



Widdringtonia whytei - Rendle
Mulanje Cedar Cloud Forest
Ecological Restoration Project

A presentation by
Mulanje Mountain Conservation Trust (MMCT)
at the
4th World Congress of Biosphere Reserves Lima, Peru,
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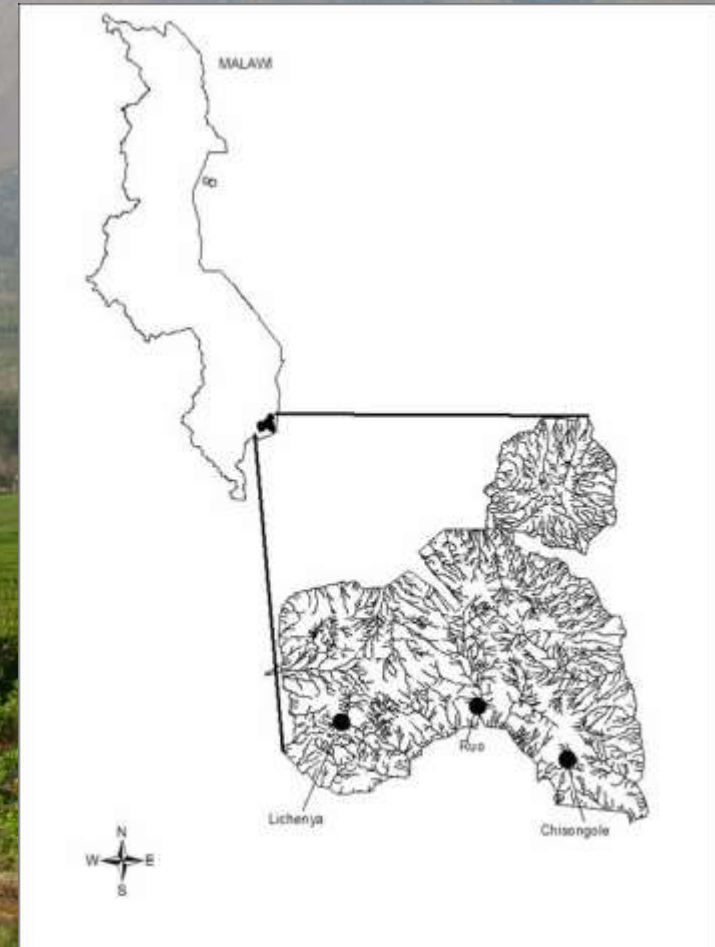
Presentation Outline



- Introduction
- Threats
- Objectives of Ecological Restoration
- Progress
- Challenges
- Way Forward

Location of Mt Mulanje Biosphere Reserve

- Located on the south-eastern corner of Malawi
- An Inselberg Mountain
- Extremely rare & unspoiled ecosystem



Ecological Importance of Mt Mulanje



- Main watershed catchment area for supply of gravity-fed household water supply, irrigation and hydropower generation to the surrounding communities

Priority One Key Biodiversity Area (KBA) and Alliance for Zero Extinction (AZE) site

Profile of Mulanje Cedar

- Tree endemic to Mt Mulanje & Malawi's National tree
- Grows 40m height and ± 1 m dbh
- Excellent timber (construction, furniture, panelling wood crafts)
- +10% resin content & highly fragrant
- Wood is resistant to:
 - termites
 - wood borers
 - fungal attacks

** VERY IMPORTANT SPECIES IN THE LOCAL ECONOMY*

Why Ecological Restoration?



- Wildfires
- Lack of natural regeneration
- Over-exploitation due to Illegal harvesting
- Climate change - causing severe drought



Objectives of Restoration Programme

- To implement consensus-built cedar management plan for the restoration & sustainable utilization of Mulanje Cedar
- To carry out effective forest conservation management measures to increase protected cedar forest areas by 70%
- Increase nurseries & seedlings production for forest enrichment & cluster consolidation
- Improve

Progress: Implement consensus-built cedar management plan

- Formation of a Chief's Forum to discuss challenges faced on the mountain
- Cedar management plan developed & launched in 2015 that had high cooperation of stakeholders including all traditional leaders, Department of Forestry, judiciary, Police, etc

Progress: Implement consensus-built cedar management plan cont...

- Engaging cedar experts
 - In collaboration with the Botanic Gardens Conservation International (BGCI) & ICRAF, the program is:
 - Investigating propagation techniques in order to commercialize community nurseries for income generation for poor households around the mountain.
 - Establishing cedar trials in ‘field genebanks’ elsewhere in Malawi, in order to better define its optimal growing conditions with Mt. Mulanje trials as control;

Progress: Implement consensus-built cedar management plan cont...

- Awareness raising
 - Awareness raising on the need for the communities to be involved in protecting the Mulanje cedar.
 - Meetings
 - Radio



Progress: Increase nurseries and seedlings production

- 50kg of Mulanje cedar seed collected
- 13 tree nurseries established
- 21 nurserymen trained
 - This resource pool will be used to train communities



Progress: Increase nurseries and seedlings production cont.....

- 100,000 seedlings were raised & out planted



Challenges

Climate Change:

- 400,000 tubes directly sown with Mulanje Cedar seed impacted by cyclone storm rains dislodged sown seed in 300,000 pots resulting in huge loss.
- Following the heavy rains, the worst drought was experienced that resulted in further high mortality of planted seedlings

Corruption & Illegal Use:

- 'concerned citizens' unclear agenda to prevent MMCT & FD to carryout management operations
- Increased outside illegal extraction of Cedar timber

Way Forward

- Need for intensify seed collection for gene banking & further propagation
- Need to expand nursery network to quantum-leap numbers planted
- Need to involve communities raising tree nurseries in homesteads hence improve livelihoods
- Build alliances with international experts to further investigate optimal ecological requirements
- Need for further financial & technical support.

Acknowledgements

- The current initiative has been made with support from:
 - IUCN through Save Our Species Project
 - GEF / World Bank funding
 - Botanic Gardens Conservation International
 - Mulanje Mountain Conservation Trust
 - Malawi Government through the Department of Forestry & Forestry Research Institute of Malawi

Final Comment

It is possible to conserve the Mulanje Cedar forests on the mountain as there is very strong will from both the private sector & Government of Malawi, and interest from local communities

THE DEVELOPMENT OF AN INTEGRATED MANAGEMENT PLANNING PROCESS FOR THE BIOSPHERE RESERVE IS NOW UNDERWAY