

## **BRIEF REPORT OF A STUDY TOUR TO BRAZIL ON REDD EXPERIENCE**

### **1.0 Background**

Deforestation and forest degradation is the cause of around 18% of greenhouse gas emissions responsible for global warming. CO<sub>2</sub> emission can therefore be reduced through reduction of deforestation particularly in the tropics. In this regard, Tanzania has embarked on establishing Reduced Emissions from Deforestation and forest Degradation (REDD) initiative. In order to undertake REDD initiative, it is imperative to have the National REDD Strategy in place. The National REDD strategy is the document that will guide the implementation of REDD initiative in Tanzania. The process of developing National Strategy as part of the REDD readiness is funded by the Royal Norwegian Government.

The Vice President's Office – Division of Environment (VPO-DoE) and Ministry of Natural Resources and Tourism – Forestry and Beekeeping Division (MNRT-FBD) appointed National REDD Task Force to oversee development of National REDD Strategy and implementation of REDD activities in Tanzania. Furthermore, The Institute of Resource Assessment (IRA) was selected as a secretariat to the National REDD Task Force to facilitate the whole process. It is in this context that the secretariat organized a ten days study tour for some National REDD Task Force members and policy makers to Brazil from 20<sup>th</sup> – 29<sup>th</sup> May 2009. The terms of reference for this study are attached as Appendix 1.

Delegation was lead by Hon. Dr. Batilda S. Burian, Minister of State – Vice-President Office (Environment) who was accompanied by the following government senior officials:

1. Mr. Ali Juma Hamad – Ministry of Agriculture, Livestock and Environment-Zanzibar,
2. Mr. Freddy K. Manyika – Division of Environment, Vice-president Office, and
3. Mr. Christognus A. Haule – Division of Forestry and Beekeeping-Ministry of Natural resources and Tourism.

### **2.0 History of the Amazon Fund**

The Amazon Fund is a Brazilian initiative to contribute to the reduction of emissions from deforestation and forest degradation. The fundraising mechanism of the Amazon Fund is based on the results achieved in the reduction of emissions from deforestation in the Brazilian Amazon. The rationale of the Fund follows the Brazilian proposal presented at the 12<sup>th</sup> Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC), in Nairobi, Kenya, 2006.

The Amazon Fund is a private fund managed by the Brazilian Development Bank (BNDES) according to guidelines and criteria set by the Steering Committee that include representatives from federal and state governments, NGOs, social movements,

indigenous people, scientists and industries. From 2008 to 2011, the federal government has invested roughly US \$ 500 million in initiatives to reduce deforestation and promote conservation in the Amazon.

## **2.1 Purpose of the Amazon Fund**

- a) Invest in actions from government and non-government organizations to control and combat deforestation and to promote the conservation and sustainable use of forests including:
  - Protected Areas and Public Forests,
  - Environmental monitoring and control,
  - Combat of Illegal logging,
  - Sustainable Forest Management,
  - Biodiversity Conservation, and
  - Reforestation and Restoration of Forest Ecosystem
- b) Invest on the transfer of technology and experiences to other tropical forestry countries and other biomes in Brazil. *(up to 20% of the funds)*

## **2.2 Objectives of the Amazon Fund**

### **2.2.1 The main objective**

The main objective of the Amazon Fund is to combat deforestation and promote conservation and sustainable use in the Amazon biome. Additionally, the Amazon Fund focuses on the following:

- Raise funds to be used in projects that combat deforestation and promote conservation and sustainable use in the Amazon biome.
- Promote the implementation of deforestation monitoring and control systems in the Brazilian biome and other tropical countries.
- Contribute to the achievement of the goals of the National Plan on Climate Change, in special Goal 4: reduction of deforestation rate by 40% in the period of 2006-2009, in comparison with the average deforestation rate of the period of 1996-2005, and 30% reduction in the next two following quadrennial periods.

The Funds of the Amazon Fund may be invested in projects related to prevention, monitoring and combat of deforestation, as well as to the promotion of forest conservation and sustainable use in the Amazon biome. Funds may be also applied in the development of deforestation monitoring and control systems in the Brazilian biomes and in the tropical countries. The projects may be submitted by public institutions, state-owned companies and non-governmental organizations and must be included in at least, one of the following modalities:

- Public Forests and Protected Areas (Environmental Services and management).

