



TOWARDS FORMALIZATION OF WOODFUEL VALUE CHAIN IN LIBERIA: PROGRESS AND CHALLENGES

IBRAHIM M. FAVADA

**Sustainable Woodfuel Value Chains in Africa: Governance,
Social, Economic and Ecological Dimensions**

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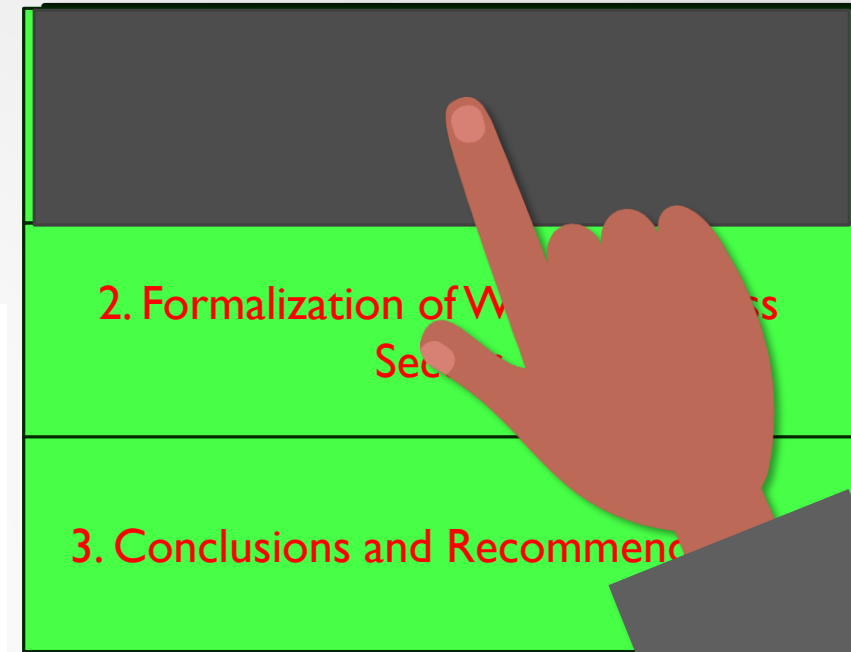
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- Conclusions
- Recommendations

INTRODUCTION

Importance of Fuelwood Sector in Liberia

- 98% of Liberia's population depends on fuelwood (firewood and charcoal) for cooking and heating (MLME, 2009).
- Firewood is the most common fuel in rural areas, while charcoal use dominates in urban cities.



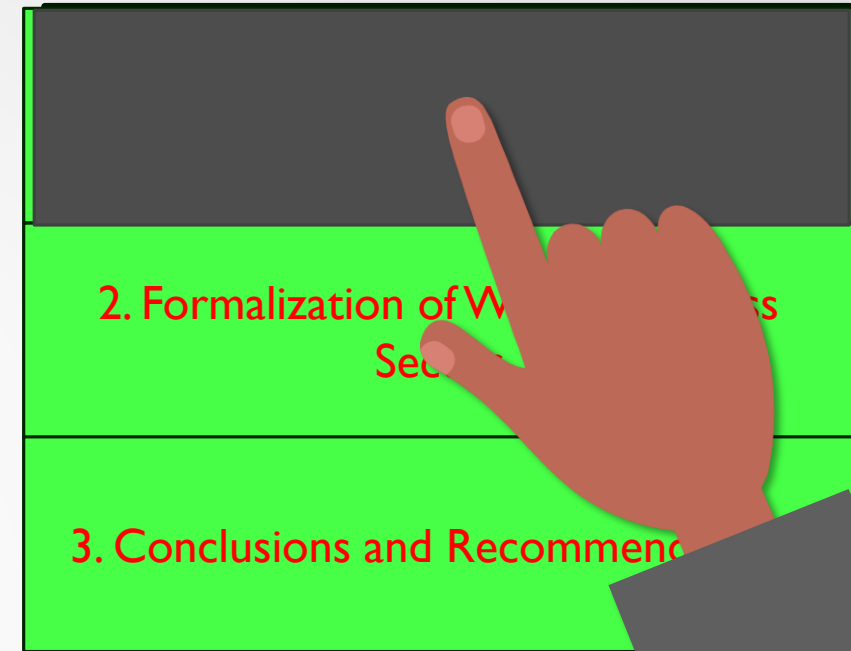
INTRODUCTION

Importance of Fuelwood Sector in Liberia

Fig. I. Usage of Cooking and Heating Fuels (in %)

