation in the project target area and the time delay between prodoc preparation and the start of the project, an inception phase should be built into JP design. This would be a mimimum of 6 months and a maximum of 12 depending on the nature of the JP. At the end of this phase (during which baseline studies, staff recruiting, equipment purchases, office procurement, PMC and SC formation etc would take place) the JP with gornement partners would present (if necessary) a revised workplan and budget for the entire JP period. This would achieve two important objectives: 1)ensure that project design adequately addresses the real needs of the country and the target groups and 2) encourages the greater involvement of government partners and target groups in the planning and implementation of the JP from the very beginning. This would be a big step forward in promoting sustainability and maximising long-term impact from JP interventions.

## Section IV: General Thematic Indicators

### 1 Environmental and Climate Change policy development and mainstreaming

#### 1.1 Number of sectors or mainstreaming laws, policies or plans supported by the joint programme

##### 1.1.1 On Environmental Management

###### Policies

National	1
Local	0

###### Laws

National	0
Local	0

###### Plans

National	2
Local	1

##### 1.1.2 On Climate Change

###### Policies

National	1
Local	0

###### Laws

National	0
Local	0

**Plan**

National 2  
Local 1

**1.2 Please briefly provide some contextual information on the law, policy or plan and the country/municipality where it is (or will be) implemented**

The policy document whose preparation was supported by the JP is the ESAN II which is the second phase of the National Strategy for Food Security and Nutrition. This is being implemented nationally. This being a national strategy affects the whole country and population of ± 20,000,000 persons.

The two national plans are the INGC annual contingency plan, normally prepared in October and the Annual Plan for Food Security and Nutrition (PASAN).

The JP also assists SETSAN (Secretariat for Food Security and Nutrition) conduct thrice yearly Vulnerability Analyse. This is an exercise carried out over the whole country. Each year in June a report is published which guides the preparation of the PASAN. In October and February of each year the vulnerability analyses conducted by SETSAN monitors the vulnerability situation in the country.

The local plan into which the JP invested much time and effort is the Chicualacuala Strategic District Development Plan (PEDD) which was finalised at the end of 2010.

**1.3 Sector in which the law(s), policy(ies) or plan(s) is/are focused**

Water management  
Sanitation  
Sustainable management of natural resources  
Climate change: adaptation

**Comments**

**1.4 Number of citizens and/or institutions that the law(s), policy(ies) or plan(s) directly affects**

All the public management and legal/institutional arrangements serve to the whole nation. Therefore all the efforts within the Joint Programme on laws, strategies, policies and plans will directly affect the whole population of the Country

**Citizens**

Total	20,000,000
Urban	8,000,000
Rural	12,000,000

**National Public Institutions**

Total	12
Urban	11
Rural	1

**Local Public Institutions**

Total	2
Urban	1
Rural	1

**Private Sector Institutions**

Total	unable to estimate
Urban	
Rural	

**1.5 Government budget allocated to environmental issues before the implementation of the Joint Programme**

National Budget      Not known

Total Local Budget(s)      Not known

**Comments**

Environmental issues are not specific to one ministry, although there is one over arching ministry for the coordination of environmental affairs (MICOA). Despite requests to government partners involved in activities linked to the environment It has not possible to obtain information order to complete this section.

**1.6 % variation in government budget allocated to environmental policies or programmes**

**National Budget**

- % Overall
- % Triggered by the joint programme

**Local Budget**

- % Overall
- % Triggered by the Joint Programme

**Comments**

**1.7 Government budget allocated to Climate Change before the implementation of the Joint Programme**

National budget

Total Local Budget(s)

**Comments**

Climate change is seen as an environmental issue and therefore there is no separate budget for climate change

**1.8 % variation in government budget allocated to Climate Change from the beginning of the Joint programme to present time**

**National Budget**

- % Overall
- % Triggered by the Joint Programme

**Local Budget**

- % Overall
- % Triggered by the Joint Programme

**Comments**

**2 Institutional capacities for environmental management developed and civil society participation increased**

## 2.1 Number of km2 of land newly managed by a natural resource plan supported by the Joint Programme

Total of the area managed in Km2      over 700 (exact area not known)

### By habitat (Km2)

Tropical forest	About 400
Temperature forest	
Savannah	About 200
Shrub land	
Grassland	About 70
Wetlands	
Rocky areas	
Desert	
Sea/oceans	
Artificial terrestrial	About 30

## 2.2 Number of institutions, civil servants and citizens trained by the JP to take informed decisions on environmental issues (excluding climate change)

### Public institutions

Total      6

### Private Sector Institutions

Total      0

### NGO/CBO

Total      15

### Civil Servants

Total	About 150, some have received various trainings
Women	50
Men	100

**Citizens**

Total About 1,500, some have participated in various training  
Women 900  
Men 600

**2.3 Number of citizens supported by the JP that have organised themselves to effectively participate in natural resource management initiatives**

Total About 1,500 families  
Women 750  
Men 750  
Ethnic groups 0

**2.4 Number of successful environmental service payment mechanisms that have been promoted by the JP**

Total N/A  
No. of beneficiaries N/A

**Sectors of application****Financing source****2.5 Has the JP had an impact on the development of national and local policies or regulations that recognize schemes of Payment for Ecosystem Services as an environmental management tool, How?**

The JP, in collaboration with rural communities and government, has established a community based forestry management plan and is assisting in the implementation of this plan through the creation of (15) village management committees and the training and equipping of 24 community forest guards. Payment to the respective communities for forest management is not directly through eco-system services. It is through the fines imposed on illegal loggers and charcoal makers and through a 20% community tax that forest

concessionaries are obliged to pay to the government.

### 3 Climate change adaptation and mitigation and development of institutional capacities

#### 3.1 Number of Km<sup>2</sup> and type of habitat covered by mechanisms and/or actions to adapt to climate change (implemented with the support of the joint programme)

The geographical unit that can be used for this question is “River Basin” in the context of MDGF 1680 Joint Programme, and the surface area of Seyhan River Basin is 20,600 km<sup>2</sup>

Tropical Forest	400
Temperature Forest	
Savannah	200
Shrub land	
Grassland	70
Wetlands	
Rocky Areas	
Desert	
Artificial terrestrial (pastoral land, arable land, etc.)	30

#### 3.2 Adaptation measures supported by JP that are addressing the following climate change issues

Land degradation  
Soil fertility decrease  
Wildfire  
Droughtm Storms/flooding  
Alteration of rain patterns

#### 3.3 Based on available data, what kind of improvements on the population’s wellbeing have been achieved through JP supported adaptation measures?

#### Health

*The health of the families (about 1500) living in the 15 communities being assisted by the JP has improved as a result of the the provision of clean water and an increase in agricultural and livestock production and productivity.*

*As a result of a range of cc adaptation interventions, mostly income generating activities, the vulnerability of the families in rural communities has decreased. For example, the JP has contributed significantly to increased and diversified agricultural production, improved animal health and improved forestry management. The provision of water from boreholes also greatly assists rural families in this semi-arid, drought affected district (Chiculacuala).*

*The JP has directly contributed to improved and diversified livelihoods through increased incomes, improved diets and employment creation in the informal sector (buying and selling produce, animals etc)*

#### Vulnerability

*The health of the families (about 1500) living in the 15 communities being assisted by the JP has improved as a result of the the provision of clean water and an increase in agricultural and livestock production and productivity.*

*As a result of a range of cc adaptation interventions, mostly income generating activities, the vulnerability of the families in rural communities has decreased. For example, the JP has contributed significantly to increased and diversified agricultural production, improved animal health and improved forestry management. The provision of water from boreholes also greatly assists rural families in this semi-arid, drought affected district (Chiculacuala).*

*The JP has directly contributed to improved and diversified livelihoods through increased incomes, improved diets and employment creation in the informal sector (buying and selling produce, animals etc)*

#### Improved livelihoods

*The health of the families (about 1500) living in the 15 communities being assisted by the JP has improved as a result of the the provision of clean water and an increase in agricultural and livestock production and productivity.*

*As a result of a range of cc adaptation interventions, mostly income generating activities, the vulnerability of the families in rural communities has decreased. For example, the JP has contributed significantly to increased and diversified agricultural production, improved animal health and improved forestry management. The provision of water from boreholes also greatly assists rural families in this semi-arid, drought affected district (Chiculacuala).*

*The JP has directly contributed to improved and diversified livelihoods through increased incomes, improved diets and employment creation in the informal sector (buying and selling produce, animals etc)*

#### Others, specify

*The health of the families (about 1500) living in the 15 communities being assisted by the JP has improved as a result of the the provision of clean water and an increase in agricultural and livestock production and productivity.*

