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COMMUNITY PARTICIPATION IN NON-TIMBER FOREST PRODUCTS MARKET IN NIASA SPECIAL RESERVE, MOZAMBIQUE

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First Niassa Special Reserve Science Meeting and Miombo Network Meeting: from science to miombo woodlands management

Maputo, 3-4 June 2021

Introduction



- There has been a growing interest in the role played by Non-Timber Forest Products (NTFPs) towards improving livelihoods among rural populations.
- This has been facilitated by the fact that communities living close to forest solely rely on NTFPs at a great extent for their livelihoods, and thus, any effort in conserving such resources as a requirement in understanding how the host communities get to interact with them.
- **Objectives of the study**
- Evaluate the Effect of Non-Timber Forest Products on Rural Livelihoods: Implication for Income and Food Security
- Evaluate community participation in the value chain of non-timber forest products.



Methodology

- **Three administrative posts i.e.**
- Mecula, Matondovela, and Marangira
- **Villages from each administrative post were Purposively Selected**
- *Mussoma/Rugenda, Cuchilanga, Lisongole, Ntimbo1, Ntimbo2, Lichengue, and Mecula*





SILO WHERE SEEDS ARE KEPT FOR THE NEXT SEASON



FRUITS



SPICES

Classification of Valuable NTFPs Collected from Mecula, Marrupa Corridor.

Classification of NTFPs collected				
	Edibles	Medicinal, cultural and dietary supplements	Floral products	Specialty woods
	Mushrooms (21 Species)	Medicinal plants (44 Trees Species and shrubs)	Honey	Firewood (50 Tree species)
	Wild vegetables (27 Plant species)	Tree oils and resins (4 Plant species)	Wild tubes (11 Species)	Bamboo shoots
	Bush meat (6 Species)	Oils	Ropes	Charcoal (32 tree species)
	Wild fruits and nuts (32 Plant Species)		Grass	Poles (43 Tree species)
	Fish (25 Species)		Sisal	Rubber (8 Plant Species)
	Forage(8 Plant Species)		Berries	
	Spices (5 Species)			
Total	7	3	6	5

NTFPs Supplied by Selected Plant Species

Spicie	Part harvested	Use
<i>Julbernardia globiflora</i> (Ntchenga)	Bark, Root, Trunk, and Branches.	Medicine, Crafts, Firewood, Making Canoe, Ropes, Poles, Wooden sandals, making Beehives, and Dancing costumes
<i>Pterocarpus angolensis</i> DC (Ntumbati)	Bark, leaves, Root, Trunk and Branches	Fishing, Cultural, Medicinal, Poles, Ropes, Firewood, and Forage
<i>Annona senegalensis</i> Pers (Ntopeto)	Fruits, Trunk, Branches, Leaves, Roots, and Bark	Food, Crafts, Hoe handles, Spices in fish, Medicine, and Glue
<i>Grewia inaequilatera</i> Garcke (Mpinji)	Root, Fruit, leaves, Bark, and Seeds	Medicine, Food, Used for making oils from seeds, and Used for protection.

Cont.

<i>Diplorhynchus condylocarpon</i> (Ntomonhe)	Root, Leaves, Trunk, Bark and Branches	Medicine, Forage, Firewood, Rubber, and Cultural attachments.
<i>Securidaca longipedunculata</i> (Chiguluka)	Bark, Root, Leaves and bark	Cultural attachment and Medicine
<i>Pseudonostylis maprouneifolia</i> (Nzolo)	Roots, Leaves, Branches, Bark, and trunk	Medicine, Cultural, Poles, Firewood, and Ropes
<i>Burkea africana</i> (Nkalati)	Trunk, Branches, Roots and Bark	Charcoal, Firewood, Poles, Cultural, and Medicine
<i>Brachystegia boehmii</i> (Njombo).	Bark ,Trunk, Branches and leaves	Crafts, Medicinal, Firewood, Poles, Wooden sandals, Doors for poultry, Hats, Dancing costumes, and Making Beehives
<i>Strychnos potatorum</i> (Nkulungulo)	Trunk, Branches, Root, Fruit and leaves	Firewood, Toothbrushes, Food, Medicine, Traditional /Culture, and Medicine
<i>Catunaregam spinosa</i> (Nzondoka)	Roots, leaves, Fruit	Fish Poison, and Food

