

#### MINISTRY OF AGRICULTURE, WATER AND FORESTRY



### **Directorate of Forestry**

#### The Project Idea Note (PIN) for Namibia

<u>Program for Indigenous Forest Landscape Restoration through Transboudary Fire</u>

Management in Kavango-Zambezi Trans-frontire Conservation Area

**Project proponent:** Directorate of Forestry of Namibia in

collaboration with Japan International

Cooperation Agency (JICA)

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Requested funds:	3,000,000
Proponent contribution:	800,00 USD

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#### INTEGRATED TRANSBOUNDARY FOREST FIRE MANAGEMENT IN THE ZAMBEZI REGION

#### 1 Background

This project idea note (PIN) for Namibia seeks to attract funding from the Green Climate Fund-simplified approval process for implementing an integrated transboundary forest fire management project in Zambezi Region focusing on the Caprivi State Forest located in the north western area of the Region, covering 102,400hectares.

Organized forest management was initiated during the South African occupation in 1964 and by 1968, a long term Management Plan was commissioned with two objectives of soil conservation and timber production. The main threats to sustainable management of the forest at that time were uncontrolled veld fires and illegal pit sawing.

On the advent of Independence, the Namibian constitution under Article no. 95 (I) provided for welfare to all Namibians from which various laws and policies on community based natual resource management were developed which led to the establishment of conservancies, community forests and later on the establishment of small-scale commercial farming in adjacent areas which had some spill-over effects as farmers started to occupy the area illegally.

The planned project seeks to address some of the challenges in the State Forest through improved institutional coodination, regulated harvesting of timber and none-timber forest products, improved management of forest fire and mitigating climate change through enhanced adaptation activities.

The project is designed for a five-year period, the first of which is for preparation and the last one for consolidating benefits and reaffirming sustainability. It will be reviewed and planned on a bi-annual basis. It is envisaged that by the end of the project, *firstly* the transboundary cooperation on forest fire management will be enhanced and operational with a very effective early warning capability with both prevention and fire suppression mechanisms in place. With that, the forest cover and other biological elements will be restored, *secondly*, there will be improved sector coordination of activities related to natural resource management and *thirdly*, there will be enhanced resilience of local livelihood opportunites in relation to effects of climate change.

#### 1.1 Challenges

1. The State Forest forms the natural transboundary border between Namibia and Zambia on the northern end, which is polous and can easily be accessed

- by both car and foot for illegal harvesting and poaching, which has increased levels of illegal activity and deforestation
- 2. There are no permanent cut lines along the common border due to inadequate state resources, as thus fire from either side of the border is not prevented from crossing.
- 3. Its proximity to the inter-regional road network and to Katima Mulilo town makes it vulnerable to mass land demand for farming and settlements. There has also been a remarkable increase in human, livestock and wildlife populations over the past 25 years all exerting pressure on the forest cover and resources.
- 4. Since Independence, the state forest has been subjected to illegal settlements, poaching, and illegal timber harvesting and clearing for agriculture. Furthermore, forest fires both natural and anthropogenic are prevalent, with Transboundary impacts from Zambia and Botswana. Anthropogenic fires are also started by licensed and unlicensed 'devil's claw' harvesters, who burn-off grass to find their targets, and fires are left to burn. Those seeking medicinal plants often excavate to remove the plants and then leave the holes uncovered thereby leading to land degradation.
- 5. At institutional level, there is lack of coordination in the allocation of land rights. Currently there are 168 institutional, commercial and individual land rights within the state forest all, allocated by the Traditional Authority without consent of the Directorate of Forestry who have jurisdiction over the area.
- 6. Inadequate capacity of the Directorate to enforce law, manage fire and regulate harvesting have resulted in unregulated use of the forest and harvesting of Timber and Non-Tiber Forest Products, and subsequent increase in deforestation.

#### 1.2 Project Rationale:

The Caprivi Sate Forest carries very valuable timber and none timber forest products in the region and is a corridor for wildlife migrations. The forest cover needs to be restored if Namibia has to contribute significantly to carbon sequestration and hence mitigate global warming as enshrined in protocals mentioned in the subsequent chapter. The State forest is home to 44 mamals four of which are part of the big five except the Rhino. There are 27 tree species two of which are the main commercial timber species (*Baikiaea plurijuga* and *Pterocarpus angolensis*). The area is also a home to the crested guineafowl which is not found anywhere else in the country.