*As a result of a range of cc adaptation interventions, mostly income generating activities, the vulnerability of the families in rural communities has decreased. For example, the JP has contributed significantly to increased and diversified agricultural production, improved animal health and improved forestry management. The provision of water from boreholes also greatly assists rural families in this semi-arid, drought affected district (Chiculacuala).*

*The JP has directly contributed to improved and diversified livelihoods through increased incomes, improved diets and employment creation in the informal sector (buying and selling produce, animals etc)*

### **3.4 Number of individuals and institutions with improved capacities to adapt to climate change or mitigate it**

Adaptation

#### **Public institutions**

Total 12

#### **Private Sector Institutions**

Total Not known

#### **Civil Servants**

Total About 150

Women 50

Men 100

#### **Citizens**

Total About 1,500, mainly rural families

Women 750

Men 750

### **3.5 Interventions funded by the JP to improve capacities of individuals and institutions to adapt to Climate Change or mitigate it**

Adaptation

Capacity building

Equipment

Knowledge transfer

### 3.6 Number of clean development mechanism projects registered to mitigate climate change

CO2 emissions captured through conservation	N/A	
CO2 emission reduction through the use of renewable energies		N/A
CO2 emission reduction through the use of clean technologies		N/A

**b. Joint Programme M&E framework**

**UNJP, ENVIRONMENTAL MAINSTREAMING AND ADAPTATION TO CLIMATE CHANGE IN MOZAMBIQUE**

Expected Results (UNDAF CP Outcomes and Outputs; and JP Outcomes and Outputs)	Baselines	Indicators	Overall JP expected target	Achievement of Target to date	Means of Verification (MOV)	Collection methods (with indicative time frame & frequency)	Responsible Agency(ies) and Implementing Partners	Risks and Assumptions
<b>JP OUTCOME 1: Government, civil society, communities and other stakeholders informed, sensitized and empowered on environment and climate change (CC) issues.</b>	Absence of/limited information on environment and CC data and training materials, including lack of knowledge in the use of said data.	Broader understanding among the various actors of environmental and cc issues and their impact on development	Training and sensitization of stakeholders	Provincial seminar to share results of risk mapping, district profiling and climate proofing  Training of over 100 government staff, 60 teachers, staff from all 43 municipalities in the country and community leaders from virtually all villages in Chicualacuala district	Seminar presentations and synthesis report  Availability of reports on trainings given	Request documents from JP management team and from INGC  Request training materials and list of participants from MICOA	UNDP, UN - HABILITAT FAO,WFP	The (degree of ) commitment of Government, civil society, communities and other stakeholders involved should be evidenced by adequate funding drought related initiatives
OUTPUT 1.1: Environment priorities and indicators reflected in planning frameworks and budgets at district and community level	Absence of environmental parameters in local budgets	Four policy briefs developed and discussed per year	4 policy briefs per year	One policy brief on climate change adaptation produced; one methodological guideline on integration climate change on district development plan elaborate	Policy brief document and methodological guideline document available	Request documents from UNDP	UNDP, UN-HABILITAT MICOA, INGC, provincial and district authorities	Weak understanding and low priority given to CC and environment issues
		CC issues included into two national plans and/or strategies	2 national plans or strategies	CC included in one national strategy (ESANII) and in the INGC annual contingency plans Environment and CC integrated into the Chicualacuala District Strategic (5 year) Plan	ESAN document 2011 contingency plan  PEDD document	Copies of publications/materials available from ESAN/INGC/ WFP  Request copy of PEDD from District Government	WFP, UNDP, FAO  CONDES MICOA	



Expected Results (UNDAF CP Outcomes and Outputs; and JP Outcomes and Outputs)	Baselines	Indicators	Overall JP expected target	Achievement of Target to date	Means of Verification (MOV)	Collection methods (with indicative time frame & frequency)	Responsible Agency(ies) and Implementing Partners	Risks and Assumptions
<p>OUTPUT 1.3: Training programmes on disaster and climate change prediction, including interpretation of maps and application of monitoring data for early warning purposes</p>	<p>Inexistence of adequate toolkits, maps and training initiatives. Limited outreach of current training activities</p>	<p>Diagnostic tools on the application and use of climate information developed and applied by programme</p> <p>Materials for training programmes adapted/developed</p> <p>Two training of trainers courses</p> <p>One pilot district using maps</p>	<p>At least 20 technicians trained</p> <p>Three trainings held at district level</p> <p>One district piloted</p>	<p>The training manual “Guardar a água da chuva” is finalized and published.</p> <p>One training session for district technicians, civil society organizations and communities done by INAM in Chicualacuala</p> <p>Materials produced for trainings on interpretation of risk maps</p> <p>Training of about 100 government staff and community leaders, various training materials developed by the JP were used</p> <p>A report produced on the impact of CC in Chicualacuala</p>	<p>Training material available for inspection</p> <p>List of participants</p> <p>Copies of materials adapted/developed</p> <p>Training materials lists of participants</p> <p>Training materials Available for inspection</p> <p>Report available</p> <p>Report available</p>	<p>Copy of manual available from HABILAT</p> <p>Available from INAM/UNDP</p> <p>Available from WFP</p> <p>Available from JP management unit</p> <p>Available from JP management unit</p>	<p>UNDP, UN-HABITAT, WFP</p> <p>INGC, MICOA, Provincial and District authorities</p>	<p>Low prioritization of issues from relevant authorities and stakeholders</p> <p>Reduced number of participants at training sessions</p> <p>Lack of people with sufficient skills to receive and pass on training</p> <p>Work overload for potential skilled candidates</p>

Expected Results (UNDAF CP Outcomes and Outputs; and JP Outcomes and Outputs)	Baselines	Indicators	Overall JP expected target	Achievement of Target to date	Means of Verification (MOV)	Collection methods (with indicative time frame & frequency)	Responsible Agency(ies) and Implementing Partners	Risks and Assumptions
<p>OUTPUT 1.4: Knowledge and experience sharing within the different groups (UN implementing agencies and beneficiaries)</p>	<p>Limited information and experience sharing</p>	<p>At least three field days organized targeting 8 communities on a yearly basis</p>	<p>Three field visits 8 villages targeted</p>	<p>2 exchange visits between 3 communities to learn about experiences in introducing fish culture</p> <p>Field visit to Kenya to study water harvesting</p> <p>Field visit to Massingir district to study various types of irrigation systems</p> <p>Presentation and simulation of the use of the technical guidelines produced by the JP in workshops with the provincial and district planning support teams</p> <p>A workshop with provincial; and district planners to explore possible mechanisms for financing environment protection and CC adaptation measures</p>	<p>Site visits, interviews with community members</p> <p>Report of field visit</p> <p>Report of field visit</p> <p>Report of the workshop</p> <p>Report of the workshop</p>	<p>Site visits</p> <p>Reports available from JP management team</p> <p>Interview with UNDP</p> <p>Available from PNUD</p>	<p>ALL UN AGENCIES, Government partners and select Civil Society Organizations (CSOs)</p>	<p>Insufficient Inter agency coordination</p> <p>Timely and coordinated logistical support</p> <p>Access to communities is hampered by road inaccessibility</p>

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<p><b>JP OUTCOME 2: Government capacity at central and decentralized levels to implement existing environment policies strengthened</b></p>	<p>Government has limited capacity to implement environmental policies</p>	<p>Number of Government staff at different levels aware of importance of environment implications</p> <p>Environment policies implemented</p> <p>Government action plans and budgets include environment considerations</p>	<p>Government staff have sufficient skills to implement environmental and cc policies</p>	<p>Over 200 government staff and community leaders trained in environmental awareness</p> <p>PEDD, Chicualacuala includes environmental considerations</p>	<p>Documents officially approved or published</p> <p>Execution of budgets evidence expenditures on environment conscious activities</p> <p>PEDD document available</p>	<p>Six monthly monitoring reports</p> <p>Reports</p> <p>Request copy of document from district government</p>	<p>UNDP, UNEP, UN-HABITAT, FAO, WFP</p>	<p>Government, civil society, communities and other stakeholders committed</p> <p>Stakeholders agree on usefulness of environmental indicators</p> <p>National policies, strategies and structures should be consolidated</p>
<p>OUTPUT 2.1: National Disaster Preparedness plan and other relevant plans revised/updated to include climate change and environment aspects</p>	<p>INGC strategies do not sufficiently address climate change challenges</p>	<p>National disaster preparedness and risk assessment plans prepared and updated each year</p> <p>Two yearly training sessions on participatory planning to include environment and CC issues</p> <p>Publication of results of risk assessment</p>	<p>Risk assessment is being gradually integrated in contingency plans</p>	<p>On-going support to INGC to integrate lesson learned in the JP into annual disaster management contingency plans</p> <p>Four workshops in participative environmental planning conducted for local authorities, district government, members of the district consultative council (total 200 persons)</p> <p>Risk mapping exercise replicated in 6 districts in the Limpopo River Basin and 1 district in the Zambezi River Basin</p>	<p>Number of plans updated and revised</p> <p>Report and photos of the workshops</p> <p>Availability of risk mapping (and district profiling reports) by district</p>	<p>Yearly monitoring of plans</p> <p>Hazard risk areas identified in maps</p> <p>Training session reports including list of participants</p> <p>Reports available from INGC/SETSAN/WFP</p>	<p>UNEP UN-HABITAT, WFP, FAO</p> <p>MICOA, MAE, SETSAN. INGC, MINAG, provincial/district authorities</p>	<p>Insufficient funds/reliable data for environment data collection</p> <p>Clear perception of individual roles of stakeholders, including Government, in drought rehabilitation, emergency response and preparedness</p>