Impact of NTFPs on Food security and Income

NTFPs provide Food by
a margin of 38.6%
(Adjusted R value:
0.386)



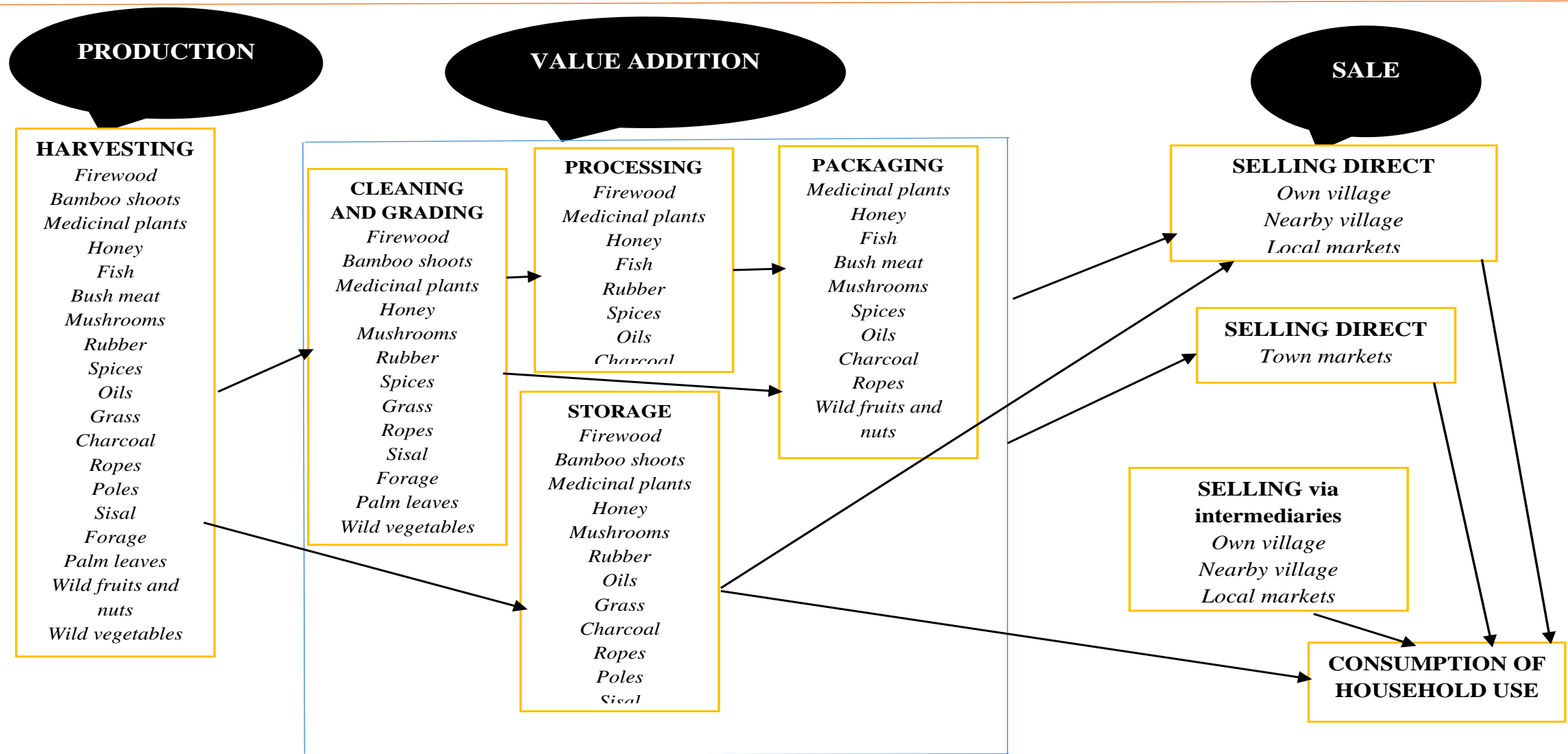
1. Spices $\beta=0.865$ ($p=0.00$),
2. Wild vegetables $\beta=0.632$ ($p=0.017$)
3. Wild fruits and nuts $\beta=0.598$ ($p=0.016$)
4. Medicinal plants $\beta=0.488$ ($p=0.005$)
5. Honey $\beta=0.479$ ($p=0.015$)
6. Berries $\beta=0.449$ ($p=0.003$)
7. Ropes $\beta=0.419$ ($p=0.030$)
8. Wild tubes $\beta=0.377$ ($p=0.043$).