- Sustainable Production Activities.
- Scientific and Technological Development Applied to the Sustainable Use of Biodiversity; and/or
- Institutional Development and Enhancement of Forest Management Mechanism.

### **2.2.2 Strategic Objectives**

The strategic objectives of the Amazon fund are:

- To demonstrate that international negotiations on REDD initiatives can be effectively put into place.
- REDD initiatives will attend the principles of effectiveness, efficiency and equity when they privilege scale, cost-effectiveness and equity.
- To demonstrate initiative for assisting negotiations of deforestation reduction in “wholesale” scale.

## **3.0 Key requirements of the Amazon Fund and other necessary considerations**

### **3.1 Awareness Creation**

Awareness at all levels on the importance of establishing fund is a pre-requisite condition for smooth operationalization of the fund. Even though the Amazon fund started about three years ago, some challenges still exist in which a solution is inevitable.

### **3.2 Fund-Raising**

Fund raising for the Amazon Fund carried out by the Brazilian Development Bank (BNDES), which also operates as Fund Manager. The fund raising activity is based on reduced emission from deforestation in the Amazon. The annual collection limits are determined by the amount of emission reductions attested by the Technical Committee.

### **3.3 Source of funds**

Any and all voluntary individual, company or institute, including foreign governments, interested in contributing to the reduction of carbon emissions from deforestation may donate to Amazon Fund. One of the important pre-requisite for funding raising on emission reduction is that donors should have the assurance that the donations is based on real reduced emissions from deforestation and the warranty, by external auditors, that the fund’s resources shall be invested in the continuous reduction of future emission. Donors receive the certificate which is non transferable and does not grant them ownership rights or any kind of credits.

### **3.4 Fund raising mechanism**

This is done by Brazilian Development bank which mobilizes fund from various donors with provision of certificate as incentive. The amount of fund raised is equated with the amount of carbon reduced. For the period of 2008 – 2009 the standard price for carbon

was US\$ 5 per ton of carbon. Future price may change according to the fund dynamics in order to ensure an adequate resource flow to future deforestation reduction. The estimated amount of fund to be raised from 2009 – 2011 is US\$ 1 billion.

### 3.5 Fund governance

Amazon Fund management basically involves integrated procedures and decisions developed by its three main bodies (see figure 1):

- Steering committee – Responsible for definition of strategic guidelines and criteria for the fund application. The committee is constituted by representatives from the government, civil societies, and Brazilian legal Amazon.
- Technical committee – Established by the Ministry of Environment to certify the data and calculation of the avoided emissions from the reduction of deforestation rates in the Brazilian legal Amazon.
- Fund Manager – The Brazilian Development Bank which is the state owned and state controlled financial institution. Apart from this fund a bank is also manager of other funds such as Workers supporting fund, National Development fund, Communication fund, Export Guarantee fund and Guarantee fund for competitiveness.

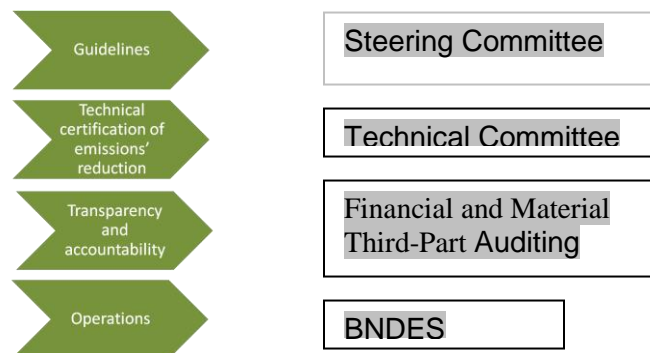


Figure 1: Main Bodies of Amazon Fund

### 3.6 Auditing of Fund

This is undertaken by external auditor in order to verify proper funds utilization and implementation. Use of external auditor brings transparency and confirmation of the effective application of the Fund resources. The overall auditing aims at checking if the application of the Amazon Fund resources correspond to its purposes and the guidelines and criteria established by the Steering Committee, as well as if the projects outputs conform with the Sustainable Amazon Plan and with the Plan for the Prevention and Combat of Deforestation in the Amazon.