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<p>OUTPUT 2.2:</p> <p>Early warning and communications system enhanced at provincial level</p>	<p>Poorly integrated communication system</p>	<p>Gaps in local capacities identified and addressed</p> <p>Percentage of areas covered by communications network</p> <p>Sufficient time between the warning and the arrival of event</p>	<p>Enhanced the capacity of radio communication system, considering the covered areas and a enough time between the alert and event occurrence</p>	<p>Higher radio antenna installed in Chicualacuala town, radio coverage extended from 35 kms to about 80 kms radius, still some technical problems to resolve as signal does not reach Mapai</p>	<p>Existence and operational capacity of communications network (radio communication facilities)</p>	<p>Site visit, interview with manager of radio station</p>	<p>UN-HABITAT, UNDP, UNIDO</p> <p>MOPH, INGC, INAM, ICS</p>	<p>Gaps in local communication capacities</p> <p>Limited radio coverage</p> <p>Dispersed population cannot be reached in time</p>
<p>OUTPUT 2.3:</p> <p>Authorities, civil society and other relevant actors trained to incorporate and report on environmental and climate change risk events</p>	<p>BL. Limited awareness among stakeholders of climate change risks</p>	<p>Twenty civil society representatives (TV, radio, newspapers) trained on reporting on CC</p> <p>At least two yearly training events with inputs from the three collaborating agencies</p> <p>Educative material adapted and produced</p> <p>Study on the contribution of natural resources/predicted impacts of climate change completed</p> <p>Government and local NGOs trained in the application and use of current and forecasted climate information by programme</p>	<p>Report of the socio-economic impacts of climate change</p>	<p>Two environmental training workshops targeting over 100 primary school teachers organized</p> <p>3 environmental and climate change training workshops targeting 90 community environmental educators organized in three administrative post of Chicualacuala (MICOA/DEC,2010)</p> <p>Report on the socio-economic impact of CC produced at district level. Impacts are being assessed at the river-basin level (INGC).</p>	<p>Training session reports including lists of participants</p> <p>Report available</p> <p>Publication and dissemination of the study</p>	<p>Copies of publications/materials/manuals available from MICOA</p> <p>Report from MICOA</p> <p>Available from JP management team</p>	<p>UNEP, UNDP, FAO</p> <p>INGC, INAM, MINAG and MICOA</p>	<p>Collaboration from relevant authorities and stakeholders</p> <p>Absence/weakness of environment and CC risks in sectoral strategies for development</p> <p>Education authorities do not conscientiously incorporate environmental and cc risks into the curricula nor develop region-specific materials</p>

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		Educative (thematic) material adapted and produced		2 video focusing on environmental education/management and climate change adaptation produced and disseminated	Educative material available	Copies of publications/materials available from HABITAT	UN-HABITAT, UNDP MICOA/DPCA; ICS, INGC, OSC, RADIO, TV, MPD,DPE, Provincial and District Governments	Collaboration from relevant authorities and stakeholders insufficient
<b>JP OUTCOME 3: Climate proofing methodology mainstreamed into government development plans, UN / Donors' programming and local stakeholders' activities/invests.</b>	Absence of climate proofing methodologies and assessments	Methodology for climate proofing produced	Climate proofing strategy developed for Limpopo River Basin  150 Policy-makers and stakeholders trained on climate change mainstreaming  Climate change issues integrated in two government policies/plans	INGC, in collaboration with the University of Cape Town, is analysing the impact of CC in the Limpopo River Basin prior to producing the climate proofing strategy  A set of new downscaled climate scenarios developed and hydrological and agricultural modelling undertaken	Contract document	Visit to UNEP/INGC offices  Information available from UNEP	UNEP/INGC	
OUTPUT 3.1: Tools for climate proofing of risk zones in the Limpopo River Basin developed	Absence of climate proofing tools	A document on the applied use of climate proofing is prepared	Climate proofing implementation strategy for Limpopo River Basin	The development of the climate proofing strategy is under way.	Availability of the document	Copies of publications/materials disseminated	UNEP/INGC	
OUTPUT 3.2: Assessment of climate proofing approaches carried	Absence of assessment of climate proofing approaches	Climate proofing issues are included in government plans	One training workshop on climate change mainstreaming	Climate proofing approaches being reviewed, and first workshop taking	The Government plans containing climate proofing	Copies of publications/materials disseminated	UNEP/INGC	

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out			targeting policy-makers  Climate change issues integrated in two government policies/plans	place end of July  Training manual and workshop being developed	issues  Existence of plans/policies	Request copies of plans from Govt. or responsible JP partners		
OUTPUT 3.3: Stakeholders trained on climate proofing	No training has been provided to stakeholders on climate proofing	Number of stakeholders trained in climate proofing	Training programme on climate change mainstreaming  Two training workshops on climate change mainstreaming	1 workshop for staff of all 43 municipalities in the country in CC, its impact in urban centres and ways to prevent or mitigate this impact (about 90 participants in total)	Seminar report available from MICOA	Request copy of seminar proceedings from MICOA	UNEP/INGC, UN-HABITAT/MICOA	
<b>JP OUTCOME 4: Community coping mechanisms to climate change enhanced</b>	Community coping mechanisms inadequate and non-sustainable in the face of cc	Adoption by communities of best practices in use of natural resources  Reduce current water leakage in irrigation systems by 50%	Three communities selected for improved coping mechanisms	Six communities targeted, benefiting about 2,000 beneficiaries	Improved livelihoods  Adaptive measures implemented  List of variables indicating higher efficiency in water use	Site visits, interviews with community members	UN-HABITAT, UNDP, FAO,WFP  MINAG (INAM), ME	Resistance to change based on cultural habits  Needs and expectations of communities not taken into consideration from the inception stage  Climate conditions (favourable or unfavourable)

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<p><b>OUTPUT 4.1:</b> Inventory and subsequent implementation of strategies and coping mechanisms currently in use by communities and in the Limpopo River Basin</p>	<p>Coping initiatives unknown and not mapped</p>	<p>Baseline study, including methodology and strategy for assessing and implementing cc coping mechanisms produced capacity needs assessment carried out</p>	<p>Report on climate change coping mechanisms</p>	<p>Food security and Nutrition, including livelihoods and coping mechanisms, baseline done for Chicualacuala district</p> <p>Report on climate change coping mechanisms produced</p>	<p>Baseline document available</p> <p>Report available</p>	<p>Copies of inventory baseline study and strategy</p> <p>Request copy of report from JP management team</p>	<p>UNDP, UNEP,FAO, WFP MINAG, MICOA, MOPH, CSO</p>	<p>Availability of relevant data</p> <p>Insufficient collaboration from relevant authorities and stakeholders to obtain information</p>

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		CC coping mechanisms implemented and/or reinforced in three communities	Six interventions in three communities to reinforce climate change coping mechanisms	<p>Integrated fish farming being supported in two target communities and expanding to a third (vegetables, fish, rabbits, pigs and ducks)</p> <p>Meteorological equipment for the meteorological station in Chicualacuála purchased and ready to be installed in site demarcated within the CERUM</p> <p>Technical study conducted into the potential for rainwater harvesting for ecosystem rehabilitation</p> <p>Three Early warning committees trained and equipped</p> <p>Didactical material (card game and board game) on adaptation to climate change developed and tested</p>	<p>Site visits</p> <p>Inspect list of materials, site visits</p> <p>Study report available</p> <p>Training report, list of equipment provided</p> <p>Materials available for inspection</p>	<p>Visit communities</p> <p>Reports of fish culture specialist</p> <p>Site visit</p> <p>Report available from UNEP or IUCN</p> <p>Report available from INGC/UNDP</p> <p>Materials available from HABITAT</p> <p>Request UNEP to provide copy of report</p>	<p>UNDP/UNEP/FAO</p> <p>MINAG, MICOA, MOPH, CSO</p>	Insufficient funds to apply the CC coping strategies