This project idea note describes actions that will be carried out to close existing gaps in land and resource use rights (ownership) through integrated and participatory forest fire management.

#### 1.3 Potential Beneficiaries

The project envisages benefits at 3 levels locally, nationally and internationally as follows:

- At community level, the project will benefit more than 88 households in devils claw harvesting and marketing,
- Nationally, the local farmers numbering around 5,090 (Likwama farmers Cooperative) will benefit more from well managed grazing resources and at regional and national level, the project will attract tourism for much needed forex and boosting of regional economy.
- At International level, the carbon sequestration by the forest cover will mitigate global warming and help in restoring ecosystem functionality especially in the restoration of the habitat for increased bio-diversity that will attract more tourists

#### 1.4 Geographical Scope

The envisaged project activities have direct influence and impacts on climatic conditions of neighbouring areas as the site lies at the intersection of a network of major rivers in the region (Kavango, Zambezi and Chobe), which are responsible for ecological patterns in Angola, Eastern Namibia and North Western Botswana. The rivers are also responsible for influencing social and economic activities of the region, and livelihood patterns. The target area is also part of the Kavango-Zambezi Trans Frontier Conservation Area (KAZA), a resource management grouping of countries served by rivers Kavango and Zambezi (Namibia,Angola, Zambia, Botswana and Zimbabwe) and responsible for the welfare of a wider regional populations.

The target area shares wide social, economic and cultural traits with much of Central Africa, due to common migration practices and shares in the Trans-Caprivi Highway that links neighbouring Zambia and Democratic Republic of Congo to the Walvis Bay Harbour, and has influence on people traversing the route and their business wellbeing.

#### 1.5 Policy Framework

Namibia is signatory to the following local and international conventions which have direct effect on sustainable management of forests and improved community livelihoods in project areas:

• The United Nations Frame Work Convention on Climate Change (UNFCCC) an Intergovernmental treaty developed to address the challenges/problems of climate change to which Namibia is a signatory

- RAMSA Treaty on Natural Wetlands, The Lower Okavango River which is in proximity to the Caprivi State Forest is the fifth RAMSAR site in Namibia.
- The United Nations Convention to Combat Desertification (UNCCD), which guides UN member states on redeeming the functionality of environment through reduced land degradation, combating ofdesertificationand mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements.
- The Convention on Biological Diversity of the United Nations, guides Member States on preventing depletion of natural resources within their territorial boundaries;
- The SADC Protocol on Forestry, guides SADC Member States on sustainable management of forest resources

Various pieces of legislation are in place that guide access to and use of forest resources. They also provide guideline on the approach to management and preservation of forests as follows:

- The Namibian Constitution, article 95(I) seeks to promote the welfare to the citizens through the maintenace of biological and ecological processes.
- The Vision2030, spells out the country's development programs and strategies to achieve its national objectives based on eight themes, of which development and institutional capacity building, natural resources management and factors of the external environment form an integral part.
- The Harambee Prosperity Plan, a targeted action plan to accelerate development in clearly defined priority areas, which lay the basis for attaining prosperity in Namibia. The plan does not replace, but complements the long-term goal of the National Development Plans [NDPs] and Vision 2030. Under Social Progression, as pillars, there are measures to improve agricultural productivity to address hunger and poverty in rural/communal areas using natural resources.
- The Forest Act, 2001 (Act No. 12 of 2001) was brought into force on August 15, 2002 and amended by the Forest Amendment Act, 2005 (Act No. 13 of 2005) that came into force on December 28, 2005. Accordingly, the Act gives authority to relevant stakeholders, including communities, to sustainably manage the forest and forest resources.

#### 1.6 Socio-Economic Features

The activities of the project take into cognisance the local people and their dependency on forest resources within the project area, i.e., Devil's Claw harvesting groups, and will ensure that all ethnic groups and gender will participate

equally in decision-making, training, and income generating activities without discrimination.

