# Enhanced Biodiversity through timber out-grower schemes in Malawi

# Harold Chisale<sup>1\*</sup>, Joyce Njoloma<sup>2</sup>, Maggie G. Munthali<sup>3</sup>

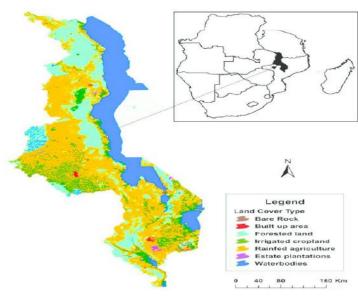
Department of Forestry, Bunda Campus, Lilongwe University of Agriculture and Natural Resources<sup>1\*</sup>, SADC ICRAF, Chitedze Research Station, Lilongwe Malawi<sup>2</sup>, Department of Geography, University of Pretoria, South Africa<sup>3</sup>

\* Joined Lilongwe University of Agriculture and Natural Resources, Bunda Campus in 2015 as A Lecturer in Forestry Department after working for Malawi Government Forestry department for 7 years. He holds a BSc in Forestry from Mzuzu University, Malawi, MSc in Cliamte Change and Risk Management from University of Exeter, UK. Currently pursuing a PhD in Forest Science with University of Pretoria, South Africa.

Contact: Chisale.harold2@gmail.com

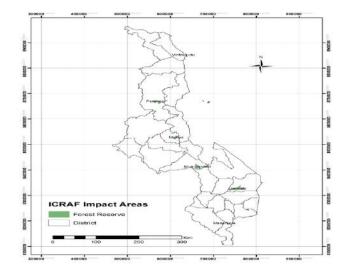
## Geographic and demographic information

Map of Malawi showing Districts



Country	Malawi			
Province	National			
	Karonga, Mzimba, Ntchisi, Dedza,			
District	Machinga and Chikwawa			
	Cilikwawa			
Size of geographical area	27,522 km <sup>2</sup>			
Number of indirect beneficiaries	28,000 persons (Men:11200 persons) (Women:16800 Persons)			
Dominant ethnicity	Chewa, Tumbuka, Mang'anja, Ngoni			

Map of Malawi showing Impact area



Size of project area	786.03 km <sup>2</sup>
Number of direct beneficiaries	23,609 persons (Men:11372 persons) (Women:12237persons)
Geographic coordinates (longitude and latitude)	
Dominant ethnicity	Chewa, Tumbuka, Mang'anja, Ngoni

## **Ecosystem Types**

X	Forest	X	Grassland	X	Agricultural	In-land water
	Coastal		Dryland		Mountain	Urban/peri-urban

## Important species in the site

English common name (Local name)	Scientific name	Description  For poles and fuelwood and sale		
Blue gum	Eucalyptus Spp			
Accacia	Accacia spp	Fuelwood and sale		
Mangos	Mangifera indica	Fruits for food and fuel wood		
Pawpaw	Asimina triloba	Fruits for food and sale		



Accacia Tree in Chikwawa

#### **General introduction**

Malawi is endowed with a diversity of natural resources including forests, flora and fauna, fresh water and fertile soils (Government of Malawi, 2012). Majority of the forests in the country are located within rural and frequently remote areas. Malawi as one of the poorest and densely populated countries in Southern Africa makes management of natural resources such as forests a challenging task and this create unnecessary pressure on the forests resulting in forest degradation (Clarkson, 2012). Over the years, the Malawi government through the Department of Forestry has been encouraging tree planting, protection and conservation of forest resources. However, deforestation and forest degradation continue to be a major challenge despite the emphasis on forests protection and conservation by government (Kambewa and Utila, 2008). The deforestation and forest degradation are a result of uncontrolled firewood collection, infrastructure development, agriculture expansion, illegal charcoal production, shifting cultivation; urbanization, high population, and curing tobacco in the smallholder and estate sectors (Maumbeta et al. 2011; Kambewa and Utila, 2008).

