

**A COMPREHENSIVE AND EFFICIENT SYSTEM FOR  
MONITORING PROGRESS TOWARDS SUSTAINABLE FOREST  
MANAGEMENT (SFM) IN MALAWI**

**VIRTUAL WORKSHOP REPORT**

**DEVELOPING A NATIONAL MONITORING AND EVALUATION FRAMEWORK FOR CONDUCTING INVENTORIES OF  
EXISTING FOREST-RELATED DATA, MAPPING DATA GAPS; AND ADDRESSING THESE GAPS AND SELECTING  
APPROPRIATE NATIONAL INDICATORS**

**5 November 2021**

## Executive Summary

The goal of the Virtual Workshop was to liaise with the key forest-stakeholders to coordinate national inputs into the project development and formulation and implementation of mapping existing national forest related-databases and identifying potential data gaps and tools to address these gaps - this includes not only “classic forest inventories” but also financial data/flows for forests and contribution of forests to food security and poverty eradication; and towards development of the monitoring framework for international forest-related goals and targets (serving the UN Forest Instrument, GFGs, SDGs and FRA2020).

The workshop was held virtually via Zoom on 4 November 2021 from 10:00 hours to 12:15 hours. Stakeholders totaling 49 were invited to participate in the Virtual Workshop but only eight (8) stakeholders participated. During the opening remarks, the background to the study was presented to the stakeholders and thanked UNFF for the support to the development of the National Monitoring and Evaluation Framework towards SFM. The importance of monitoring and evaluation for SFM was emphasized and how relevant data reinforces monitoring thereby requiring serious review of the draft report by stakeholders.

The presentation covered the following areas of focus:

- Introduction & Background
- SFM Concept
- Comprehensive Information Management in SFM
- Malawi ‘s National Forest Monitoring System
- Key Policies & Data Gaps
- Broad Categories for the Data Gaps
- Challenges Affecting Acquisition of Forest-related Data
- Sustainability Strategy & other Recommendations
- Suggestions/Comments/Questions

The presentation (Annex 1) was followed by questions, comments, feedback and suggestions from stakeholders with a response provided to each issue raised. Both stakeholders and presenter (National Consultant) provided the responses and a consensus was reached on all contentious issues under discussion. Several issues were raised for discussion and included influence of climate change and status of biodiversity; adoption of NFI methodologies and SOPs as national tools; review of elements of governance as data areas; conflicting deforestation and lack of degradation rates; discrepancies on data on LULCC maps; and establishment of similar monitoring units in other MDAs, among others.

On behalf of the Forestry Department, Madam Patricia Chidyera Masupayi thanked all the participants to the Virtual Workshop for their active participation and expressed satisfaction with the high level of discussion that was there during the Workshop. The National Consultant appreciated all the contributions that came from participants towards the development of the National Monitoring and Evaluation Framework for SFM and urged stakeholders to send their views even after the Workshop through email.

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## **1. Introduction**

The goal of the Virtual Workshop was to liaise with the key forest-stakeholders to coordinate national inputs into the project development and formulation and implementation of mapping existing national forest related-databases and identifying potential data gaps and tools to address these gaps - this includes not only “classic forest inventories” but also financial data/flows for forests and contribution of forests to food security and poverty eradication; and towards development of the monitoring framework for international forest-related goals and targets (serving the UN Forest Instrument, GFGs, SDGs and FRA2020).

Specifically the Virtual Workshop was organized to present the findings of the initial background analytical study of the national monitoring and evaluation framework for Sustainable Forest Management (SFM) and allow stakeholders review and validate available forest data in Malawi attended by a range group of stakeholders from relevant sectors. The workshop also reviewed and identified available forest related data and data gaps. Inputs from stakeholders will help finalize the background analytical study based on the feedback and inputs from the virtual national workshop, including comments from UNFFS.

## **2. Location and period of the workshop**

The workshop was held virtually via Zoom on 4 November 2021 from 10:00 hours to 12:15 hours.

## **3. Attendance**

Stakeholders totaling 49 were invited to participate in the Virtual Workshop, many of whom acknowledged the invitation. However, on the material Workshop day, only eight (8) stakeholders (Annex 2) actively participated in the Workshop.

