Annex 14 - Operation & Maintenance Plan

This annex provides additional information on the Operation and Maintenance of the physical assets that are going to be built/rehabilitated or purchased by the WFP-Government of Mozambique during and after the project implementation timeline. The Plan has a validity of 10 years. It contains the following sections:

1. List of eligible assets to be built/rehabilitated by the project
2. List of assets to be purchased by the project
3. Measures for community asset maintenance
4. Measures for purchased asset maintenance

# Eligible assets to be built/rehabilitated by the project

Through project design consultations with communities and technical experts a list of assets to be built/rehabilitated has been developed. Through the Environmental and Social Screening of the project proposal, the list of assets was revised further to ensure no environmental and social risks are incurred by the project. This refined list is shown in table 1.

Notably, Community-based Participatory Planning (CBPPs) exercises will be conducted closer to the implementation stage to adapt to the asset development plan to each community.

## Table 1. List of eligible activities

|  |  |  |
| --- | --- | --- |
| **Eligible activities** | | |
| **Activity category** | **Description** | **Intervention level** |
| Project setup | Farmers' Clubs | Community |
| Project setup | Village Saving and Loan groups | Community |
| Agriculture | Conservation Agriculture techniques | Household/ Community |
| Agriculture | Preparation and application of compost | Household/ Community |
| Agriculture | Introduction of new cash crops or drought-resistant crops | Household/ Community |
| Agriculture | Creation of additional vegetable gardens at household level | Household |
| Agriculture | Creation of additional vegetable gardens at community level | Community |
| Agriculture | Construction of community post-harvest structures (surface<25m2) | Community |
| Agriculture | Training | Community |
| Forestry | Introduction of energy saving stoves | Household |
| Forestry | Introduction and cultivation of fruit trees | Household/ Community |
| Forestry | Reforestation with native vegetation | Community/watershed |
| Forestry | Production of green charcoal | Household |
| Forestry | Training | Community |
| Land reclamation | Stabilization of land with vetiver | Community/watershed |
| Land reclamation | Reclamation of gullies with Brush Check dam (height<2m) | Community/watershed |
| Land reclamation | Reclamation of gullies with sand bags, dry stone, or gabbions | Community/watershed |
| Land reclamation | Protection of river bank with sand bags, dry stone, or gabbions | Community/watershed |
| Land reclamation | Land demarcation | Community/watershed |
| Land reclamation | Training | Community |
| Water management | Community water ponds for irrigation/livestock use constructed (volume<1000m3) | Community |
| Water management | Water tanks for irrigation/livestock use (volume<20m3) | Community |
| Water management | Small-scale irrigation using river or stream diversion (withdrawal<100m3/day AND diversion<10% of water flow) | Community/watershed |
| Water management | Rock catchments or dams in gullies and small rivers (<2m in height) | Community/watershed |
| Water management | Hand-dug water wells for irrigation and/or livestock (depth<5m and withdrawal<100m3/day) | Community |
| Water management | Creation of *zai* and planting pits | Community/watershed |
| Water management | Training | Community |
| Livestock | Creation of forage and fodder production sites | Community |
| Livestock | Creation or rehabilitation of animal handling (cattle crush) facilities established | Community |
| Livestock | Creation of feed storage facilities (surface<20m2) | Community |
| Livestock | Training | Community |

# Assets to be purchased by the project

In line with the budget and procurement plan of the project, table 2 enlists the assets to be procured by the project, which will require maintenance beyond the project cycle.

## Table 2 List of assets to be purchased

|  |  |
| --- | --- |
| **Assets to be purchased** | |
| **Asset category** | **Description** |
| Vehicles | Motorcycles for extension officers (3) |
| Equipment | Automated weather station (1) |
| Equipment | Rain gauges (50) |
| ICT | Radios (1,000) |

# Measures for community asset maintenance

The following are the different mechanisms that will be used by the project to ensure the maintenance of the assets developed/rehabilitated by the project:

1. DUAT – individual assets

DUAT stands for *Direito do Uso e Aproveitamento de Terra,* or right to use and benefit from the land. This is a land use certificate that enable individuals or legal entities to use land for up to 50 years. DUATs are necessary as the land in owned by the state, not by an individual. DUATs are free to smallholder farmers who will use the land for their food security and basic livelihood activities. Only businesses and for-profit entities (which can include farmer associations) need to pay for DUATs. Alongside, DUATs are customary land rights, whereby the community members and leaders jointly agree to the use of an individual of a specific land. In the project areas, the customary system prevails.

