



Republic of Zambia

MINISTRY OF LANDS AND NATURAL RESOURCES

Forestry Department

CURRENT STATUS OF THE FOREST ACCOUNT (FA) – WEALTH ACCOUNTING AND VALUATION OF ECOSYSTEM SERVICES (WAVES) PROJECT

(As at 13th April 2018)

1.0 INTRODUCTION

The Forest Technical Working Group (FTWG) for the Forest Account under the Wealth Accounting and Valuation of Ecosystem Services (WAVES) Project participated in the previous mission and workshop held from 9th – 13th April, 2018 with a view to work and update the accounts. In close collaboration with members from the National Remote Sensing Centre (NRSC) and ex-officials from the World Bank, the FTWG made significant and substantial progress in analysing the Forest data stocks and flows from the environment to the economy. The FTWG was able to make informative presentations and provided consistent updates before the mission team and the workshop, including construction of several tables for the Forest Account (FA). The following outputs were constructed and confidently presented during the workshop:

- 1) Developed a conceptual framework for the provisioning services
- 2) Forest asset account tables at national level 2010-2015 (area based),
- 3) Forest asset account tables at national level 2010-2015 (volume based),
- 4) Forest asset account tables at national level 2010-2015 (monetary based),
- 5) Forest asset account tables at national level 2010-2015 (land cover change matrix),
- 6) Preliminary physical supply and use table (PSUT) for 2010,
- 7) Preliminary monetary supply and use table (MSUT) for 2010,
- 8) Early draft technical report for consultation.

Changes in the FTWG and the additional motivation provided by new members have also served as a catalyser to broaden the discussion on potential policy application, access to new and additional information for the account. It has also helped to have a more strategic thinking about the account in terms of thinking in parallel about policy uses and technical implementation of the accounts. So far, the FTWG has successfully recorded about 70 - 75% of the expected work-load in building and

completing the forest account. The team has also started drafting a diagram that will communicate the flow of resources from the environment to the economy. It would be reasonable to think that if this core group is supported, the first iteration of the Forest Account would quickly be developed and validated within the next 2-3 months.

2.0 TECHNICAL CHALLENGES

There are still technical challenges ahead related to the credibility and authenticity for some of data/information provided to the FTWG. There may still be need to do some quality control and verification of the available data, particularly with forestry economic data, production returns, coefficients used for calculating data on provisional services (i.e. exhaustive estimates on waste losses against input data for data flows). However, there are potentially some short term parallel studies or analytical work that could be commissioned soon that could address these challenges and enhance the FA implementation and at the same time inform policy dialogue in very specific areas. Some ideas discussed include the following analytical work: (i) Tracking down the economic, social and environmental impacts of charcoal production, (ii) Forest ecosystems and water nexus along the Kafue river, other headwaters and river basins, (iii) Understanding competing demands of forest ecosystem services in the Eastern province, (iv) Income generation in the forest sector and potential to expand the forest related industries.

3.0 CONCLUSION

In conclusion the FTWG (though very few members present) agreed on a few milestones and next steps (Table 1) based on the following objectives:

- 1) Design a conceptual framework for organizing the forest stock and economic information,
- 2) Track and estimate data stocks and flows from the environment into the economy (*i.e. area of forests growing stock, biomass stock, carbon stocks and attach the monetary value*) – 2010 to 2015,
- 3) Develop a FA for the supply of goods (NTFPs and TFPs) and ecosystem services from forests into the economy supported by a diagram that clearly interprets analyzes the FA – 2010 to 2015,
- 4) Inform policy (i.e. provide policy direction) to support Sustainable Forest Management (SFM).

Table 1: Forest Account Work-Plan

Activity	Lead Persons	Due Dates
1) Finalize Technical Report for Consultation	Mulongwe ¹	April 30, 2018
2) Validate, review data and update Technical Report and present first iteration of all forest accounting tables	Abel ²	May 31, 2018

Activity	Lead Persons	Due Dates
3) Subject the accounts to a Consultative Review Process	Abel ² and Mulongwe ¹	June 29, 2018
4) Final preparation and publication of the forest account	Abel ² , Michael ³ and Mercy ⁴	July 31, 2018
5) Briefs and other communication materials prepared	Abel ² and Rosina ⁵	August 31, 2018
6) Conference paper on forest accounts to be presented at the NCA Policy Forum	Abel ² and JP ⁶	September 28, 2018
<p>NOTES</p> <p>Only 3 Technical Working Group members (TWG) were actively involved in raising the profile for the Forest Account during this mission. Other members were not in attendance. However, the team was supported by 2 World Bank officials working on the Forest Account flanked by the World Bank communication specialist. The full names of the members assigned responsibilities are as follows:</p> <ol style="list-style-type: none"> 1. Mulongwe Lishomwa – Forestry Department (TWG) 2. Abel M. Siampale – Forestry Department (Focal Point) 3. Michael Phiri – National Remote Sensing Centre (TWG) 4. Mercy Soko – World Bank (Data Analyst) 5. Rosina Mbewe – World Bank (Communications Specialist) 6. Juan-Pablo Castaneda – World Bank (Environmentalist) 		

