

**SESA for REDD+ Mozambique
Strategy Option Scenarios
Issues and Recommendations**

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National REDD + Strategy Options for Mozambique

- **Land tenure, carbon rights and benefit sharing;**
- **Community-based forest management (formal and customary);**
- **Promotion of private forestry;**
- **Government managed forests for conservation of biodiversity and maintenance of fragile ecosystems and land;**
- **Conservation of biodiversity and ecosystem services outside Protected Areas;**
- **Payment for ecosystem services;**
- **Agriculture productivity and food security for small and marginalised farmers;**
- **Environmentally-friendly infrastructure planning, construction and maintenance;**
- **Forest and non-forest enterprises;**
- **Law enforcement;**
- **Good governance and anti-corruption;**
- **Land use planning for each of the physiographic regions; and**
- **Institutional framework**

Fundamental Considerations for Rural Mozambique

- **As a result of the extreme poverty in the region, forest resources are critical to the survival of many members of communities living near the national parks in Cabo del Gado and Zambezia.**
- **Families often rely upon forest resources for everything from food and medicines to the raw materials needed to build their homes and furniture.**
- **Unless the dynamic of poverty can be changed, it will be difficult for families to stop relying upon forest resources for their day to day survival.**

REDD Scenarios for Consideration

REDD **Scenario Options** derived from **Verified Carbon Standard (VCS)**
Association and Conservation International

Project Developer's Guidebook to VCS
REDD Methodologies (Shoch et al. 2011)

We present the:

- Scenario Option as presented in Shoch et al (2011);
- **Suggest an existing project or concession in Mozambique that fits the scenario;**
- Identify environmental and social issues based on consultation and baseline studies;
- Make recommendations based on consultation, baseline studies, and team expertise;
and
- Identify potential Policy Implications of implementing the scenario in MZ following the team recommendations

*Scenarios can be combined to fit
real world conditions*

SCENARIO 1 – Illegal Deforestation of a Forest Authorized for Conversion

- Intact forest threatened with deforestation, illegal logging, and rotating subsistence agriculture.
- Government seeks to protect the area by enforcing the property boundary

Community Consultation:

- Men need to gather materials/resources illegally from within the preserve area/protected area
- The preserve is within 3 km of their homes
- The buffer zone area is as much as 8 to 10 km away, and resources are depleted there now
- Have an awareness of the need for sustainable use of the forest
- Do not have an alternative for resources that they can rely upon
- Money from carbon trading would not outweigh money from illegal logging; or even legal logging
 - Not much incentive for them to change their behavior
- Need to manage how **Tourist and Hunting Concessions** use the preserve area. Community observed concession staff entering preserve area for wood cutting/gathering. Concession uses wood from preserve area so that their own concession remains pristine.

Recommendations

- Buffer zone needs to be managed for forest recovery (Coert's strategy)
- Create sustainable agricultural practices in the buffer zone for people living in the area
 - Composting programs for fertility; co-ops for cash crops (managed by women's groups)
- Stop use of protected forest preserve resources by concessions
- 17% IVA on farming equipment makes it difficult for some people to participate in commercial agriculture

Institutional Implications

- Issue of enforcement of preservation of the boundary in the Forest Law and in Land Law
- Change **tourism law** so if tourists or hunters are doing something illegal in the protected area, concession is penalized

Gilé National Reserve (GNR), Zambezia

2,860 km², mainly comprised of miombo forest

- **Protected area**
- **Buffer Zone**
- **Development Zone**

SCENARIO 2 – New Highway Construction through a Remote Forest Area

- New highway will impact pristine area
- (can also consider railway or other linear feature such as transmission lines, water lines)

Issues

- Direct impact to forest destroyed by the construction of the linear feature
- Will facilitate access along the newly opened road, railroad, transmission line
- Can facilitate illegal logging, charcoal production, fuel wood collection
- For roads, can facilitate people moving into areas not formerly developed --- direct impacts from new development, secondary impacts from use of forest resources around the new development

Recommendations

- Require analysis of alternatives that avoid forest
- Coordinate with Bio-fund
- Require project proponents to pay biodiversity offsets
 - Offset money goes to protected areas or conservation areas
- Biodiversity offset costs need to be high enough to provide a real incentive for proponents to adopt other build alternatives that do not destroy pristine forest

Institutional Implications

- Because government projects are evaluated by the ministry, at times there is a conflict to push project through without balanced consideration of environmental or social issues.
- Ensure balance in consideration of environmental and social impacts against economic objectives and incentives

Proposed Port project in Macuse District in Zambezia, New Port Project in Cabo Delgado, result in Construction of:

- a Port,
- a railway running 1070 kilometers from the Port to the coal mine in Moatize in Tete province,
- development of the coal mine and local support infrastructure.