The project will raise awareness about DUATs to create an incentive for people to invest and stay in the land for longer. DUATs are under the mandate of MITADER. So, MITADER will ensure that they undertake the right actions to meet the new, additional demand, that the project may generate. Where DUATs are not deemed desirable by the communities, the project will still raise awareness about the need to invest and stay in one plot for longer, helping with the sustainable management of the community resources.

1. Social Contracts – community assets

Social contracts are signed with the communities, the community leaders, and project to establish the community land that will be used for community level activities. The social contract not only makes the land available for work (for a specified period), upon consensus of all relevant stakeholders, but also establishes how the asset should be developed and maintained over time (including beyond the project cycle). In addition, the social contract ensures that the community is the recognized owner of the asset, minimizing confusion over who is responsible for maintenance of the asset. Social contracts are standard practice in WFP projects, translated to local language, and presented at the beginning of the project to all members of the community, before it is signed. Copies of these are kept with all the key stakeholders from the project for reference.

1. Asset Committee – community assets

The Committee serves as focal point for both community members and project staff. Communities elect community committees of 6-8 members. The committee should have 50% representation of women (at least) and include influential and well-respected members of the community from different institution. The committee must represent the interest of all groups in the community. The committees are responsible for informing participants of Complaint and Feedback Mechanisms, verify the beneficiary selection, assist with beneficiary registration, and the for leading work on asset development/rehabilitation. Beyond the project cycle, the committee continues. Their roles shift to supporting the maintenance and sustainability of the asset generated. As such, committee members continue to coordinate the input of the community when it pertains to the asset. This work is accompanied by plans that are developed throughout the project cycle and trainings delivered.

1. Local Adaptation Plans (LAPs) & Strategic Plans for District Development (SDDS) – all assets

Local Adaptation Plans (LAPs) are being developed to implement activities under the [National Strategy for Climate Change Adaptation and Mitigation](http://www.cgcmc.gov.mz/en/policy-and-strategies/148-national-adaptation-and-mitigation-of-climate-change-strategy) with the aim of building the medium- and long-term adaptive capacity of local communities. The Ministry of Land, Environment and Rural Development (MITADER) is involved in the process of drawing up these plans to support the Strategic Plans for District Development (SDDS), in partnership with local government (district and provincial) and development partners. LAPs set out climate vulnerabilities in relation to local capacity. In the plans, districts and communities put forward their vision of development in the context of climate change and outline the interventions needed to achieve this vision. For this reason, the activities developed by this project are to be embedded into these, ensuring their sustainability.

1. Community-based Participatory Plans – all assets

CBPPs are done at the beginning of the project cycle. The output is a Community Action Plan (CAP), which outlines clear priorities for resilience activities to be implemented. The CAP has a medium/long term vision, covering 5 years. CAPs can be updated based on the changing context/priorities. This offers the opportunity to change activities to ensure that once established, assets are maintained as part of a community strategy. This helps inform the approaches outlined in 1, 2, 3, and 4, especially when it pertains to the period beyond the project cycle.

1. Associations – some community assets

There are cases where the assets that are produced are linked to income generating activities, that render benefits to a group. In this context, associations are fitting to establish a mechanism to manage the income generated. This is the case for community gardens and wood lots. The groups are established within the project, much like the asset committees and are supported to manage the financial resources stemming from the assets, as well as to re-invest these in the asset, as needed for maintenance and sustainability.

# Measures for purchase asset maintenance

By asset the measures are outlined for the purchases under the project.