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OUTPUT 4.2: Community based natural forest resource management system established	No application of principals for sustainable forestry activities	At least 1 community area including forested areas demarcated and registered (DUAT title)	At least 1 community area including forested areas demarcated and registered (DUAT title)	47,000 hectares belonging to three communities has been mapped and preliminary demarcation has been done .	Communities holding DUAT (Right of Use and Benefit to Land) titles  Cadastre maps of delimited areas	Records at Serviço de Geografia e Cadastro  Copies of land title certificates	FAO,  MINAG and CSOs, DPA and District authorities	Communities are entirely committed to community areas  Communities' willing to cooperate in the judicious use of natural resources if given the right initiatives
		At least three community committees and associations established and legalized	At least three community committees and associations established and legalized	12 forest management committees undergoing registration. 1 other already registered.  24 community forest guards trained and officially recognised by the forestry service	Lists of members of management committees  Report on training and photos of ceremony	Site visits, lists available from JP management team  Available from JP management team	FAO  MINAG, Provincial forestry services, district authorities, CSOs	Community steering committees with the associations are not aware of CC and environmental issues nor are they strong enough to actually steer the organization
		Forestry inventory(ies) completed and management plans developed	Forestry inventories completed management plans developed	Inventory completed, Market study completed community based forest management plan developed including monitoring report	Availability of reports	Request reports from JP management team	FAO  MINAG, Provincial forestry services, district authorities, CSOs	Guides from management plan ignored  Non-compliance with management plans

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<p>OUTPUT 4.3: Territorial planning mechanisms at community level introduced</p>	<p>Limited application of territorial planning</p>	<p>Territorial planning, including CC and disaster risk reduction tools carried out for Eduardo Mondlane and Mapai</p> <p>One training session on planning and cadastre</p>	<p>Territorial plan produced</p>	<p>As part of the territorial planning process, support provided to the Ministry of State Administration (MAE/DNOT) to carry out field work in order to clarify physical delimitations and technical boundary descriptions of 9 localities</p> <p>The second draft of the District Land Use Plan was handed over to the District for final comments.</p> <p>Training in territorial planning given to over 100 district level government staff and community leaders as part of the participatory planning workshop held in September 2010</p> <p>Capacity building on the improvement of the land registry and cadastre system included - training of SDPI out on the procedures to conduct the work</p>	<p>Availability of report with boundaries defined</p> <p>Document available</p> <p>Training materials compiled and available</p> <p>Information available from HABILAT</p>	<p>Request report from UN HABILAT</p> <p>Request document from HABILAT</p> <p>Request document from HABILAT</p> <p>Site visits, interviews with SDPI staff</p>	<p>UN-HABILAT</p> <p>MINAG/DPA Gaza/SPGC, MOPH, district administrator, MAE/National Directorate for Territorial Organization (DNOT)</p>	<p>Collaboration from relevant authorities and stakeholders insufficient</p>

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		Local building codes and standards revised; shelter reinforcement implemented	Examples of houses with reinforced roofs serve as a model for the construction of these structures by households	This activity will be developed during the construction of the CERUM	Manuals and codes available Number of facilities using building codes adapted to local conditions applied	Visit district planning centre to find manuals Visit the CERUM and observe the reinforced demonstration houses	UN-HABITAT MINAG, MOPH, district administrator	Availability of material and labour
OUTPUT 4.4: Agro forestry practices introduced and applied at the community level	Limited application of sustainable agro-forestry practices	Examples of good agro forestry practices implemented in at least three sites  Vegetation survey conducted by Dec 2008  Tree nurseries set up and species trials undertaken	Three sites  Report produced	Three sites with agro-forestry practices  Report produced and distributed  6 fields and respective farmers selected for the establishment of agro forestry demonstrations  15,500 purchased tree seedlings distributed to 127 families in 6 villages  Three tree nurseries established. Over 11,000 saplings of cashew trees and other species produced and distributed to community members	JP and IIAM reports Site visits  Existence of report  Field visits to Chicualacuala. JP and IIAM reports  List of beneficiaries, site visits  JP reports, field visits	Request reports from JP management team  Request reports from JP management team  Request reports from JP management team  Request reports from JP management team  Visit farms/homes of beneficiaries	FAO, WFP, UNDP  MINAG, district agriculture authorities, MICOA	Resistance to change  People will be sensitized in a way that allows for committed participation
OUTPUT 4.5: Multipurpose integrated water resource	Considerable system losses of scarce water	Baseline document of existing water reserves completed	Report produced	An assessment report on ecosystem status in the district finalized, as an	site visits	Publications and reports Visits to water points Programme progress	UNEP, UN-HABITAT, UNIDO, FAO	Collaboration from relevant authorities and stakeholders  Water tables are

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management systems created		<p>Reinforced rain water harvesting systems in ten sites</p> <p>Number of additional water points</p> <p>10 sites using Improved water management system</p>	<p>100 household and 4 communal systems installed</p> <p>At least 6 new boreholes drilled and providing water for people and animals</p> <p>8 sites with improved water pumping facilities</p>	<p>input to the IWRM plan</p> <p>50 individual household rainwater harvesting systems installed in Chicualacuala. Two communal rainwater systems nearing completion</p> <p>One addition water point (borehole) in operation (Madulo)</p> <p>Borehole in Mahatlane drilled, water tower and tanks erected</p> <p>Four sites using improved water management systems for irrigation of crops (Ndombe, Mapuvule, Chissapa, Madulo)</p> <p>Solar water pumping systems installed in Madulo, Ndombe and Mepuza. More than 500 families benefiting from clean water and water for irrigating crops</p>	<p>Visit sites, check for improvement indicators in water management</p> <p>Site visit</p> <p>Site visit</p> <p>Site visit</p> <p>Site visit</p>	<p>report</p> <p>Site visit</p> <p>Site visit</p> <p>Site visit</p> <p>Site visit</p>	<p>MINAG, MOPH, MICOA, INGC, and district authorities</p>	<p>deeper than expected</p> <p>Few drilling companies with skills and adequate machinery operating in remote areas like Chicualacuala</p>

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		Improved capacity to assess water/related CC impact; planning and implementation of CC adaptation strategies	District water resources management plan developed and capacity built for its implementation	<p>Training of facilitators for the development of the district water resources management plan conducted</p> <p>Exchange visit to Kenya organized for capacity building on rainwater harvesting.</p> <p>Exchange visit to Masingir to study irrigation technologies</p>	<p>Training report</p> <p>Exchange visit report</p> <p>Exchange visit report</p>	<p>Request report from IUCN/UNEP</p> <p>Request report from JP management team</p> <p>Request report from JP management team</p>		
OUTPUT 4.6: Sustainable conservation agriculture practices introduced and efficiency in small scale irrigation systems improved	No systematic application of principals and techniques of conservation agriculture	<p>Map of soil suitability and land use for agricultural activities produced</p> <p>At least ten fields where sustainable conservation agriculture practices adopted by end of programme</p> <p>Two small scale irrigation systems where improvements implemented and 50 farmers trained on use of efficient irrigation system</p> <p>Renewable energy use for irrigation purposes implemented in at least</p>	<p>Report produced with soil and land use maps</p> <p>10 sites practicing CA</p> <p>At least 2 irrigation systems working</p>	<p>Report produced. Information from report used in training workshop in September</p> <p>CA trials set up with IIAM (Agricultural Investigation Institute of Mozambique) in 21 fields in Mapai and Mahatlane benefiting 19 farmers</p> <p>4 irrigation systems set up with JP assistance</p>	<p>Maps available with potential agricultural areas identified and soil characterization</p> <p>Visit the demonstration fields</p> <p>IIAM reports on trial results</p> <p>Site visits, photos, project reports</p>	<p>Visit fields</p> <p>Talk to communities/ associations</p> <p>Manuals</p> <p>Request reports from IIAM</p> <p>Visit farms to see how many farmers applying best practices</p> <p>Site visits</p>	FAO, WFP MINAG, Provincial and District Agricultural Service	<p>Communities' reticence to adopt conservation agriculture practices</p> <p>Untimely scheduling of irrigation schemes may affect productivity</p> <p>Availability of renewable energy sources</p>