## **4. Opening remarks**

Willie Sagona welcomed the participants to the Virtual Workshop and encouraged them to actively participate in the validation process. In the opening remarks the background to the study was presented to the stakeholders and acknowledgement was made to UNFF for the support towards the development of the SFM’s National Monitoring and Evaluation Framework. The objectives of the Workshop were stated as follows:

- To solicit inputs from stakeholders into the draft National Monitoring and Evaluation Framework;
- To review and validate available forest data in Malawi;
- To review and identify available forest-related data and data gaps.

The importance of monitoring and evaluation for SFM was emphasized and how relevant data reinforces monitoring thereby requiring serious review by stakeholders of what is contained in the report. Being a national document, it was imperative that stakeholders effectively contribute to the process so that the country report reflects the reality on the ground.

## 5. Presentation of findings of the initial background analytical study of the national monitoring and evaluation framework for SFM

The presentation covered the following areas of focus:

- Introduction & Background
- SFM Concept
- Comprehensive Information Management in SFM
- Malawi 's National Forest Monitoring System
- Key Policies & Data Gaps
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- Sustainability Strategy & other Recommendations
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## 6. Feedback, suggestions, questions, comments and inputs from stakeholders

**Question:** The question relates to sufficiency of the data we are collecting whether it would address the conservation aspect. Where are we capturing issues of changes in areas of different species as influenced by climate change whether the numbers are increasing/decreasing, whether the numbers are remaining constant or not?

**Response:** This is another data gap since the recent changes that have come with climate change are not captured. For example, some tree species have shrunk their niche and they can no longer grow better in other ecological sites and they have restricted themselves to some other places, and surely that data is missing.

**Comment:** National Biodiversity Strategy and Action Plan (NBSAP) document of 2006 being referred to in the presentation is outdated. The current National Biodiversity Strategy and Action Plan covers a period from 2015 - 2025 and in that one some of the perceived gaps were well addressed. You need to review the current NBSAP and establish the existing gaps.

**Response:** This was an oversight on my part and will review the current NBSAP II (2015-2025) accordingly whose outcome will be presented in the revised National Monitoring and Evaluation Framework for SFM.

**Question:** I remember one of the objectives of the mapping initiatives was to come up with a nationally recommended inventory methodologies that should be used and there was that call that everything that is going to be used in the assessment during mapping should at least follow a certain procedure established under the national surveys, so I don't know why are we calling for another nationally developed methodology? I mean is it still a gap?

**Response:** It is true that the current NFI methodologies and its Standard Operating Procedures (SOPs) are an outcome of a rigorous process whose methodology has been recommended and accepted as the nationally adopted tool. However, it is not yet clear as to how many people or institutions have embraced the methodology. Considering the cost implications of rigorous data collection methodologies, there are

still fears that others may choose to utilize a different methodology to cut costs. The NFI methodology needs to be popularized as the best available at the moment. As for the assessment of other resources or services of interest, uniform methodologies need to be developed and be nationally adopted to ensure that coherent data is gathered.

With regard to forest inventories the country has those nationally SOPs, at least in terms of implementation approach at project level. In relation to this presentation with regards to evaluation of other non-carbon ecosystem services such as prevention of soil erosion and others, this is lacking as of now. Indeed, there is a need to look into other standard operating procedures for activities such as mapping of forest resources and others. There could be others gaps but in this case I will have to check with the Department of Surveys who unfortunately are not participating in this Virtual Workshop.

**Comment:** Under Forest Policy but also when reporting on forestry to Southern Africa Development Community (SADC), government needs to report the governance system within the forestry sector covering the elements of governance. Need to look at the actors who are the stakeholders and their roles in forestry management and the like, and then consider the plans, then the practice. The interactions between these have an influence on how law enforcement is being done. Looking at the existing data under forestry, especially governance structures, suggestion is need to report on the governance aspects or elements because if term ‘governance structures’ is analyzed as it is, it will mean something general yet with governance there are three aspects that need to be reported on some of which may be lacking data. For example, who are the actors in the forestry governance? What are the laws that govern forestry? How many forests have management plans? Are the plans still valid and relevant (really in practice)?