#### 1.7 Investment Criteria and alignment with GCF Investment Criteria

#### Impact potential

- 1. There will be an enhancement of the resilience on the ecosystem and its services, as a result of reduced encroachment and burning, as well as illegal harvesting of Non-Timber Forest products., resulting in reduced deforestation and degradation.
- 2. There will be improved livelihood and climate change on people as sustainable resource utilization is enhanced.

#### Paradigm shift

Cooperation among neighbouring countries is critical in establishing measures against forest fire and dealing with issues at trans-boundary level. In addition, there will be enhanced collaborative partnerships and smooth control of fires by neighbouring states through Memoranda of Understanding (MoUs) which will be essential for removing barriers between states.

#### The possibility of sustainable development

There willn be co-benefits which will generate several gains from various viewpoints which will be essential for strengthening sustainability of the program activities and the benefits will include:

- a. Reduction in GHG emmission through Early Warning and prevention activities
- b. Recovery of the ecosystem which will result in increase in productivity on education, health and other life activities for beneficiaries.
- c. Improved access to market and alternative livelihood opportunities, especiacially among vu,nerable sections of the target community.
- d. Energy-saving initiatives will translate into saved labour, especially among women, which will be dedicated to other development areas.

#### Needs of recipients

- There will be strengthening of the capacity of the beneficiaries in order for them to overcome stated challenges, through increased resilience created by enhanced trans-boundary cooperation and activities on fire and Sustainable Forest management.
- II. In addition, through activities and organisation to secure external funding, the activities of the program will be helpful in providing necessary support needed to for meeting financial challenges among beneficiaries.

#### Country ownership

This program respects and responds to existing national strategies on climate change, protection, restoration of forest landscapes, as well as environmental protection, energy renewal and social development. In addition, experience and capacity exhibited by the Accredited Entity and Executing Entity are an indicator for better delivery in protecting and restoring the target landscape.

The program has also followed the prescribed guidelines and steps in the development of tehe Funding proposal, which included consultations at local, national and regional level, in accordance with regulations. This is an assurance that stakeholders will be consulted and involved during the implementation phase.

#### Efficiency and effectiveness

Experience and outputs from the JICA-SADC Forestry project will be utilised in ensuring efficiency and effectiviness during implementation of project activities. In addition, SADC's collaborative platforms and arrangements will also be made use of in this regard.

#### 2 Objectives

#### 2.1 Broad Objective

The main objective is to reduce ecological impacts of climate change as a result of frequent and repeated fires on the State Forest and surrounding areas, whilst promoting sustainable livelihoods, restoration of indigenous forest resources through integrated participatory approaches among the relevant stakeholders locally and at transboundary level with neighbouring countries.

The program targets actions addressing both climate change ADAPTATION and to a lesser extent some mitigation activities through transboundary forest fire management.e ADAPTATION activities are through such activities as aim to strengthen community resilience against impacts of climate change, improve health and wellbeing of populations around the State Forest, the water and food security, as well as enhance ecosystem functionality in the region.

#### 2.1 Specific Program Objectives

- To enhance the effectiveness of early warning systems and provision of valuable weather-related information for communities to respond adaptively to climate change.
- To support the communities in project sites with forest fire prevention enhancement skills and knowledge to be able to control and prevent fires.
- To support and strengthen the community's resilience to climate change through conservation agriculture and sustainable income generating activities.
- To sustain forest product harvesting (timber and non-timebr products)
- To improve transboundary cooperation and response to forest fires.
- To harmonize approaches to land use, forest fire management and regulateions on trade in natural resources particularly timber

#### 2.2 Targeted Outcomes:

Restoration of the forest cover and other biological elements.

- Reduced transboundary forest fires and increased community involevement in forest fire prevention and control
- Improved community resilience to climate change.
- Increased capacity of the Forestry Department to use ICT for early warning and information/evaluation.
- Improved regulations on land uses and corresponding effects on forest resources
- Enhanced carbon sequestration of forests to mitigate climate change.
- Improved cross border trade in non-timber forest products.

#### 3 Implementation Agencies

An integrated participatory approach will be implemented considering that the area has multiple land use systems involving many sectors, institutions and policies.