## **4.0 Principles of Amazon Fund**

The following are the principles of the Amazon Fund:

- Consistent and simple
- Low transactional cost
- Based in real reduced emissions
- Participatory
- Forests are assets which hold economic, social, and environmental value
- Conserving the forests achieve local and global goals of sustainable development
- The best strategy to conserve the forests is to assume its total value when formulating policies
- Local population should be benefited by initiatives to conserve the forests.

## **5.0 Methodology for Quantification of Reduced Emissions from deforestation**

### **5.1 Estimation of reduced emissions from deforestation**

Deforestation reduction rates are estimated by a simple method, easy to understand and verify. Carbon emission reduction estimates are a function of (1) the annual deforestation rate measured by the National Institute for Space Research (INPE), (2) the average historical deforestation rate, and (3) estimates of the forest carbon stock determined by the Brazilian Forest Service.

The data and calculations are validated annually by the Amazon Fund Technical Committee, composed of highly qualified notables from the scientific and technological community, appointed by the Minister of Environment upon indications from the Brazilian Climate Change Forum. To make it easy, conservative approach to avoid Monitoring and Accounting complexity is used as follows:

- Emissions = Deforested Area (ha) x TonC/ha
- Deforested Area = Satellite Monitoring Methodology (PRODES)
- TonC/ha = below minimum reference value in the literature (120 to 350 tonC/ha)
  - ◊ project will use 100 tonC/ha
  - ◊ The PRODES calculation methodology is estimated under a digital image categorization system, and its main advantage lies on the precision in georeferencing deforestation polygons and on its multitemporal geographic image database.

### **5.2 Validation**

The validation of the amount of avoided emissions estimated by the Ministry of the Environment is fundamental to the transparency intended for the Amazon Fund and ensures that the funds raised correspond in fact to CO<sub>2</sub> emissions avoided by decreases in deforestation rates.

## **6.0 Amazon Fund incentive scheme mechanisms and their potential use**

The following are some of the incentive mechanism existing under the Amazon fund:

### **6.1 Minimum price for non-timber forest products**

The Brazilian government has set a minimum price for non-timber products to guarantee the indigenous/local communities who depend on forest products for their livelihood. This mechanism adds value to the non-timber forest products and encouraging the indigenous/local communities to conserve the forest.

### **6.2 Free food distribution scheme**

The government provides free food to all school children in the Amazonian State to promote the spirit of forest conservation among school children and their parents.

### **6.3 Provision of recognition certificate for contribution towards conservation**

The fund provide certificate to individuals and private companies who contribute to the Amazon fund and their contribution is translated in terms of avoided deforestation and emission reduction.

### **6.4 Provision of necessary social infrastructure**

The government provides ferry boats, builds bridges and other social infrastructures that improve the welfare of indigenous/local communities in the Amazon State.

### **6.5 Access to the Amazon Fund**

All groups including local government, indigenous groups, NGOs, CBOs are eligible to apply the fund provided they meet the set criteria. The eligibility criteria for accessing fund are transparent and simple.

## **7.0 Options for development of REDD Trust fund in Tanzania**

### **7.1 Analysis of Amazon Fund Governance flow into Tanzanian context**

Figure 2 and Table 1 gives the analysis of Amazon Fund governance flow into Tanzania National REDD Trust Fund context:

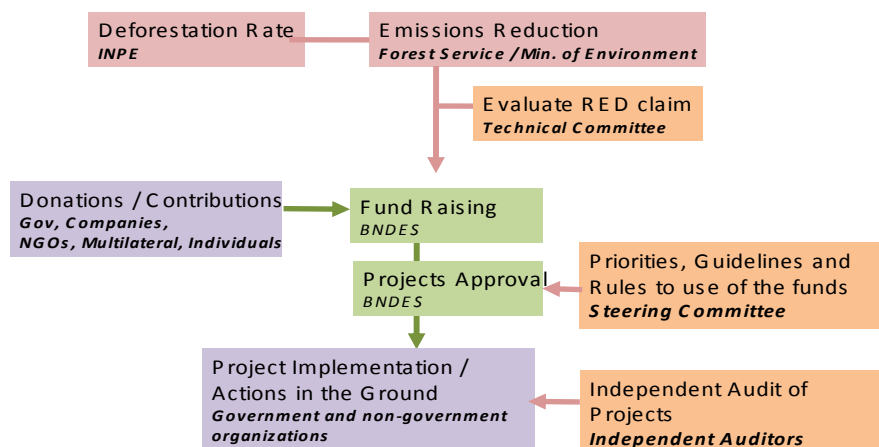


Figure 2: Fund Governance Flow

Table 1: Analysis of Amazon fund governance flow vs Tanzania REDD Trust Fund establishment