1. Automated Weather Station

One AWS has been budgeted under this budget. This is because there are no AWS that current cover the target project areas. This is also founded on discussions with the National Meteorological Institute (INAM) about the utility of the AWS for the project, but also for the country as a whole. In this context, the project is assuming responsibility over the procurement of the station, as well as the associated costs for installation and maintenance of the station during the project cycle. Data transmission costs have also been factored into the project. However, beyond the project cycle, INAM has assumed responsibility for the AWS, making it an internal part of its observational network, and thus, budget. As such, the specifications of the INAM observational network and equipment have been used to inform the procurement plan and will be used to guide maintenance of the equipment. As needed, INAM will receive additional training on the use and maintenance of the AWS from the supplier. The supplier also issues a warranty that will help beyond the project cycle.

1. Rain gauges

Like the case of the AWS, discussions were first held with INAM about the need for rain gauges. Once the need was established, there was a discussion about how the rain gauges would be integrated into the observational network and regular INAM work. This was supported by an assessment of the observational network and transmission systems in place. Upon a satisfactory review, the project accepted the integration of both rain gauges and AWS.

Procurement will be informed by guidance issued by the the World Meteorological Organization, as well as INAM specifications, fitting to the local context. Based on this, the project has decided to procure metal and copper rain gauges that have proven to be durable in the Mozambique context. The installation costs have been accounted for in the budget of the project, including INAM technical support to these activities. Additional inputs for the installation have also been factors such as cement and metal posts to fix the rain gauge structure. Additional rain gauges and installation materials have been accounted for in case of damage and loss of the equipment. This is a contingency measure. The rain gauges will be installed in public places, schools or government offices, which are protected and allow for regular access by extension officers. Trainings will be held for those required to log the data from the rain gauges and to take care of them. Community members will also be trained on this, so they can also follow up, if needed. Beyond the project, INAM will assume full responsibility, as part of its observational network.

1. Motorcycles

MASA has 1 extension officer by locality. In the targeted districts, this would mean that 8 to 9 extension officers would be needed to cover the whole district. In this context, it also means that a single extension officer has to reach over 300 farmers in widespread localities. Motorcycles are needed to be able to access these areas, but not all extension officers have one. As part of the project design, discussions took place with MASA about this limitation in mobility. MASA requested 1 motorcycle per target district to allow extension officers to have the interaction planned with the farmers. Agreement was reached on this, based on commitment from MASA that they would handle costs that are associated with the motorcycles, beyond the project cycle. This means that the motorcycles would be integrated into the MASA budget. Upon hand over of the motorcycles, MASA will have to sign a commitment document, recognizing this responsibility.

1. Radios

Dissemination of information is a key activity across the project. Radio is a common platform used in the targeted areas to access information. However, not everyone owns a radio. The project aims to procure radios for distribution among the communities to overcome this challenge. The project intends to procure solar-powered radios that are commonly used in hard terrains, which is fitting with the context. The radios will be distributed to committees, over individuals to ensure that the group is in a position to benefit from the radio, but also to take care of the radio. It would be the committee leader, who is ultimately responsible and who would have to be held accountable by the community members. Accordingly, they will receive trainings on the adequate use and storage of the radio. Committees will leverage their funds to support any repairs that may be needed.

INAM will be responsible for the sustainability of the radio programme. INAM has a strategy for the period 2018 to 2025. This is in line with the current project. Under the strategy, INAM has four strategic objectives, specifically: 1) improve climate services based on better information, capacities, and tools at national, provincial, and local levels, 2) share climate services with decision makers to ensure that the information is used to guide decisions, 3) enhance academic partnerships to enhance research and skills, and 4) help meet global and regional commitments related to the weather and climate. The radio programme is an initiative that falls under strategic objectives 1 and 2. Under strategic objective 1, this is being addressed by the area of work on enhanced access and availability of climate services for public and private sector, which is informed and guided by a business plan. Under strategic objective 2, this is being addressed by the area of work on improved communications, whereby a communication strategy is being developed, considerate of different forms of media, including radio and television. To further cement this commitment, WFP will ensure that INAM integrates the radio programme into their core work through the MOU. This will ensure that after the project cycle ends their commitment on the radio programme will continue as guided by their strategic plan.