The key actors are as follows:

- Ministry of Agriculture, Water and Forestry: Directorate of Forestry (Lead Executing Entity)
- Ministry of Environment and Tourism and its associated NGOs
- Non-Governmental Organisations supporting natural resource management
- Ministry of Land Reform (Communal Land Boards)
- Ministry of Urban and Rural Development (Traditional Authorities)
- Farmers Cooperatives and Associations within the region (e.g. Likwama)
- Ministry of Safety and Security (Namibian Police- Demining Unit)
- Namibia Association of Community-based Service Organisations (NACSO)
- Community-based Natural Resource Management (CBRNM)

#### 4 Activities of the Project

#### Strategic Objective 1: Early Warning & Information, Evaluation

#### Key Activities

- Activity 1.1 Enhance early warning detection, monitoring and reporting on forest fires, using satellite images, tablets and other IT equipment
- Activity 1.2 Training of resource persons, at community and regional level, including village Boards and Ministry staff on how to access and use the early warning information on forest fires.
- Activity 1.3: Measure and monitor the creation of fire cut-lines.

# Strategic Objective 2: Capacity Strengthning for Prevention Enhancement (participatory forest management including firewood, livelihood and forest restoration activities) targeting MAWF and other national stakeholders in the forest

#### Key Activities

- Activity 2.1 Conduct a participatory mapping study on causes/drivers/uses of fire and carry out awareness among the communities
- Activity 2.2 Procure fire-fighting/suppression Equip/engine/servicing) and maintain it (1x fire truck, 1x land cruiser-pickup, 1x motor bike, fire bouncers, Knapsack sprayers, fire beaters)
- Activity 2.3 Support fire prevention and fire suppression activities in and around state forest, including internal and external cut-lines)
- Activity 2.4 Conduct forest resource inventory in State Forest including vegetation mapping, wildlife (game counting), and update Forest Management Plan, and monitor vegetation cover and regrowth.

- Activity 2.5 Support awareness meetings for stakeholders and surrounding communities
- Activity 2.6 Support development of regulations for land uses in state forest (grazing, harvesting, and other agricultural activities).
- Activity 2.7 Support community resilience climate-smart initiatives that contribute to improved community livelihoods (conservation agriculture, livestock off-taking, energy stoves, guinea fowl, beekeeping, cement brickmaking, aquaculture)
- Activity 1.2.8 support community and individual Agro-Forestry initiatives (tree nurseries of high value tree and plant species, as well as fruit trees)

# Strategic Objective 3: Strengthened Transboundary Cooperation and Forest Fire Response capacity

#### Key Activities

- Activity 3.1 Support the development of trans-boundary agreements and cooperation on forest fire management (MoU).
- Activity 3.2 Participate in transboundary activities in response to forest fire and illegal trafficking of forest products in cooperation with neighbouring states (Zambia and Botswana)
- Activity 3.3 Support stakeholder networking and improved coordination on transboundary forest fire management (training, exchange visits, etc.)

# Strategic Objective 4: Enhancement of Information Sharing on Good Practices and Experiences

#### Key Activities

- Activity 4.1 Conduct a study on social, economic and environmental safeguards/and Assess social and economic impact on communities in and around state forest
- Activity 4.2 Record best practices from successful stories of participatory forest and forest fire management including description and costing for possible replication in other areas.

### 5 Work plan

	Ork pidii			Duration (3 years, bi-annual planning									
			Year 1		Year 2		Year 3		Year 4		Year 5		
Main Output Area	Activity	Performance Characteristics/Outcomes	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	
		1 to 6	7 to 12	13 to 18	19 to 24	25 to 30	31 to 36	37 to 42	43 to 48	49 to 54	55 to 60		
st Fire	1. Early Warning & Information, Evaluation  2. Capacity Strengthening and	1.1 Enhance early warning detection, monitoring and reporting on forest fires, using satellite images, tablets and other IT equipment											
ndary Fore nt		1.2 Training of resource persons, at community and regional level, including village Boards and Ministry staff on how to access and use the early warning information on forest fires.											
sbou		1.3 Measure and monitor the creation of fire cut-lines.											
nt of Transbound management	2. Capacity Strengthening and Prevention Enhancement	2.1 Conduct a participatory mapping study on causes/drivers/uses of fire and carry out awareness among the communities											
(participatory management firewood, live	(participatory forest management including firewood, livelihood and forest reforestation activities	2.2 Procure fire-fighting/suppression Equip/engine/servicing) and maintain it (1x fire truck, 1x land cruiser-pickup, 1x motor bike, fire bouncers, Knapsack sprayers, fire beaters)											