Main activity	Implementing Organ (s)	
	Amazon Fund	TZ REDD Trust Fund
Deforestation rate determination	INPE (National Institute for Space Research)	NCMC (FBD/VPO/SUA/IRA)????
Emissions Reduction	Forest Service/Ministry of Environment	FBD/MNRT/VPO -DOE
Evaluate REDD claim	Technical Committee	National Climate Change Technical Committee
Fund raising	BNDES (Brazilian development Bank)	NMB/TIB/NSSF... ??????
Donation/Contribution	Gov., Companies, NGOs, Multilateral, individuals	Gov., Companies, NGOs, Multilateral, individuals
Project Approval	BNDES	NRTF/National Climate Change Technical Committee
Priorities, Guidelines and Rules for the use of the fund	Steering Committee	National Climate Change Steering Committee
Project implementation/Actions in the Ground	Government and Non-Government Organizations	Government and Non-Government Organizations
Independent Audit of Projects	Independent Auditors	Independent Auditors/NAAO

## **8.0 Key challenges encountered in the operationalization of Amazon Fund and possible ways and means of addressing them**

### **8.1 Key challenges**

- Source of funds
- Setting up eligibility criteria for selection of individuals/local people who can benefit from the fund
- Membership to the fund steering committee/management committee
- Stakeholders' willingness to participate
- To coordinate supported projects with national and sub-national policies.
- To involve local communities and indigenous population.
- To produce visible, quantifiable results in short term.
- To prove that funds for reducing deforestation do not need to attach to complex baselines and calculations.

### **8.2 Means of addressing them:**

- Government commitment through donation of seed money – the Brazilian government provides some money to the fund.
- Start with awareness creation on the importance of the fund.
- Mechanism for management of the fund should be clear and transparent.

## **9.0 Lessons learnt**

- *Commitment of Government and Local communities:* Forest conservation and management is crosscutting issue which requires commitment of both local community and central government.
- *Direct and indirect benefits:* Both direct and indirect benefits are essential for sustainable of forest management and the subsequent reduction of emissions from deforestation and forest degradation. For example, despite the fact that some communities in the Amazon forest receiving indirect benefits from the government through various programmes such as free food for school children, construction of roads, bridges and schools, direct benefits through setting up a minimum price for non-forest products is important for sustainable forest management.
- *Need of seed money:* Setting up a fund for REDD is a long term and complex process and requires seed money which should be provided by a government institution so as to enable the government to have a strong say in its management and operations.
- *Strong National NGOs:* Strong national NGOs which have adequate experts and resources are important for sustainable forest management and hence reduction of deforestation and forest degradation in the country. In addition, such NGO should have a strong networking for them to be effective in their operations and collaboration.



- *Governance*: A clear governance mechanism of Amazon Fund is essential to provide confidence to all parties involved. The management of Amazon Fund involves the integration of procedures and decisions developed by its three main bodies. In addition, for the sake of transparency and confirmation of the effective application of the fund resources, an external audit system is used.
- *Baselines and reference emission levels*: Historical deforestation rates should not be used as the only valid baseline approach. Future scenarios are more appropriate for areas with low historical rates of deforestation but with clear trends for future deforestation. Reference emission levels should be flexible and adaptive to different circumstances.

## **10.0 Conclusion**

- The protection and conservation of forests is crucial for the well being of society of developing countries and international community.
- With a firm commitment it is possible to decrease deforestation and promote SFM but it has a significant opportunity cost.
- Incentives to REDD can play a significant role to help to balance economy of the conservation and SFM.
- Amazon Fund Mechanism could be used as a reference to other countries and regions particularly Tanzania or Africa as whole.
- Both local and central government's as well as local community's commitments is essential for sustainable management of the forest