**Response:** In this case, there is a problem I had generalized governance and with the contribution made, I will have to review this and loosen it up to bring out the core elements under governance separately. That will make more sense in as far as data availability under governance is concerned. Governance is one of the most sensitive but quite an important area in resource management as it measures greatly the success of SFM.

**Question:** Did we not come up with something on deforestation rates during the development of the REDD+ Strategy? So it means that we don’t have nationally agreed figures of degradation and deforestation rates in Malawi? I feel that government should decide on adopting one working national deforestation rate based on how the two different rates came into being to end up the confusion for now and for the sake of national forest monitoring system towards SFM.

**Response:** It is **that the two deforestation rates are a result of** using different minimum mapping units and as such there is no deforestation rate that portrays recent national land cover mapping scheme, as such this is still a grey area that needs filling.

In terms of deforestation we have it at 0.63% and 1% but the former is what was reported in forest reference levels and there is need for improvements because this is only focusing on the forest reserves and excludes forests within agricultural landscapes. This is not representative of national forests but deforestation within forests reserve at 0.63%, and this rate has raised queries from United Nations and as such data on

deforestation is still lacking and needs urgent addressing. While the deforestation rates may be products of some academic or project work, government can still adopt what to work with as a national figure the way it was done with forest definition.

**Question:** Is the data on the discrepancies on LULCC maps based on the same year? If not would the discrepancies be as a result of changes over years?

**Response:** This table was developed from 2010 data across all four initiatives. Discrepancies could be a result of data being generated from different initiatives whose statistics are being compared.

**Question:** I want to seek clarity on all these data needs you have identified through a meta-analysis of the various policies and strategies that are forestry related. Should I assume that you have grouped all these data needs into the seven broad categories as you have indicated?

**Response:** Yes, through this categorization it makes linking easier because these are also the issues that are of concern at policy level being addressed by various strategies. Such being the case, the seven (7) broad categories have been linked to the five (5) National Monitoring Unit Pillars.

**Question:** Am not sure about the recommendations on 3 and 4 (**No. 3** – *Establish similar monitoring units in other MDAs including Local Government where necessary*) (**No. 4** – *Proper coordination in data collection to build on synergies and avoid duplication*).

During the implementation of the REDD+ and the Shire River Basin Management Programme, it was discovered that there were a lot of these local sectors where data is being kept and it was actually argued that for monitoring purposes these sectors at local level should not have their own monitoring units, if anything they should be collecting the data and send it to one central point to avoid duplications.

There was also an issue of individualism or individualistic approach where most of the private institutions were managing their own data but one couldn't access their data. An argument ensued to say that institutions should be able to recognize custodians of relevant data. The Department of Surveys has its own database where it invited other stakeholders to send data for storage in their server. Am not sure if institutions have responded to the call by the Surveys Department but I think with the establishment of this National Monitoring Unit (NMU) under the Forestry Department that call does not hold any more.

**Response:** You have clearly presented the issues surrounding data management dating back to the initial years of the REDD+ process. I just want to clarify on the need to *establish similar monitoring units in other MDAs including local government*. While we know that all data from other departments should be sent to one particular point, it is still important that there should other points of contact at institutional level in times of data need or querying particular set of data.

The establishment of similar monitoring units is necessarily to facilitate data feeding into the central point. However, you have raised quite critical issues to consider seriously because institutions such as NSO and Surveys Department house huge volumes of socio-economic and mapping data respectively and other

datasets but to easily access such data some formalities need to be established to ensure mutual benefit for all parties.

**Comment:** I propose that Forestry Department in trying to be key to this NMU should involve the private institutions who are data custodians and other government departments because that way it will mean ease of access to this data instead of *establishing similar monitoring units in other MDAs*. One NMU is adequate as long as it is nationalized and well supported so that other institutions including National Statistical Office (NSO) should be able to benefit from the setup.