	2.3 Support fire prevention and fire suppression activities in and around state forest, including internal and external cutlines					
	2.4 Conduct forest resource inventory in State Forest including vegetation mapping, wildlife (game counting), and update Forest Management Plan, and monitor vegetation cover and regrowth.					
	2.5 Support awareness meetings for stakeholders and surrounding communities (communication and training development)					
	2.6 Support development of regulations for land uses in state forest (grazing, harvesting, and other agricultural activities).					
	2.7 Support community resilience climate-smart initiatives that contribute to improved community livelihoods (conservation agriculture, livestock off-taking, energy stoves, guinea fowl, beekeeping, cement brickmaking, aquaculture)					
	2.8 Support community and individual Agro-Forestry initiatives (tree nurseries of high value tree and plant species, as well as fruit trees)					
	3.1 Support the development of trans-boundary agreements and cooperation on forest fire management					
3. Strengthened Transboundary cooperation and forest fire response	3.2 Support the development of trans-boundary agreements and cooperation on forest fire management					
response	3.3 Support stakeholder networking and improved coordination on trans-boundary forest fire management (training, exchange visits, etc.)					

4 Enhance Information Sharing	4.1 Conduct a study on social, economic and environmental safeguards/and Assess social and economic impact on communities in and around state forest					
on Good Practices and Experiences	4.2 Record best practices from successful stories of participatory forest and forest fire management including description and costing for possible replication in other areas.					

# 6 Estimated Budget

Objective	Item	Activities	Quantity	Unit cost	Total cost (in USD)
rest	1 Early Warning & Information,	1.1 Enhance early warning detection, monitoring and reporting on forest fires, using satellite images, tablets and other IT equipment	1	200,000	200,000
dary Fc	Evaluation	1.2 Train forest rangers and other members of the community on how to use the tablets for detecting fires and measuring of fire cut lines		140,000	140,000
of Transbound management		1.3 Measure and monitor the creation of fire cutlines.	1	15,000	15,000
ansk		Sub-Total for Component 1			355,000
t of Tra	2. Capacity Strengthening and	2.1 Conduct a participatory mapping study on causes/drivers/uses of fire and carry out awareness among the communities	1	50,000	50,000
Enhancement of Transboundary Forest Fire management	Prevention Enhancement, including sustainable	2.2 Procure fire-fighting/suppression Equip/engine/servicing) and maintain it (1x fire truck, 1x land cruiser-pickup, 1x motor bike, fire bouncers, Knapsack sprayers, fire beaters)	1	840,000	840,000
Enha	management of wood and livelihoods	2.3 Support fire prevention and fire suppression activities in and around state forest, including internal and external cut-lines	1	408,000	408,000

enhancement	2.4 Conduct forest resource inventory in State Forest including vegetation mapping, wildlife (game counting), and update Forest Management Plan, and monitor vegetation cover and regrowth.	1	130,000	130,000
	2.5 Support awareness meetings for stakeholders and surrounding communities (communication and training development)	1	62,000	62,000
	2.6 Support development of regulations for land uses in state forest (grazing, harvesting, and other agricultural activities).	1	54,000	54,000
	2.7 Support community resilience climate-smart initiatives that contribute to improved community livelihoods (conservation agriculture, livestock off-taking, energy stoves, guinea fowl, beekeeping, cement brickmaking, aquaculture)	1	520,000	520,000
	2.8 support community and individual Agro- Forestry initiatives (tree nurseries of high value tree and plant species, as well as fruit trees)	1	280,000	280,000
	Sub-Total for Component 2			2,344,000
3. Strengthened Transboundary	3.1 Support the development of trans-boundary agreements and cooperation on forest fire management	1	40,000	40,000

cooperation and forest fire response	3.2 Participate in trans-boundary activities in response to forest fire and illegal trafficking of forest products in cooperation with neighboring states (Zambia and Botswana)	1	136,000	136,000			
	3.3 Support stakeholder networking and improved coordination on trans-boundary forest fire management (training, exchange visits, etc.)	1	60,000	60,000			
	Sub-Total for Component 3			236,000			
4. Enhance Information	4.1 Conduct a study on social, economic and environmental safeguards/and Assess social and economic impact on communities in and around state forest	1	35,000	35,000			
Sharing on Good Practices and Experiences	4.2 Record best practices from successful stories of participatory forest and forest fire management including description and costing for possible replication in other areas.	1	30,000	30,000			
	Sub-Total 4			65,000			
TOTAL BUDGET							

#### 7 Budget description

The project is expected to be implemented on a budget of close to 3 million United States Dollars over a period of five years.