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		two sites	At least 6 solar systems mounted, for irrigation and drinking water provision	3 sites with solar water pumping systems mounted,	Site visit			
<p>OUTPUT 4.7: Prospects of biogas generation and composting using waste manure as coping mechanisms to climate change determined</p>	<p>Limited application of composting techniques</p>	<p>Inventory of solid waste management and mapping along the Limpopo River</p> <p>At least five demonstration sites using waste management</p> <p>Number of training sessions on waste management, manure compost and bio-digestion systems</p>	<p>Majority of farmers in target communities adopt composting, mulching and the use of manure in agriculture</p>	<p>Composting and the application of animal manure adopted by over 150 target families</p> <p>One biodigester being built with community participation in Mepuza villages</p> <p>Training in solar power and biodigesters given to 50 community leaders, teachers and members of Chicualacuata district government</p>	<p>Reports of inventory of solid waste management and feasibility studies</p> <p>Training session reports including lists of participants</p> <p>Training materials used</p> <p>List of participants</p> <p>Photos of training</p>	<p>Semester progress reports</p> <p>Visit the demonstration prototypes</p> <p>Available from UNIDO/ME or the JP management team</p>	<p>UNIDO, FAO, UNEP, UN-HABITAT</p> <p>MICOA, MINAG, Provincial and District authorities</p>	<p>Availability of material and labour</p> <p>Collaboration from relevant authorities and stakeholders</p>
<p><b>JP OUTCOME 5: Communities' livelihoods options diversified</b></p>	<p>Little information available on livelihood options and virtually no use of renewable energy</p>	<p>Use of alternative/renewable energy for production purposes</p>	<p>At least 5 sites with renewable energy</p>	<p>Solar power for water pumping installed at three sites</p>	<p>Site visits</p>	<p>Site visits, project reports</p>	<p>UNIDO, UN-HABITAT, UNDP, UNEP, FAO, WFP</p>	<p>Methodology accepted and used by local communities</p>

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OUTPUT 5.1: Options for livelihoods diversification identified	Severe limitations in rural employment opportunities	<p>Document on generic livelihood diversification options completed and sustainable livelihood options identified</p> <p>Three communities provided with knowledge and skills on sustainable livelihood options</p>	<p>Report livelihood diversification options</p> <p>Report of in-depth feasibility study of selected options</p>	<p>Report outlining livelihood diversification options produced</p> <p>In-depth feasibility studies of selected options complete. Recommendations to be implemented</p>	<p>Results of feasibility studies available</p> <p>Report on options adapted</p>	<p>Documents including feasibility studies</p> <p>Visit target communities</p>	<p>FAO, WFP, UNEP</p> <p>MICOA, INGC, local communities, district authorities</p>	Options not feasible

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OUTPUT 5.2: Inventory and feasibility assessment of potential renewable energy sources carried out	Little utilization of alternative energy and indiscriminate use of charcoal	Existing and feasible energy renewable sources documented  At least five pilot demonstration sites using renewable energy sources per year	Report produced	Report available  Three solar water pumping systems installed and working	Reports and feasibility studies  Visit pilot demonstration units	Semester progress reports and site visits	UNIDO, UN-HABITAT, FAO, UNEP  MICOA, ME, INGC. Local communities, CSOs, District authorities	Weak institutional capabilities to support programme
	Little knowledge of renewable energy and its potential	Train 50 persons on the use and management of renewable energy technologies	50 persons trained	Over 150 persons trained to manage solar water pumping and irrigation system	Training materials  Reports of training sessions including lists of participants	Semester progress reports	UN-HABITAT, UNIDO  MICOA, ME, INGC. Local communities, CSOs, District authorities	Collaboration from relevant authorities and stakeholders

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	<p>No baseline</p> <p>Limited livestock carrying capacity</p>	<p>Improved stoves introduced in 5 communities</p> <p>At least ten basic cattle infrastructures built</p>	<p>Stoves in 5 communities</p> <p>10 treatment facilities</p>	<p>Training in the use of improved stoves given to 50 community leaders, teachers and district government staff</p> <p>9 holding and treatment facilities built and functioning, each with a trained and equipped animal health worker</p> <p>Agro-veterinary supplies shop rehabilitated and open in Chicualacuala town</p> <p>Selected 3 farmers for the establishment of fodder banks and training in fodder harvesting and conservation</p>	<p>Training report and training materials</p> <p>Visit the sites to confirm existence and operationality</p> <p>Site visit</p> <p>IIAM reports, site visits</p>	<p>Semester progress reporting</p> <p>Semester reports</p> <p>Site visit</p> <p>Request report form IIAM</p>	<p>UN-HABITAT, UNIDO, WFP</p> <p>FAO MINAG, District authorities, local communities</p>	<p>Availability of material and labour</p> <p>Large grazing lands make it difficult to establish a good network of infrastructures</p>

Expected Results (UNDAF CP Outcomes and Outputs; and JP Outcomes and Outputs)	Baselines	Indicators	Overall JP expected target	Achievement of Target to date	Means of Verification (MOV)	Collection methods (with indicative time frame & frequency)	Responsible Agency(ies) and Implementing Partners	Risks and Assumptions
OUTPUT 5.3: Animal husbandry grazing and veterinary service coverage improved	Mortality, especially from tick-borne diseases is high	Livestock mortality reduced by 25% to 50% by end of programme	Measurable reduction in mortality and morbidity	Animal health has improved as a result of the increased number of treatments and vaccinations of animals by community animal health workers	Records of treatments. Data for livestock mortality ex-ante and post programme	Veterinary service reports	FAO  MINAG, District authorities, local communities	Dispersed animals may not get vaccinated
		At least four training workshops conducted during the project	At least four training workshops conducted during the project	At least 14 training sessions given in improved animal management in 8 communities	Training materials used  Manuals adapted or prepared	Request training materials from the JP management team	FAO  MINAG, District authorities, local communities	

Expected Results (UNDAF CP Outcomes and Outputs; and JP Outcomes and Outputs)	Baselines	Indicators	Overall JP expected target	Achievement of Target to date	Means of Verification (MOV)	Collection methods (with indicative time frame & frequency)	Responsible Agency(ies) and Implementing Partners	Risks and Assumptions
OUTPUT 5.4: Agro-processing and marketing activities developed	Absence of agro-processing activities	<p>Establishment of meat processing facility (slaughter house)</p> <p>Refrigeration system installed</p> <p>At least three training sessions conducted on food processing covering 100 people</p>	Slaughter house built and working in Mapai with refrigeration system	<p>Slaughter house under construction in Mapai</p> <p>Contract for limited rehabilitation of Chicualacuala slaughter house ready to sign after tender process</p> <p>108 persons trained in agro-processing and nutrition in 5 villages (62 women, 46 men) in June 2011, 3 separate trainings</p> <p>Over 100 women trained in agro-processing and nutrition in 2 farmer associations (in 2010)</p>	<p>Photos of various stages of construction, site visits</p> <p>Contract</p> <p>Report and photos of the training</p> <p>Training session reports and materials produced</p> <p>Photos of training</p>	<p>Site visits, inspection of photos</p> <p>Request reports from JP management team</p> <p>Request reports from JP management team</p> <p>Request reports from JP management team</p>	<p>FAO, UNIDO</p> <p>MINAG, UEM, Provincial government, District authorities</p>	<p>Limited or not available energy for slaughter house and refrigeration</p> <p>Small number of animals to be slaughtered</p>
OUTPUT 5.5: Use of animal traction promoted to encourage land preparation and transport	Limited use of animal traction for productive purposes	At least 200 farmers introduced in the use of animal traction	At least 200 farmers introduced in the use of animal traction	100 farmers trained in improved harnessing of draft donkeys and cattle (2 trainings given in 2010)	Farmer interviews during site visits	Site visit	<p>FAO</p> <p>MINAG, Provincial government, District authorities</p>	Target number of farmers too high

## JOINT PROGRAMME ON ENVIRONMENTAL MAINSTREAMING AND ADAPTION TO CLIMATE CHANGE

## UN RESULTS FRAMEWORK WITH FINANCIAL INFORMATION AS OF 06/2011

JP output: 1.1 Please highlight the rate of delivery for each joint programme's output:

a. Less than 30% b. between 31%-50% c. between 51-60 d. between 61%-70% e. between 71%-80 d. More than 80%