**Response:** Let's consider the fact that we are looking at different kind of data sets that can be collected by other agencies as well government agencies. For example, socio-economic, control of soil erosion, and water retention data might not be the Department of Forestry's realm and such data may be collected by Department of Land Resource Conservation or Water Department. So, by establishing these similar monitoring units, the functions would actually vary, as they would be collecting different types of datasets that could complement the kind of datasets that is require for monitoring SFM. These monitoring units will only complement each other but while fulfilling their own institutional monitoring mandates with regard to the functions of each of these MDAs.

**Question:** Will the creation of monitoring units in various MDAs not be a challenge in terms of coordination?

**Response:** Instead of being a challenge in term of coordination it will enhance coordination. There will be greater coordination in data collection by building on synergies and avoiding duplication. What is required is to have each stakeholder institutions have a monitoring and evaluation office operating at good capacity with mandate given to collect and manage data related to their institutional mandate and core functions and these will feed their data to the NMU as needed.

## 7. Closing Remarks

On behalf of the Forestry Department, Madam Patricia Chidyera Masupayi thanked all the participants to the Virtual Workshop for their active participation. She expressed satisfaction with the high level of discussion that followed the presentation regardless of small number of participants. She praised the spirited input and comments that were offered by the participants and urged the National Consultant to take the issues raised on board to further improve the content of the draft National Monitoring and Evaluation Framework for SFM. The inputs from the Stakeholders will make the final report, which is a national document, great as it will reflect on the realities on the ground and owned by all stakeholders.

In his closing remarks, the National Consultant appreciated all the contributions that came from participants towards the development of the National Monitoring and Evaluation Framework for SFM. Through active participation, despite, the small number of stakeholders attending the Workshop, critical issues were raised that will enhance the content of the final report. He went on to ask all stakeholders who attended the Virtual Workshop that should they wish to contribute any more to the monitoring framework, they should freely do so through email which should be communicated to [willsagona@gmail.com](mailto:willsagona@gmail.com). The Consultant will still



be receiving comments and inputs to the monitoring framework up until 12 November, 2021. The meeting ended at 12:15 hours.

## Annex

### Annex 1: **Presentation**



# MONITORING PROGRESS TOWARDS SUSTAINABLE FOREST MANAGEMENT (SFM) IN MALAWI – DATA GAPS, CHALLENGES AND SOLUTIONS

BY

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## PRESENTATION OUTLINE

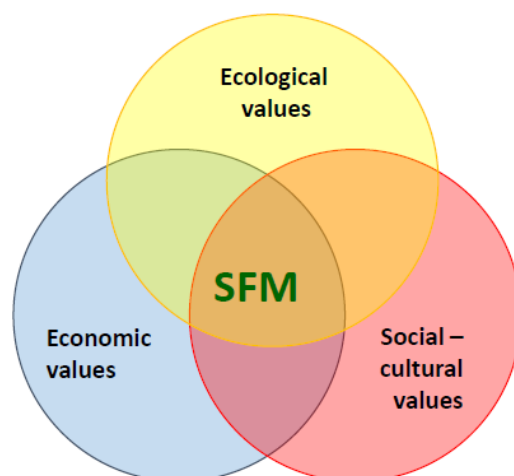
- Introduction & Background
- SFM Concept
- Comprehensive Information Management in SFM
- Malawi 's National Forest Monitoring System
- Key Policies & Data Gaps
- Broad Categories for the Data Gaps
- Challenges
- Sustainability Strategy & Recommendation
- Suggestions/Comments/Questions

## INTRODUCTION & BACKGROUND

- UNFFS is implementing a project aimed at supporting and assisting selected countries in developing a comprehensive and efficient system for monitoring progress towards SFM.
- This will be achieved through a step - by - step approach - conducting inventories of existing forest-related data, mapping data gaps; and addressing these gaps and selecting appropriate national indicators.
- Mw has been responsive to the implementation of the UN Forest Instrument.
- The adoption of the SDGs, which also has forest related targets (15.2), has led to the dvpt of a simple reporting format on SFM, which also serves the reporting needs of UNFF, CBD, NCCD and UNFCCC.

## SFM CONCEPT

- Stewardship and use of forests and forest lands in a way and rate, that maintains their biological diversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage on other ecosystems.