Malawi government through its Forestry Department, together with other private institutions have introduced several initiatives to hot forest deforestation and degradation. As one of the research institution, International Centre for Research in Agroforestry (ICRAF) in conjunction with World Vision Malawi implemented "Empowering Forest Dependent Communities through Commercialization of Small Scale Forestry Project" between 2015 and 2018. The project goals were to contribute to the commercialization of small scale timber out-grower schemes and sustainable utilization of natural forests, and utilizing sustainable management practices for natural forests and timber out-grower schemes or plantations.

Through timber out-grower scheme project, ICRAF Malawi helped smallholder farmers to substantially contribute to their income, provide markets and access to technical services in the production and use of innovative cocking stoves, and inputs such as tree seedlings, fertilizer and tree seeds. As a result of the entry and establishment of out-grower schemes into forestry industry, there is need to examine farmers' knowledge and perceptions towards timber out-grower schemes. The level of their knowledge and how they understand and perceive it will help different stakeholders to upscale the approach in the future. This study, therefore, assesses the farmers' knowledge, attitudes and perceptions towards timber out-grower schemes in Malawi.



Mango Seedlings at Department of Forestr Nursery, Bunda



Farmers produce Briquette mbaula ready for sale in Liwonde

# Working Group A

# Contribution to Aichi Biodiversity Targets' Strategic Goal A

		Breakdown Target	How did you measure the outcome?	Result		
	T 1	People are aware of the values of biodiversity	Number of people participated in the tree out grower schemes	23, 609 farmers participated in the tree out grower schemes and valued biodiversity.		
	TARGET 1	People are aware of the steps they can take to conserve and sustainably use biodiversity	Number of people trained in biodiversity conservation and management	80% of the farmers participating in tree out grower scheme were trained in forest management and biodiversity conservation		
		Biodiversity values integrated into national and local development and poverty reduction strategies				
	TARGET 2	Biodiversity values integrated into national and local planning processes				
Goal A	TAR	Biodiversity values incorporated into national accounting, as appropriate				
Strategic		Biodiversity values incorporated into reporting systems				
S	ET 3	Incentives, including subsidies, harmful to biodiversity, eliminated, phased out or reformed in order to minimize or avoid negative impacts	Number of farmers who uses innovative cooking stoves substituting charcoal /Number of farmers producing fuel saving cooking stoves	3761 households producing fuel saving stoves while 12237 household using fuel saving stoves		
	TARGET 3	Positive incentives for conservation and sustainable use of biodiversity developed and applied	Number of farmers who received the free tree planting materials and implements for tree planting	23,609 farmers received and planted tree seedlings		
	SET 4	Governments, business and stakeholders at all levels have taken steps to achieve, or have implemented, plans for sustainable production and consumption				
	TARGET	and have kept the impacts of use of natural resources well within safe ecological limits				

#### Relations to other Aichi Biodiversity Target & SDGs

Please indicate the Aichi Biodiversity Targets other than the targets your working group focuses and SDGs that your activities contribute to if any. Use "•" and" • "to indicate the "direct" or "indirect" contributions to the targets.

## CBD Aichi Biodiversity Targets (https://www.cbd.int/sp/targets/)

Strategic Goal A				Strategic Goal B					
		<b>43</b>		<b>5</b>	<b>U</b> °	7	A.	50	
Strategic Goal C Str				ategic Goal D Strategic Goal E					
11	12	33	14	15	16	1/17	718	19	20

## UN Sustainable Development Goals (SDGs) (https://sustainabledevelopment.un.org/sdgs)



## Any difficulties you found during your assessment

The baseline was a problem as it was not provided

## Key messages for the CBD in planning for the post-2020 Targets

IPSI should be continued for post-2020 target and evolved into a new phase to consolidate the potential capacity of existing members to scale up the work to conserve and revitalize SEPLS around the world. As described in difficulties above, the challenge we found through network is that most of the members did not have baseline data which makes them difficult to assess.