PROGRAM	ACTIVITY	YEAR		UN AGENCY	IMPLEMENTATION PROGRESS						
		Y1	Y2		TOTAL AMOUNT PLANNED (Including 7% PSC)	TOTAL AMOUNT PLANNED (Excluding 7% PSC)	TOTAL AMOUNT DISBURSED 12/2009	TOTAL AMOUNT COMMITTED UNTIL 06/2010	TOTAL AMOUNT DISBURSED 06/2010	TOTAL AMOUNT COMMITTED 06/2011	TOTAL PROJECT DISBURSED 06/2011
1.1 Environment priorities and indicators reflected in planning frameworks and budgets at district and community level	1.1.1.1 Provide technical support for policy briefs and advocacy materials	X	X	UNDP	60.000	56.075	12.841,48	56.075,00	29.485,20	56.075,00	54.748,79
				FAO	25.562	23.890	0,00	23.231,06	11.250,73	22.908,94	22.908,94
				UN-HABITAT	18.000	16.822	0,00	16.822,00	10.800,00	16.822,00	14.000,00
				WFP	4.000	3.738	0,00	2.000,00	2.000,00	8.138,32	8.138,32
			UNDP	5.000	4.673	0,00	4.673,00	4.349,00	4.673,00	4.349,00	
			FAO	23.238	21.718	0,00	4.697,92	4.697,92	20.067,07	7.851,07	
			WFP	12.500	11.682	10.747,66	12.500,00	10.747,66	12.645,80	12.645,80	
	1.1.1.4 Identify financing mechanisms to fund environment	X	X	UNDP	15.000	14.019	0,00	3.500,00	2.984,15	14.019,00	2.984,15
			WFP	3.500	3.271	0,00	1.500,00	1.500,00	4.771,00	4.771,00	
1.2 GIS-based data and maps on climate change vulnerability for risk areas	1.2.1.1 Mapping of areas at risk	X		WFP	62.100	58.037	29.439,00	52.000,00	50.039,00	68.037,00	68.037,00
	1.2.1.2 Collection of Environmental and CC data	X		WFP	19.900	18.598	9.813,00	18.000,00	17.813,00	20.098,00	20.098,00
	1.2.1.3 Assess water-related CC impact and develop strategies for IWRM	X		UNEP	100.000	93.458	11.170,00	72.095,33	45.646,06	57.378,81	52.659,87
imate maps arning	1.3.1.1 Provide technical support in the use and application of CC information	X		UNDP	15.000	14.019	2.589,00	14.019,00	12.192,32	14.019,00	12.192,32

1.3 Training programmes on disaster and climate change prediction, including interpretation of monitoring data for early warning purposes	1.3.1.2 Select three relevant topics to adapt, print and distribute	X		UN-HABITAT	12.000	11.215	11.215,00	11.215,00	11.215,00	11.215,00	11.215,00
	1.3.1.3 Adapt River Game material to local climate risk context	X		UN-HABITAT	13.500	12.617	12.383,00	12.617,00	12.383,00	12.617,00	12.617,00
	1.3.1.4 Develop training and technical guidelines on hazard	X	X	UN-HABITAT	13.250	12.383	1.869,00	12.383,00	8.000,00	12.383,00	12.383,00
				UNDP	33.500	31.308	0,00	31.308,00	0,00	31.308,00	7.510,06
	1.3.1.5 Field test, revise, publish and disseminate CC training materials and guidelines...applying gender sensitivity	X		UN-HABITAT	10.000	9.346	0,00	8.000,00	2.000,00	9.346,00	9.346,00
	1.3.1.6 Set criteria for selection of candidates for training of trainers	X		UN-HABITAT	2.000	1.869	935,00	1.869,00	1.869,00	935,00	1.869,00
	1.3.1.7 Training on interpretation of CC risk maps and monitoring	X	X	UN-HABITAT	9.250	8.645	0,00	8.645,00	4.750,00	8.645,00	8.645,00
			WFP	25.000	23.364	1.542,00	15.000,00	11.542,00	25.364,00	23.364,00	
1.4 Knowledge and experience sharing within the different groups (UN agencies and beneficiaries)	1.4.1.1 Field days for exchange of best practices experiences	X	X	FAO	14.806	13.837	2.056,00	8.232,03	8.232,03	14.645,03	14.645,03
				UNEP	14.000	13.084	0,00	2.876,96	2.584,83	2.688,75	2.415,73
				UN-HABITAT	8.000	7.477	0,00	6.000,00	4.000,00	7.477,00	0,00
				UNDP	6.000	5.607	0,00	5.607,00	0,00	5.607,00	4.878,35
				WFP	2.500	2.336	0,00	1.000,00	1.000,00	3.336,00	2.502,00
	1.4.1.2 Conduct on site technical sessions to share lessons learned	X	X	FAO	14.094	13.172	935,00	10.052,83	6.179,09	12.138,69	8.311,07
				UN-HABITAT	3.500	3.271	0,00	2.000,00	1.000,00	3.271,00	0,00
				UNDP	15.000	14.019	0,00	14.019,00	0,00	14.019,00	14.019,00
	1.4.1.3 Undertake community visits to other (projects) districts		X	FAO	11.406	10.660	0,00	6.900,45	6.643,61	9.905,90	9.905,90
				UN-HABITAT	2.000	1.869	0,00	0,00	0,00	1.869,00	1.869,00
2.1 National Disaster Preparedness plan and other relevant plans revised/updated to include climate	2.1.1.1 Provide technical assistance to INGC to	X		UN-HABITAT	15.000	14.019	0,00	10.000,00	4.000,00	14.019,00	7.000,00
				WFP	6.350	5.935	12.009,00	4.500,00	1.000,00	7.935,00	6.744,75
	2.1.1.2 Training programmes on environmental issues and participatory planning	X	X	FAO	42.863	40.059	0,00	18.900,00	0,00	39.452,72	39.452,72
				UNEP	80.000	74.766	24.824,00	55.526,31	49.134,11	51.893,75	33.720,73
				UN-HABITAT	3.500	3.271	0,00	3.500,00	0,00	3.271,00	3.271,00
	2.1.1.3 Prepare Hazard risk maps	X		WFP	5.650	5.280	2.944,00	5.000,00	5.000,00	6.280,00	6.280,00
2.1.1.4 Inventory map and roles of all stakeholders	X	X	FAO	23.300	21.776	0,00	17.000,00	6.000,00	12.340,57	12.340,57	
			UN-HABITAT	15.000	14.019	24.299,00	3.000,00	1.000,00	14.019,00	9.000,00	
2.2 Early warning and communication system enhanced in	2.2.1.1 Analyse availability and needs for radio communication	X	X	UN-HABITAT	8.000	7.477	0,00	7.477,00	0,00	8.000,00	0,00
				UNDP	5.000	4.673	8.237,00	4.673,00	4.673,00	4.673,00	4.673,00
	2.2.1.2 Select and implement radio communication systems	X		UNDP	5.000	4.673	0,00	4.673,00	4.673,00	4.673,00	4.673,00
	2.2.1.3 Identify appropriate technologies and equipment	X	X	UNIDO	63.130	59.000	31.565,00	47.384,00	40.000,00	55.000,00	52.000,00
			UNDP	30.000	28.037	0,00	28.037,00	697,29	28.037,00	27.622,59	
2.3.1.1 Training media and other actors in conveying reliable and	X		FAO	28.363	26.507	0,00	589,80	0,00	527,09	527,09	