## WHY NEED FOR COMPREHENSIVE INFO & BETTER INFO MGT IN SFM?

### 1. "Good decisions require good information"

- Data and information are indispensable and integral part of:
  - **planning, monitoring and reviewing**
  - **at all levels** (local to **national** to global),
  - **in all sectors of society** (social, economic, environmental and cultural).

### 2. Information management and policy making and implementation are mutually dependent

- **Data and information management processes** should be developed in line with advancement of policy ideas:
- **Forest policy formulation, implementation, assessment and review** must:
  - include proper **usage of information** in all phases of forest policy process and
  - **guarantee the sustainability and effectiveness** of information management process

### 3. Challenges and new possibilities in data management

- **Rising needs** of national and international **reporting** e.g. increased focus on forest ecosystems and services by global policy processes (UNFCCC, CBD, UNCCD, UNFF, etc) from 1980-s
- **Development of new data collection and management methods**
  - inclusion of new indicators , data multi-sourcing, use of new ICT and spatial information

## MALAWI'S NATIONAL FORESTRY MONITORING SYSTEM

- DoF and other key stakeholders has been increasing its actions to protect, restore, and avoid degradation and loss of its forests.
- The NMU was established to:
  - Serve as an authority on development, updating, and implementation of forest monitoring approaches, including the NFI, land cover change, and forest landscape restoration;
  - Establish and maintain the national DMS for key forest-related data, in close collaboration with all key stakeholders;
  - Support data collection by various actors (Public and private) with capacity building and technology transfer, and promote community participation in data collection while creating an enabling environment for data access and sharing amongst practitioners in forest monitoring and management.

## KEY POLICIES & DATA GAPS

### UN FOREST INSTRUMENT

#### *Goal:*

- Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation, and reforestation, and increase efforts to prevent forest degradation
- Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests.

#### *Existing Data:*

- List of gazetted protected areas
- Evidence of deforestation and forest degradation
- Management plans
- Governance structure
- 4 generic LULC maps
- Contradictory deforestation rates

#### *Data Gaps:*

- Periodically reviewed deforestation estimates
- Nationally adopted forest degradation rates.
- Forest conversion risk maps.
- Forest encroachment data.
- Tree survival statistics from tree planting initiatives
- Data on spatial extents of small-scale forests (that abate pressure on Malawi's contiguous forests) – documentation of small-scale forests.
- Data on extent of fires, pests and diseases
- Documentation of successful SFM stories and challenges.

## UN FOREST INSTRUMENT (2007)

### **DATA GAPS:**

Definitive LULCC maps for Malawi (*LULCC Mapping Discrepancies*):

Class	JICA		World bank		FAO		RCMRD USAID	
	Sq km	%	Sq km	%	Sq km	%	Sq km	%
Forest	24,177	20.4	21,527	18.2	34,865	28.7	33,687	28.6
Cropland	59,415	50.2	63,483	53.7	47,752	40.5	47,959	40.7
Grassland	3180	2.7	3018	2.6	10,601	9.0	9013	7.6
Wetland	30,902	26.1	29,268	24.7	23,691	20.1	26,039	22.1
Settlement	513	0.4	717	0.6	1714	1.4	731	0.6
Other	132	0.1	286	0.2	213	0.2	410	0.3
Totals	118,319	99.9	118,299	100.0	117,846	99.9	117,839	99.9

## UN FOREST INSTRUMENT (2007)

- Enhance forest-based economic, social, and environmental benefits, including by improving the livelihoods of forest-dependent people

### *Existing Data:*

- Statistics on forest dependency
- Contribution of forest sector to GDP
- Diversity of forest produce on the market
- Generalized data on forest-related livelihoods

### *Data Gaps:*

Data on socio-economic and environmental safeguards

- Comprehensive socio-economic data at local level (disaggregated data on forest-related livelihoods)
- Tools and approaches for monitoring ecosystems goods and services attained from SFM
- Data on value addition on forest products

## NATIONAL FOREST ACTION PLAN (2019) & NATIONAL FOREST POLICY (2016)

- To conserve, establish, protect and manage trees and forests for the sustainable development of Malawi

### *Existing Data:*

- List of gazetted protected areas
- Evidence of deforestation and forest degradation
- Management plans
- Governance structures