SCENARIO 3 – Forest Conservation with the Introduction of Sustainable Forest

Management

- A forest area is under threat of deforestation by local communities who are clearing land for shifting agriculture.
- Engage communities in authorized sustainable forest management for commercial timber production,

Issues

- How to successfully co-ordinate all forest users for sustainable management of the forest
 - Everyone needs to benefit from the system in order for them to co-operate and participate
- MZ forestry program emphasizes plantation forestry and does not emphasize healthy management of MZ indigenous forests
- Need timber inventory at country level, provincial level and concession level

Recommendations

- Logging – try to ensure use of more of the tree than just the section suitable for timber – use the branches and crown so there is not so much waste. Encourage community management of systems.
- Use wood and plant resources in the understory
 - charcoal production, wood carving, medicinal plants, other uses
- Allow farmers to practice agriculture in the newly cleared area for a short period of time (2-4 yr)
- Allow controlled burning for regeneration of trees and bush – enhances biodiversity
- Establish a foundation for charcoal production where local people can benefit from the process (Charcoal Co-op)
- training and awareness raising so that people along the process chain understand why

Institutional Implications

- Establish a Forestry policy so wherein trees cut for timber are used more effectively, and understory is managed effectively,
- Curriculum change at the university to teach sustainable forestry management of Miombo forests
- Potentially the proposed new FUNAB development group to help co-ordinate and manage community involvement in forest management

Quirimbas National Park (QNP), Cabo Delgado Province

7,506 sq. Km, of which 5,984 sq. km are terrestrial and 2,122 sq. km are coast line and marine.

Mainly comprised of Miombo woodlands, coastal forests

SCENARIO 4 – Selective Illegal Logging on an Authorized Logging Concession.

- Illegal logging focused on scattered high value species is taking place in the area, and the concession holder seeks to improve enforcement of the concession boundaries to prevent the entry of illegal loggers.

CTC-Catapu Project,

25,000 hectare forest concession, Catapu, Sofala Province

- use hardwoods, e.g. Panga Panga, Mutondo to make handcrafted furniture

(need to evaluate successes from community perspective)

Issues

- Government has not consistently paid the 20% of the concession tax to the communities that is supposed to go to them as an incentive to not use the forest illegally
- Because the community does not receive their payments, there is no incentive for them to not use the forest as they would traditionally, or to assist illegal loggers in identifying high value trees and harvesting them

Recommendations

- Have concessions pay equivalent of 20% tax directly to the community
- Establish a community committee (including forest users) to manage the 20% fund for the benefit of the community – schools, clinics, hire doctors and/or nurses to work in the clinic
- Evaluate the CTC-Catapu Concession Management Practices and apply these practices elsewhere

Institutional Implications

- Need an independent institution or organization to manage the money that would go back into the community. Potentially the proposed new FUNAB development group could manage the money that comes in from the 20% tax for development programs. (80% to agriculture, 20% to FUNAB rural development group)
- Provincial directorate of agriculture/MITADER would provide oversight to the process.
- UT REDD + to influence forestry so that concessions are used better for conservation biodiversity, and for benefit of the communities

SCENARIO 5 – Legal Deforestation followed by Plantation Forestry.

Florestal de Niassa, in Niassa Province
(> 50,000 hectares)

- A conservation organization acquires and protects an area of native forest that had been permitted for conversion to Eucalyptus plantations, thereby preventing the cutting of native forest.
- Considered Improved Forest Management (IFM) Logged to Protected Forest (LtPF) and not REDD strictly speaking; other formulas used to evaluate carbon value

Issues

- Don't take natural forests to develop plantations for pulp or other economic uses
 - this is occurring in Zambezia and Niassa by Portugese and by the Swedish Church and Green Resource (Scandinavian)
 - Government supports these developments for job creation, but reality is many jobs go to outsiders (short term employment in initial clearing), and for tax incentives,
- Communities see plantation forestry as an issues of large scale degradation of the environment

Recommendations

- Evaluate Brazilian model and see if it can apply in MZ. In Brazil they plant trees for pulp in cleared/deforested areas. Communities help manage the plantation in return for direct pay from the plantation; also receive payment at 7 year term when trees are cut and harvested for pulp. The plantation is then replanted, and process begins again.
- Need to evaluate how introduced species may effect ecology of indigenous species. If possible, plant indigenous species in plantations

Institutional Implications

- In the licensing process ensure review of management plan, make sure that non-specialized positions are filled with local unskilled laborers; also ensure gender issues are addressed by the labor plan.