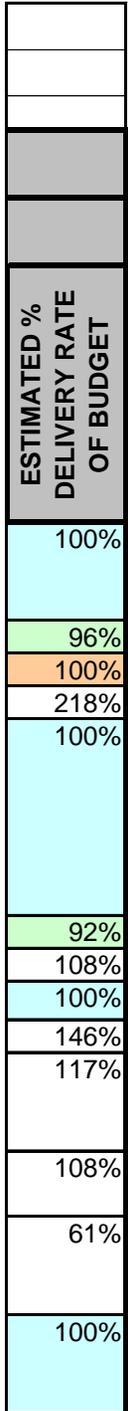
2.3 Authorities, civil society and other relevant actors trained to incorporate report on environmental and climate change risk events	Factors in conveying reliable and factual information on CC			UNDP	75.000	70.093	0,00	28.037,00	28.037,00	70.093,00	28.037,00
	2.3.1.2 Training civil society on incorporating environmental CC information into public dialogue	X	X	FAO	29.238	27.325	0,00	2.243,07	2.243,07	2.986,70	2.986,70
				UNEP	25.000	23.364	0,00	14.198,63	7.386,97	13.269,75	11.903,71
				UNDP	40.000	37.383	0,00	37.383,00	20.355,56	37.383,00	29.584,34
	2.3.1.3 Study on socio econ impact of CC on natural resources utilization & mng	X	X	FAO	23.400	21.869	0,00	0,00	0,00	0,00	0,00
				UNEP	45.000	42.056	3.496,00	34.976,96	19.936,19	32.688,75	28.631,95
				UNDP	20.000	18.692	0,00	18.692,00	18.692,00	18.692,00	18.692,00
2.3.1.4 Prepare, and publish climate change advocacy	X	X	UN-HABITAT	60.000	56.075	56.075,00	56.075,00	45.000,00	56.075,00	56.075,00	
			UNDP	60.000	56.075	10.383,00	14.000,00	13.650,00	56.075,00	13.650,00	
2.3.1.5 Organize public events and lectures on CC & implement awareness campaigns in primary schools at local level			UNDP	20.000	18.692	0,00	0,00	0,00	18.692,00	6.284,00	
3.1 Tools for climate proofing of risk zones in the Limpopo River Basin	3.1.1.1 Identify activities/initiatives for climate proofing in Limpopo Basin	X		UNEP	40.000	37.383	4.311,00	23.539,63	15.873,17	21.999,65	14.834,74
	3.1.1.2 Design & formulate a climate proofing implementation strategy, including practical mainstreaming guidelines		X	UNEP	110.000	102.804	0,00	99.176,96	54.638,89	82.688,75	60.386,38
3.2 Assessment of climate proofing approaches	3.2.1.1 Support the integration of climate proofing/CC issues in government plans	X		UNEP	40.000	37.383	2.271,00	7.889,78	5.014,96	15.373,63	7.686,88
	3.2.1.2 Organise awareness training workshops targeting		X	UNEP	120.000	112.150	0,00	2.876,96	2.584,83	42.688,75	22.415,73
3.3 Stakeholders trained on climate proofing	3.3.1.1 Develop, and conduct a training programme on climate proofing	X		UNEP	28.000	26.168	1.196,00	5.449,47	3.864,71	5.116,96	3.611,88
	3.3.1.2 Conduct training sessions on climate proofing for stakeholders		X	UNEP	30.000	28.037	0,00	2.876,96	2.584,83	27.652,75	22.386,73
Inventory of strategies and coping mechanisms currently in place by communities and in the Limpopo River Basin	4.1.1.1 Map CC coping mechanisms of communities	X	X	FAO	20.300	18.972	0,00	14.175,00	9.450,00	18.985,05	18.985,05
				UNEP	50.000	46.729	7.035,00	15.941,66	10.112,28	14.898,75	9.450,73
				WFP	4.000	3.738	0,00	2.000,00	2.000,00	3.738,00	3.738,00
				UNDP	0	0	11.208,00	0,00	0,00	0,00	0,00
	4.1.1.2 Design a strategy to implement CC coping mechanisms	X	X	FAO	20.300	18.972	0,00	2.400,00	2.400,00	2.400,00	2.400,00
				UNEP	20.000	18.692	1.080,00	4.948,48	4.656,35	4.624,75	4.351,73
				UNDP	5.000	4.673	0,00	4.673,00	4.673,00	4.673,00	4.673,00
	4.1.1.3 Select 3 communities to implement coping mechanism	X	X	FAO	86.539	80.878	80.094,00	102.366,24	92.366,24	105.680,66	105.680,66
				UNEP	50.000	46.729	0,00	51.979,26	10.173,27	32.978,75	27.932,73
				UN-HABITAT	8.000	7.477	0,00	7.477,00	5.000,00	7.477,00	5.000,00
			UNDP	5.000	4.673	10.575,00	4.673,00	4.673,00	4.673,00	4.673,00	
		WFP	18.000	16.822	0,00	15.000,00	2.000,00	16.822,00	15.139,80		

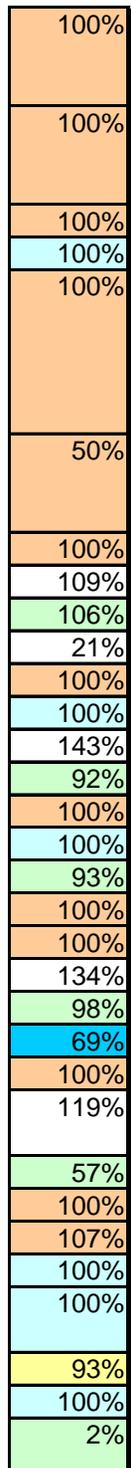
4.1.1.4	Develop and conduct a training programme for the	X	X	UNDP	10.000	9.346	0,00	9.346,00	9.346,00	9.346,00	9.346,00				
				WFP	8.000	7.477	0,00	8.000,00	8.000,00	9.477,00	9.477,00				
4.2	Community based natural forest resource management system established	4.2.1.1	Demarcation of community forest areas in Mapai			FAO	60.300	56.355	37.664,00	43.815,30	43.815,30	51.061,55	51.061,55		
						FAO	30.563	28.564	14.505,00	14.505,00	14.505,00	33.554,84	32.651,61		
						FAO	120.300	112.430	74.766,00	110.981,74	90.359,74	115.770,29	115.770,29		
						FAO	45.150	42.196	9.346,00	24.838,14	24.838,14	37.613,26	37.613,26		
						FAO	23.706	22.155	0,00	0,00	0,00	0,00	0,00		
						FAO	35.300	32.991	6.075,00	22.610,83	12.391,93	19.183,82	19.183,82		
4.3	Territorial planning mechanisms at community level introduced	4.3.1.1	Undertake applicable territorial planning strategies to cope with CC	X		UN-HABITAT	33.500	31.308	19.626,00	25.000,00	11.000,00	31.308,00	25.625,00		
						UN-HABITAT	25.750	24.065	7.944,00	8.500,00	12.444,00	24.065,00	20.444,00		
						UN-HABITAT	67.000	62.617	24.299,00	62.617,00	34.299,00	62.617,00	62.617,00		
						UN-HABITAT	69.000	64.486	15.888,00	64.486,00	17.000,00	64.486,00	64.486,00		
4.4	Agro forestry practices introduced and applied at the community level	4.4.1.1	Identify potential Agro forestry (AF) tree species	X		FAO	50.300	47.009	45.850,00	53.532,11	53.532,11	54.907,14	54.907,14		
				4.4.1.2	Introduce/ develop AF practices	X	X	FAO	34.063	31.835	3.140,00	22.206,01	22.206,01	48.628,83	42.520,83
								WFP	4.000	3.738	0,00	4.000,00	0,00	3.738,00	3.364,20
				4.4.1.3	Establish tree nurseries and trials	X	X	FAO	18.138	16.951	4.673,00	4.868,65	4.868,65	6.304,87	6.304,87
								UNDP	70.000	65.421	0,00	23.364,00	0,00	65.421,00	41.968,24
4.4.1.4	Train communities on tree seed collection and processing	X	X	FAO	49.190	45.972	27.450,00	29.382,21	29.382,21	30.201,21	30.201,21				
				UNDP	38.000	35.514	0,00	14.953,00	12.204,31	35.514,00	31.108,55				
4.5.1.1	Evaluate potential for boreholes, dams and irrigation	X	X	UN-HABITAT	20.000	18.692	41.257,00	18.692,00	20.000,00	18.692,00	18.692,00				
				UNIDO	58.850	55.000		15.000,00	0,00	55.000,00	50.000,00				
4.5.1.2	Identify, design and implement rain water harvesting	X	X	UN-HABITAT	100.000	93.458	58.879,00	88.380,35	60.000,00	93.456,00	93.456,00				