### *Data Gaps:*

- LULCC maps
- Data on forest rehabilitation, restoration
- Data on tree cover gains and losses in agricultural landscapes
- Site-specific data on fire in both plantations and natural woodlands
- Areal extent for rehabilitation through natural regeneration
- Law enforcement level – successful confiscation of illegal forest produce and successful court cases
- Data on extent of fires, pests and diseases

## MALAWI BIOMASS ENERGY STRATEGY (2009) & NATIONAL ENERGY POLICY (2018)

- Ensure a sustainable supply of affordable wood fuels by increasing the supply and efficiency of biomass energy use, as well as create (or improve) the institutional capacity to manage the biomass energy sector.
- Increase the access to affordable, reliable, sustainable, efficient and modern energy services by every person in the country.

### *Existing Data:*

- General statistics on biomass energy dependency
- Data on alternative energy technologies

### *Data Gaps:*

- Data on fuel wood supply from industrial plantation and other sustainable wood sources.
- Data on fuelwood offtakes from forest reserves and other natural woodlands.
- Data on fuelwood usage by households, institutions and industries, including tobacco estates.
- Data on extent of fires, pests and diseases

## NATIONAL CLIMATE CHANGE MANAGEMENT POLICY, (2016)

- Guide programming of interventions for reduction of greenhouse gas emissions in the atmosphere, as well as adapting to the adverse effects of climate change and climate variability.
- Integrate climate change into development planning and implementation by all stakeholders.

### *Existing Data:*

- Stakeholder maps
- Investment plans
- Feasible mitigation and adaptation options

### *Data Gaps:*

- Carbon and/or biomass estimates from agricultural landscapes
- Tree and forest characterization in agricultural landscapes
- Social, economic and environmental safeguards

## FOOD SECURITY POLICY (2006) & NATIONAL AGRICULTURAL POLICY (2010)

- Increase agricultural productivity as well as diversity and sustainable agricultural growth and development.

### *Existing Data:*

- Crop production estimates
- Land capability classes
- Vulnerability maps
- Disaggregated data on livestock population
- Soil and water conservation options

### *Data Gaps:*

- Data on non-carbon biophysical benefits – water retention, soil fertility maintenance, control of soil erosion, etc.
- Encroachment extents in protected areas

## NATIONAL BIODIVERSITY STRATEGY ACTION PLAN (NBSAP) (2006)

Conserve and sustainably use the biodiversity.

### *Existing Data:*

- National red data list
- Ex situ conservation of endemic plant species
- Tree species list for Malawi
- List of threatened, endemic and endangered and protected species
- Benefit sharing mechanisms

### *Data Gaps:*

- Forest stratification and mapping
- Biodiversity mapping
- Site-specific data on fire in both plantations and natural woodlands



## WILDLIFE POLICY (2000) & NATIONAL PARKS AND WILDLIFE ACT (2004)

- Ensure proper conservation and management of wildlife in order to provide for sustainable utilization; equitable access to the resources; and fair sharing of benefits from the resources for both present and future Malawians.
- Promote community participation and private sector involvement in the conservation and management of wildlife.

### *Existing Data:*

- Management plans
- Governance structure
- Benefit sharing mechanisms
- Pilot REDD+ project
- Public-private partnership arrangements
- Data on private wildlife conservation and ecotourism

### *Data Gaps:*

- Data on non-carbon biophysical benefits – ecotourism, water retention, soil fertility maintenance, control of soil erosion, etc.
- Data on safeguards – resource governance, community participation, livelihood improvement

## NATIONAL DECENTRALIZATION POLICY (1998)

- Promotes popular participation in governance through local governments by among others, devolving forestry management on customary land to the communities.

### *Existing Data:*

- Decentralized functions
- Number and extent of protected areas being co-managed by communities and government agencies such as Forestry Department and Department of Parks and Wildlife.

### *Data Gaps:*

- Data on safeguards – resource governance, community participation, livelihood improvement
- Catalogue of forests and village forest areas being managed by communities.

## NATIONAL WATER POLICY (2005)

- Conserve and manage water resources for improved livelihoods.
- Promote integrated water resource management approaches.