SCENARIO 6 – Degradation Preceding Deforestation

- A forest area is subject to progressive degradation over time from illegal logging and fuel-wood collection, charcoal production, and fires encroaching from adjoining pasture lands that are periodically burned. Degradation eventually leads to total loss of forest cover and conversion to pasture, where continuous grazing pressure prevents natural reestablishment of forest.
- Improve pasture management and develop fast-growing fuel wood plantations to ease stress on the forest

**Mozambique Leaf Tobacco
Tete, Niassa, Zambezia,
Manica and Cabo Delgado**

Issues

- Selective logging of individual trees prevents regeneration of the harvested trees and other species in understory
- Over harvesting of individual species before seed production can result in loss of species
- Within miombo forest – forest can regenerate from root stocks, as long as root stock are left intact
- Managed charcoal production and fuel wood collection can regenerate forests
- Need to evaluate how large scale agricultural and mining developments contribute to degradation and deforestation, and not focus exclusively on small scale farming and illegal logging. See Scenario 2.

Recommendations

- Need to enforce legal logging laws to prevent over harvesting of individual species
- As with Scenario 3, coordinate logging with harvesting fuel wood, charcoal production and agriculture in newly cleared areas
- As with Scenario 5, need to evaluate how introduced species for plantations may effect ecology of indigenous species. If possible, plant indigenous species in plantations
- Evaluate pasture management models for southern Africa to control for overgrazing

Institutional Implications

- In the management of all forests, take into account the forest ecology rather than having a blanket policy and management plan directed to all forests in the country

SCENARIO 7 – FOREST CONSERVATION IN A WELL-PROTECTED AREA

Parque Nacional da Gorongosa

4,067 km², Sofala Province

- In 2012, the UNFCCC proposed methods for providing compensation for on-going conservation of protected areas under REDD +, including market and non-market options (UNFCCC 2012).

Recommendations

- Keep natural forests dynamics by allowing tree falls
- Allow natural fires to occur within the forest, but manage so they do not burn out of control
- Have controlled burns in the forest to manage forest succession
- Understand ecological system that is being conserved, as each system requires an appropriate management approach
- Have fire breaks (at recommended distances between breaks for forest composition and topography)

Institutional Implications

- Evaluate forest law to see if there is potential to modify the law to have controlled burns, some controlled cleaning of understory, collect smaller branches for other uses.
- Ensure community involvement in management of forests so that they have an incentive and an interest in managing the forest.

Obrigada



Families often rely upon forest resources for everything from food and medicines to the raw materials needed to build their homes and furniture.

Key Issues

- Create sustainable agricultural practices in the buffer zone for people living in the area
 - Composting programs for fertility; co-ops for cash crops (managed by women's groups)
 - Everyone needs to benefit from the system in order for them to co-operate and participate
- 17% IVA on farming equipment makes it difficult for some people to participate in commercial agriculture
- Evaluate tax law to make it easier for small farmers to participate in production of cash crops.

Key Issues continued

- Evaluate forest law to see if there is potential to modify the law to have controlled burns, some controlled cleaning of understory, collect smaller branches for other uses.
- Ensure community involvement in management of forests so that they have an incentive and an interest in managing the forest.
- Need an independent institution or organization to manage the 20% tax money that would go back into the community. Potentially the proposed new FUNAB development group could manage the money that comes in from the 20% tax for development programs. (80% to agriculture, 20% to *FUNAB rural development group*)
- UT REDD + to influence forestry policy so that concessions are used better for conservation biodiversity, and for benefit of the communities
- MZ forestry program emphasizes plantation forestry and does not emphasize healthy management of MZ indigenous forests; establish curriculum at university to teach management of natural forests