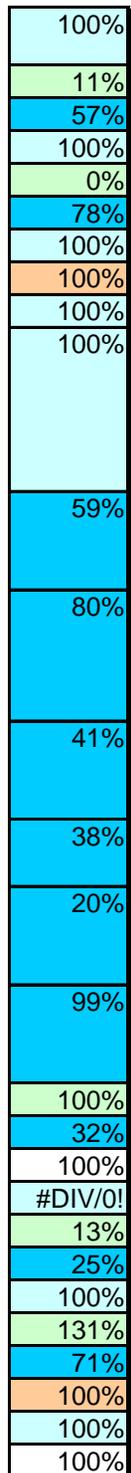
4.5 Multi purpose ir water resource mar systems crea	4.5.1.3 Support establishment of additional water facilities	X	X	UN-HABITAT	162.000	151.402	86.916,00	90.000,00	86.000,00	151.402,00	151.402,00
				UNIDO	33.705	31.500		10.000,00	0,00	31.000,00	23.145,00
	4.5.1.4 Protect water pumps and install additional water points	X	X	UN-HABITAT	49.000	45.794	6.542,00	7.000,00	6.542,00	45.794,00	4.000,00
				UNIDO	0	0	0,00	0,00	0,00	0,00	0,00
	4.5.1.5 Train local technical staff and communities on water	X	X	UN-HABITAT	105.000	98.131	16.822,00	16.822,00	16.822,00	98.131,00	67.500,00
			UNIDO	20.865	19.500	0,00	3.000,00	0,00	16.500,00	10.000,00	
4.5.1.6 Develop water resources management plan	X		UNEP	218.000	203.738	143.000,00	256.466,96	155.594,83	291.724,24	157.096,00	
4.6 Sustainable conservation agriculture practices introduced and efficiency in small scale irrigation systems improved	4.6.1.1 Soil survey and map out existing farming areas	X		FAO	35.300	32.991	32.991,00	32.991,00	32.991,00	32.991,00	32.991,00
	4.6.1.2 Assess soil potential for agriculture activities	X		FAO	55.300	51.682	28.435,00	41.824,63	28.435,00	68.544,18	49.519,18
	4.6.1.3 Review community knowledge and introduce drought resistant crops	X		FAO	66.738	62.372	28.037,00	38.722,26	38.722,26	60.114,61	60.114,61
	4.6.1.4 Identify, develop and extend irrigation system and improve efficiency of water use	X	X	FAO	77.563	72.489	83.257,00	91.723,86	87.443,86	101.661,64	101.661,64
				UNIDO	50.290	47.000	0,00	0,00	0,00	35.000,00	24.100,00
	4.6.1.5 Establish seed production and nurseries for crop multiplication	X		FAO	35.238	32.933	12.476,00	14.401,47	14.401,47	15.223,20	15.223,20
	4.6.1.6 Train community in water and small scale irrigation	X	X	FAO	26.238	24.521	12.150,00	15.434,15	15.434,15	15.434,15	15.434,15
				UNIDO	12.091	11.300	0,00	1.200,00	0,00	11.300,00	8.200,00
	4.6.1.7 Establish demonstration fields of conservation agriculture	X	X	FAO	83.738	78.260	26.989,00	60.780,64	46.236,64	63.623,55	63.623,55
			WFP	8.000	7.477	0,00	3.000,00	3.000,00	7.477,00	5.981,60	
4.6.1.8 Field days for dissemination of improved techniques	X	X	FAO	20.706	19.351	0,00	0,00	0,00	1.315,71	1.315,71	
			UNIDO	10.058	9.400	0,00	2.500,00	0,00	9.400,00	6.450,00	
4.7 Prospects of biogas generation and composting using waste manure as coping	4.7.1.1 Carry out an Inventory of solid waste management sites	X	X	FAO	39.350	36.776	0	37.800,00	37.800,00	37.800,00	37.800,00
				UNIDO	15.729	14.700	15.600,00	43.000,00	22.000,00	14.700,00	13.000,00
	4.7.1.2 Demonstration sites on waste management and composting incorporated to CC	X	X	FAO	29.300	27.383	0	0,00	0,00	0,00	0,00
				UN-HABITAT	2.500	2.336	0,00	2.336,00	0,00	1.800,00	1.200,00
				UNIDO	72.760	68.000	14.000,00	31.000,00	45.000,00	65.000,00	53.000,00
4.7.1.3 Train on waste management, manure composting and bio-digestion	X	X	FAO	12.444	11.630	0,00	0,00	0,00	0,00	0,00	
			UNIDO	34.240	32.000	2.400,00	3.500,00	2.400,00	32.000,00	13.000,00	
5.1 Options for livelihood diversification identified	5.1.1.1 Undertake feasibility study on livelihood diversification options	X	X	FAO	35.300	32.991	0,00	34.678,40	8.153,40	8.636,69	8.153,40
				UNEP	50.000	46.729	15.240,00	57.232,96	10.167,49	53.488,75	24.742,33
				WFP	8.000	7.477	0,00	4.000,00	4.000,00	9.477,00	9.477,00
5.1.1.2 Undertake in-depth feasibility studies for selected activities	X		FAO	30.300	28.318	5.664,00	5.664,00	5.664,00	5.664,00	5.664,00	

5.2 Inventory and feasibility assessment of potential renewable energy sources carried out	5.2.1.1 Identify potential renewable energy sources with feasibility studies	X		UNIDO	20.865	19.500	15.000,00	20.000,00	18.000,00	19.500,00	19.500,00
	5.2.1.2 Install five renewable energy pilot demonstration units	X	X	FAO	60.363	56.414	0,00	0,00	0,00	375,84	375,84
				UNIDO	148.730	139.000	51.000,00	100.000,00	51.000,00	139.000,00	125.000,00
	5.2.1.3 Introduction of improved stoves and assess potential to manufacture	X	X	UN-HABITAT	8.000	7.477	0,00	7.477,00	0,00	2.000,00	1.750,00
				UNIDO	42.800	40.000	2.500,00	32.000,00	28.000,00	25.000,00	14.650,00
				WFP	1.500	1.402	0,00	0,00	0,00	1.402,00	1.261,80
5.2.1.4 develop and conduct atraining programme for	x	x	UN-HABITAT	23.000	21.495	0,00	13.000,00	0,00	13.000,00	0,00	
			UNIDO	12.305	11.500	0,00	4.000,00	2.500,00	11.500,00	6.600,00	
5.2.1.5 Identify productive uses that can use renewable energy for income generation	X	X	UNIDO	96.535	90.220	16.000,00	59.865,00	68.000,00	75.000,00	60.000,00	
5.3 Animal husbandry grazing and veterinary service coverage improved	5.3.1.1 Construction of infrastructure for cattle	X		FAO	60.238	56.297	28.037,00	31.584,03	31.584,03	32.087,62	32.087,62
	5.3.1.2 Determine/evaluate seasonal amount of biomass available	X		FAO	35.300	32.991	10.935,00	11.563,93	11.563,93	11.563,93	11.563,93
	5.3.1.3 Provide technical advise on livestock management	X		FAO	35.063	32.769	17.664,00	18.226,30	18.226,30	18.452,03	18.452,03
	5.3.1.4 Strengthening the production of small stock	X		FAO	38.363	35.853	20.467,00	21.190,92	21.190,92	41.352,98	41.352,98
	5.3.1.5 Train communities on livestock management	X	X	FAO	55.063	51.461	46.104,80	46.697,21	46.697,21	46.697,21	46.697,21
				UNIDO	28.890	27.000	0,00	21.880,00	17.500,00	27.000,00	17.000,00
5.3.1.6 Support veterinary services for disease prevention and control	X		FAO	57.738	53.961	32.150,00	32.150,00	32.150,00	33.457,06	33.457,06	
5.4 Agro-processing and marketing activities developed	5.4.1.1 Develop marketing activities for agriculture and animals and its by-products	X		FAO	38.638	36.110	0,00	0,00	0,00	0,00	0,00
	5.4.1.2 Upgrade existing cattle slaughter and butchery facilities	X	X	FAO	55.300	51.682	13.458,00	13.458,00	13.458,00	72.355,16	31.628,27
				UNIDO	0	0	6.795,00	10.320,00	9.000,00	0,00	0,00
	5.4.1.3 Develop and implement a business plan for public private			FAO	36.094	33.733	0,00	0,00	0,00	0,00	0,00
UNIDO				0	0	0,00	0,00	0,00	0,00	0,00	
5.5 Use of animal traction promoted to	5.5.1.1 Train farmers in the use of animal traction for crop production and transport of goods	X		FAO	48.817	45.623	22.088,00	31.684,60	31.684,60	40.684,60	40.684,60
<b>TOTAL</b>					<b>5.232.004</b>	<b>4.889.724</b>	<b>1.603.216,94</b>	<b>3.271.401,41</b>	<b>2.336.002,81</b>	<b>4.240.948,04</b>	<b>3.454.030,86</b>
FAO					1.918.911	1.774.683	727.457	1.118.104	967.199	1.367.299	1.284.009
						124.228	50.922	78.267	67.704	95.711	89.881
						20.000	20.000	20.000	20.000	20.000	20.000



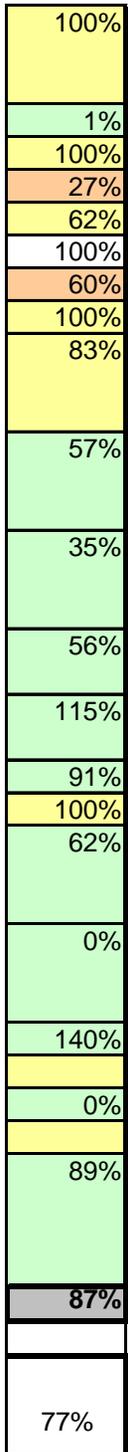






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