Table 2: List of Data Sources

Data Types	Potential Sources
Land Cover/Use	<ul style="list-style-type: none"> • National Remote Sensing Centre (NRSC) – Satellite Imagery and GIS services • Forest Department – Forest Inventories and the ILUA II Report • Survey Department – Land use data and topographical Maps and Aerial Photography, National Spatial Data Infrastructure • Ministry of Agriculture – Agricultural Data • Central Statistical Office (CSO) • Local Government (Councils) – Land use data • Zambia Environmental Management Authority – Environmental flows • Academia – Department of Natural Resources, CBU
Wood and Non-wood (Timber and Non-timber resources)	<ul style="list-style-type: none"> • Forestry Department – Inventories and Administrative Data • ZAFFICO – timber inventory and flows • Private Forest Plantations - • WISDOM Report • Wood based industries (Sawmills, carpentry shops) • Central Statistical Office (CSO) • Department of Wildlife and National Parks • Ministry of Agriculture • Ministry of Energy – charcoal and firewood use • NGOs (CIFOR, WWF, FAO) • Academia
Economic Data	<ul style="list-style-type: none"> • Central Statistical Office (CSO) • IAPRI – charcoal flows • Forest Livelihood and Economic Survey • Zambia Revenue Authority (ZRA) • Ministry of Commerce, Trade and Industry • Ministry of Finance • Academia

WORKPLAN FOR THE TWG FOR THE WATER ACCOUNT

NO	Action	Responsible	Timeframe
1	Complete the Consultation draft-version one	Mkhuzo Chongo	11/5/18
2	PSUT for 2010 for all provinces	Stanley Hantambo	11/5/18
3	PSUT for Copperbelt ,Lusaka &Eastern for 2014,2015 & 2016	Stanley Hantambo	11/5/18
4	Main messages	Mkhuzo Chongo	11/5/18
5	Issues with data	Mkhuzo Chongo	11/5/18
5	Application to policy	Mkhuzo Chongo & Michael Vardon	11/5/18
	After May 11 2018		
6	Arrange stakeholder meetings (Individual engagements)	PIU/ TWG	30 th June 2018
7	Update the draft –version two	TWG	15 August 2018
8	Stakeholder seminars/workshop	PIU	1 sept 2018
9	Methods for MSUT for 2010-2017-Draft asset account physical	Nkandu Kabibwa	1 sept 2018
10	Provincial GDP for 2014,2015,2016	Mkhuzo & Stanley	1 sept 2018
11	Policy -7NDP for entry points	Mkhuzo Chongo	1 sept 2018
12	2010 water policy	Mkhuzo Chongo	1 sept 2018
13	Energy Plan?	Mkhuzo Chongo	1 sept 2018
14	How National strategy for the development of statistics links with water and other accounts	Nkandu Kabibwa	1 sept 2018
15	Develop an asset account	Mkhuzo Chongo & Michael Vardon	
16	On going production of 2017 PSUT	Mkhuzo & Stanley	

WORK PLAN FOR LAND ACCOUNT APRIL TO SEPTEMBER 2018

SN	ACTION	RESPONSIBLE	DUE DATE
1	Communication with other line Ministries And Institutions		
	<ul style="list-style-type: none"> Ministry of Local Government – Appointment of 2 key personnel to the TWG (Planner and GIS Technician) 	National Coordinator/Communications Team	A week after the Mission (16 th to 20 th April 2018)
	<ul style="list-style-type: none"> Ministry of Tourism (Department of Wildlife and Parks) – National Parks data 	National Coordinator/Communications Team	16 th to 30 th April 2018
	<ul style="list-style-type: none"> Office of the Vice President, Department of Resettlement – Data on Resettlement areas 	National Coordinator/Communications Team	16 th to 30 th April 2018
2	<ul style="list-style-type: none"> Ministry of Mines – Data Mining areas 	National Coordinator/Communications Team	16 th to 30 th April 2018
	Data Collection		
2	<ul style="list-style-type: none"> Land Use Data from Key Line Institutions (Council, Mines, Department of Wildlife, DMMU Agriculture, CSO Etc...) 	TWG	16 th April to 31 st May 2018
	<ul style="list-style-type: none"> Accessing of Classified Land Cover Data 2015 from Regional Centre for Mapping and Resource Development (RCMRD) 	TWG/National Coordinator/World Bank	
3	Data Compilation		
	<ul style="list-style-type: none"> Generating land use data through supervised and unsupervised techniques to produce land use and monetary accounts for the Pilot Area (Eastern Province) 	TWG	1 st June to 30 th June 2018
	<ul style="list-style-type: none"> Converting of Analogue data into digital format and Data processing (Land use -Eastern Province) 	TWG	1 st June to 30 th June 2018
4	Planning for Next Pilot Area		
	<ul style="list-style-type: none"> Data Collection, Data Compilation and Converting of Analogue data into digital format and Data Processing (Land use - Next Province with available data) 	TWG	1 st July to 30 th September 2018
5	Monthly meetings as TWG –Progress Check/ Data analysis	TWG	Once Every Last week of the month

6	Procurement of Hardware and Software		
	<ul style="list-style-type: none"> • 2 Laptops with high specifications; <ul style="list-style-type: none"> ✓ Operating System – Windows 10 Pro 64 Bit ✓ RAM – 16GB ✓ Disk Storage – 100GB Free Space ✓ Screen – 15 Inch (1366 x 768) ✓ Processor – i7 Processor ✓ Software – Microsoft Office 	World Bank	By 15 th May 2018
	<ul style="list-style-type: none"> • 2 ArcGIS License – 10.2 	World Bank	By 15 th May 2018