### *Existing Data:*

- National erosion rates
- Extent of water abstraction
- Data on critical water catchment areas

### *Data Gaps:*

- Data on non-carbon biophysical benefits – water retention, etc.
- Data on safeguards – resource governance, community participation, livelihood improvement
- Extent of IWRM in Malawi

## MALAWI GROWTH AND DEVELOPMENT STRATEGIES (MGDS) I – III & MALAWI'S VISION: MALAWI 2063

- Reducing poverty and creating wealth through sustainable economic growth and infrastructure development.
- Create inclusive wealth and self-reliance for the Nation.

### *Existing Data:*

- Generalized data on human well-being e.g., income per capita.

### *Data Gaps:*

- Livelihood improvement and other socio-economic and environmental safeguards.
- Alternative livelihood creation.

## BROAD CATEGORIES FOR THE DATA GAPS

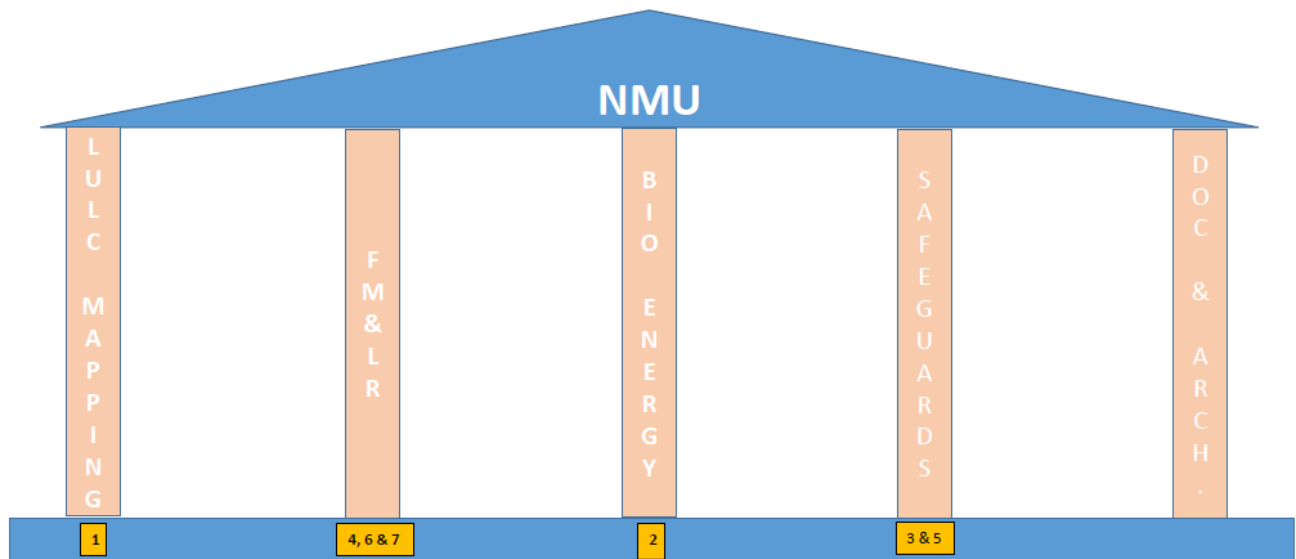
ITEM No.	CATEGORY	DATA TYPE
1	LULC Mapping	LULC maps; deforestation estimates; forest conversion risk maps; forest encroachment data; etc
2	Forest Degradation	Forest degradation rates; Mapping charcoal hotspots; levels of fuelwood extraction; fuelwood usage by HHs, institutions and industries, etc
3	Non-carbon Biophysical Benefits	Valuation of ES (water retention, prevention of soil erosion, etc), etc
4	Landscape Restoration	Tree survival statistics from tree planting initiatives; extent of forest restoration through natural regeneration, biomass estimates from agric landscapes, Biodiversity mapping, etc
5	Social & Economic Safeguards	Value addition on forest produce; livelihood enhancement, etc
6	Tree & Forest Protection	Extent of fires, pests and disease infestation; etc
7	Law Enforcement	Volumes of confiscated illegal forest produce; Cases prosecuted; etc