NTFPs explained
24.5% of variation in
income generation by a
margin of 24.5%
(Adjusted R value:
0.245).



1. Firewood $\beta=0.762$ ($p=0.017$).
2. Wild vegetables $\beta=0.701$ ($p=0.013$).
3. Sisal $\beta=0.598$ ($p=0.016$)
4. Medicinal plants $\beta=0.576$ ($p=0.007$)
5. Spices $\beta=0.559$ ($p=0.020$)
6. Charcoal $\beta=0.521$ ($p=0.003$)
7. Honey $\beta=0.459$ ($p=0.007$),
8. Wild tubes $\beta=0.399$ ($p=0.022$),
9. Wild fruits and nuts $\beta=0.372$ ($p=0.046$)
10. Ropes $\beta=0.372$ ($p=0.021$).

NTFP Value Chains in Mecula- Marrupa Corridor NSR



Factors that influence decision of the household's participation in selected non-timber forest products market

Economic Factors



- The distance to markets is affordable.
- Forests form a major source of household food security.
- Forests form a major source of tourist attraction in the area.
- Non-Timber Forest Products have a ready market.
- Forests form a major source of ready income for households.
- No much capital is required.

Social factors



- Forests form a major source of medicine.
- Forests are a resource for education institutions.
- Distance to nearby forest is very minimal.
- Forests are significant in our housing needs.
- Strong culture attachment on forests.

Physical Factors



- Restricted Grazing in nearby forests.
- Experienced forest fires.
- Scary Dangerous wild animals.
- Restriction of hunting in non-gazzeted forests.
- Restriction of collection by the community.



Constraints faced in collecting NTFPs

- Many animals in the forest.
- High restriction from authorities and cultural beliefs.
- Long distance from the collection centers for some products.
- Some NTFPs are seasonal in nature.
- Uncontrolled fires.
- Extinction of some NTFPS.
- Cheaper prices for the different NTFPs.
- Nearby forests are reserved forests.
- Cultural beliefs.

Conclusions

- Even though the collection of these NTFPs had contributed largely to food security and income generation, Production and selling of these products has remained less and on a subsistence basis
- All products were sold direct to users and/or intermediaries. However, the grass was largely sold within the village. Mushrooms, edible and wild fruits entered the value chain and ended with consumers within the village, local, and/or town markets.

Recommendations for management

- Need to promote off-farm income generating activities.
- Interventions aimed at conserving the forest should consider both in-situ and ex-situ conservation of the mostly utilized plants and trees.
- Capacity building to households on NTFPs value addition and strengthening its markets are pertinent for improved income
- Capacity building on marketing of the products could include establishment of collection/trading centers in order that it becomes easy for price monitoring as well as control of the quality of the products.
- Identify and Gazzeting cultural sites for tourist attraction



Acknowledgement

- Special thanks to Wildlife Conservation Society Mozambique for both technical and financial support rendered for the success of this work.
- We also wish to acknowledge the Regional academic Exchange For enhanced skills in fragile ecosystems management in Africa for the scholarship and the general academic support.
- Special thanks go to Dr. Franziska Steinbruch and Alberto Muchanga for all the support rendered towards field activities.





• Bamboo stool



Grass



Behive for honey production



Unprocessed Spices

Thank you