The funds shall be used mainly on activities that will improve DoF's operational capacity to manage the State Forest sustainably so as to restore the ecological balances resulting from degradation of forest resources by fire and unregulated resource use. The response to climate change in terms of strengthening resilience to communities living within the state forest shall also receive a relatively big portion of the budget. The funds will also promote the coordination of trans-boundary activities, as well as linking with KAZA TFCA activities in neighbouring countries/

#### 8 Benefits

- 1. Restoration of land functionality and productivity,
- 2. Streamlining of land use patterns and use rights, strengthened resource ownership through improved participatory approaches and policy coordination
- 3. Improved forest resource planning and management
- 4. Enhanced social, economic and ecological opportunities/benefits and hence mitigating the effects of climate change.
- 5. Enhanced (stakeholder) cooperation and coordination

#### 9 Monitoring and Evaluation

The project will develop a monitoring and evaluation plan and a system based on the programme logframe and its activities. The M&E Plan's monitoring component will target routine programme pregress implementation. This will be done continously and will generate quarterly preogress reports that will be shared with all stakeholders. The main purpose of monitoring is to keep track of programme efficiency by generating data on the outputs delivered vis-avis the inputs. The evaluation component will target three rounds of participatory evaluation at baseline, mid-term and at end term. This will focus on comparing the achievements of the programme against the planned outcomes of the programme. The monitoring and evaluation reports together with the technical progress report and workplan will be tabled to the Project steering commitee for strategic guidance and approval.

#### 10 Risk assessment

 The response from the neighboring countries of Zambia and Botswana on forest fire management and in combating illegal logging

- activities and poaching. This risk will be mitigated through regular coordination of meetings and supporting joint operations of law enforcement agents.
- The lack of sector coordination in the implementation of the project particularly on the allocation of land rights may jeorpadise the implementation of the project. This will be mitigated through steering committee meetings as well as other regular meetings with key stakeholders.

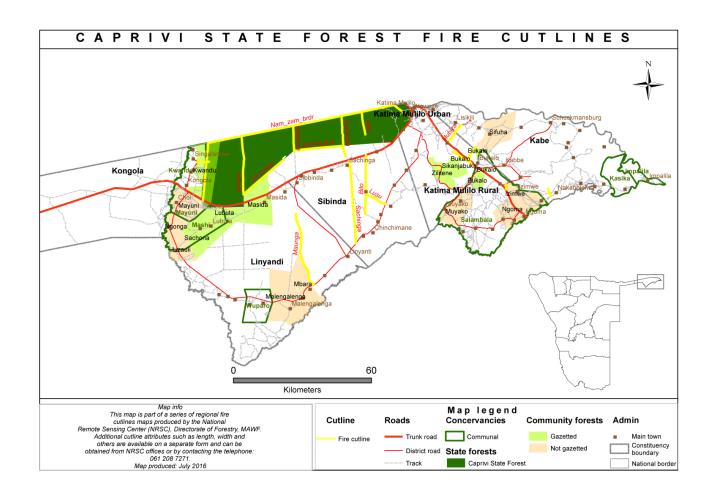
#### 11 Environmental and Social Safeguards

The project has built-in mechanisms for integrating environmental and social issues into decision-making. promotion of sustainable income generating activities and improvement of on-Timber Forest Products.

Further, the policies will be integrated through supporting law enforcement activities, including cross-boarder ones that are related to environmental safeguards, participation in trans-boundary conservation activities through KAZA and river basins management. Equally, the project has mechanisms for integrating activities and rights of resource use groups, including marginalised communities into sustainable income generating and environmental conservation activities that will mitigate the effects of climate change

#### **Appendices**

1. Location of Caprivi State Forest



#### 2. Vegetation Characteristics of the Caprivi State Forest