## CHALLENGES

- Data quality and reliability - incoherent and questionable standard
- Capacity (Human, Financial and Technological) in data generation and database management
- Limited awareness of environmental and natural resource best practices
- Few opportunities for practical cooperation among sectors
- Unupdated framework for monitoring, assessing, and reporting
- Low CSO and Private sector involvement
- Deficiencies regarding adequacy of methodologies to conduct inventories and the socio-economic data on forests
- Lack of centralized data repository – relevant data scattered across different government agencies and private organizations
- Lack of a better reporting system to adequately and appropriately cover all aspects of SFM
- Reporting burden to multiple international and regional processes.

## SUSTAINABILITY STRATEGY & RECOMMENDATIONS

- Streamline data needs into existing structures



## SUSTAINABILITY STRATEGY & RECOMMENDATIONS

- Empower appropriate structures to collect required data (e.g. NSO).
- Link NMU with other data collecting agencies.
- Establish similar monitoring units in other MDAs including Local Government where necessary.
- Proper coordination in data collection to build on synergies and avoid duplication.
- Focus on developing approaches and tools that include adoptable standard operating procedures for valuation of ecosystem goods and services.

- There is need to leverage monitoring efforts to ensure that robust data is collected and reported because monitoring resources can be challenging.
- Non-carbon including socio-economic benefits of SFM become critical as long as these benefits are monitored and reported to the appreciation of all stakeholders including community members.

**COMMENTS/QUESTIONS/SUGGESTIONS**

**THANK YOU**

## Annex 2: Invited Stakeholders' List

No	Name	Organization	Email address	Work Place	Remarks
1	Dr. C.Z. Chilima	Department of Forestry	<a href="mailto:cchilima@gmail.com">cchilima@gmail.com</a>	Lilongwe	Absent
2	Afsa Kemitale-Rothschild	UNFF	kemitale@un.org	New York, USA	Absent
3	Njeri Kariuki	UNFF	kariuki@un.org	New York, USA	Absent
4	Mr. Yamikani Idriss	Department of Environmental Affairs	idrissyamikani@gmail.com	Lilongwe	Absent
5	Chifundo Dalireni	Wildlife and Environmental Society of Malawi (WESM)	chifundod@gmail.com	Lilongwe	Absent
6	Gloria Majiga	Centre for Environmental Policy and Advocacy (CEPA)	gloria@cepa.org.mw	Blantyre	Absent
7	Reginald Mumba	Coordination Unit for Rehabilitation of the Environment (CURE)	reginald.mumba@gmail.com	Blantyre	Absent
8	Mr M. Ntholo	Lilongwe University of Agriculture and Natural Resources (LUANAR)	mosntho7@gmail.com	Lilongwe	Absent
9	Ms. Lucy Chimombo	Department of Energy	lchimombo@yahoo.com	Lilongwe	Absent
10	Mr. Thanasius Sitolo	Department of Water	tsitolo@gmail.com	Lilongwe	Absent
11	Mr. M.E.L. Msomba	DFO Nkhata-Bay	melmusomba@gmail.com	NkhataBay	Absent
12	Kennedy Adamson	LUANAR (NRC)	kennan84@gmail.com	Lilongwe	Absent
13	Ted Kamoto	Department of Forestry	teddiekamoto@gmail.com	Lilongwe	Absent
14	Henry Utila	Forestry Research Institute of Malawi	heutila@gmail.com	Zomba	Absent
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16	Dan Ndalowa	Malawi College of Forestry & Wildlife	nchidani@gmail.com	Dedza	Absent
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20	Custom Nyirenda	Department of Forestry	nkhamoza@gmail.com	Viphya/ Mzimba	Absent
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23	Mr Nthala	RAIPLY	raiplymw@raiplymalawi.com	Viphya	Absent
24	Prof. Lusayo Mwabumba	Mzuzu University	<a href="mailto:lusayomwabumba@yahoo.co.uk">lusayomwabumba@yahoo.co.uk</a>	Mzuzu	Attended
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49	Lutiya Kayange	Forestry Department		Lilongwe	Attended