Fuel Types	Total Pop.	Rural Pop.	Urban Pop.
Charcoal	44	9	70
Firewood	54	90	26
Others (Elect. and cooking gas)	2	1	4

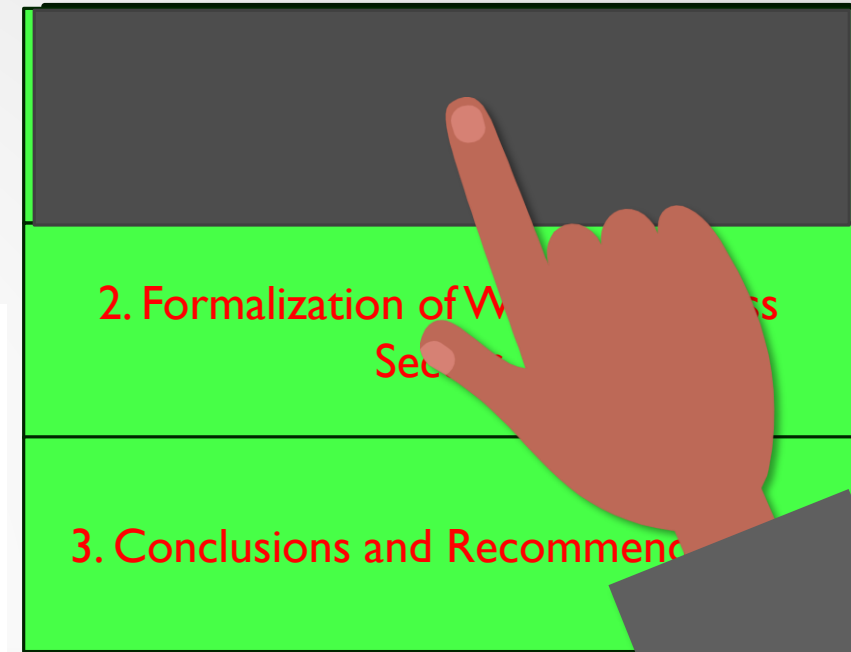
Sources: LISGIS, 2013, World Bank, 2018



INTRODUCTION

Importance of Fuelwood Sector in Liberia

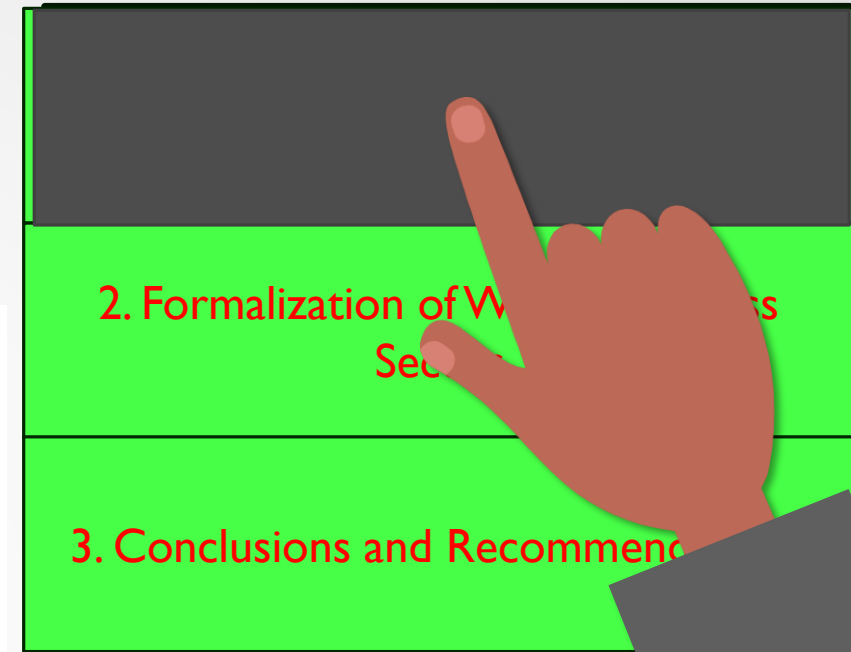
- Fifty years ago, firewood was primary cooking fuel in rural and urban areas (USAID, 2015; Rotto, 1970).
- An estimate of charcoal annual market value in 2009 was between US\$15-25 million (USAID 2015).



INTRODUCTION

Importance of Fuelwood Sector in Liberia

- Charcoal has increasingly eroded the share of firewood since the 70's due to economic growth, increasing population, urban migration, convenience in use of charcoal, etc.



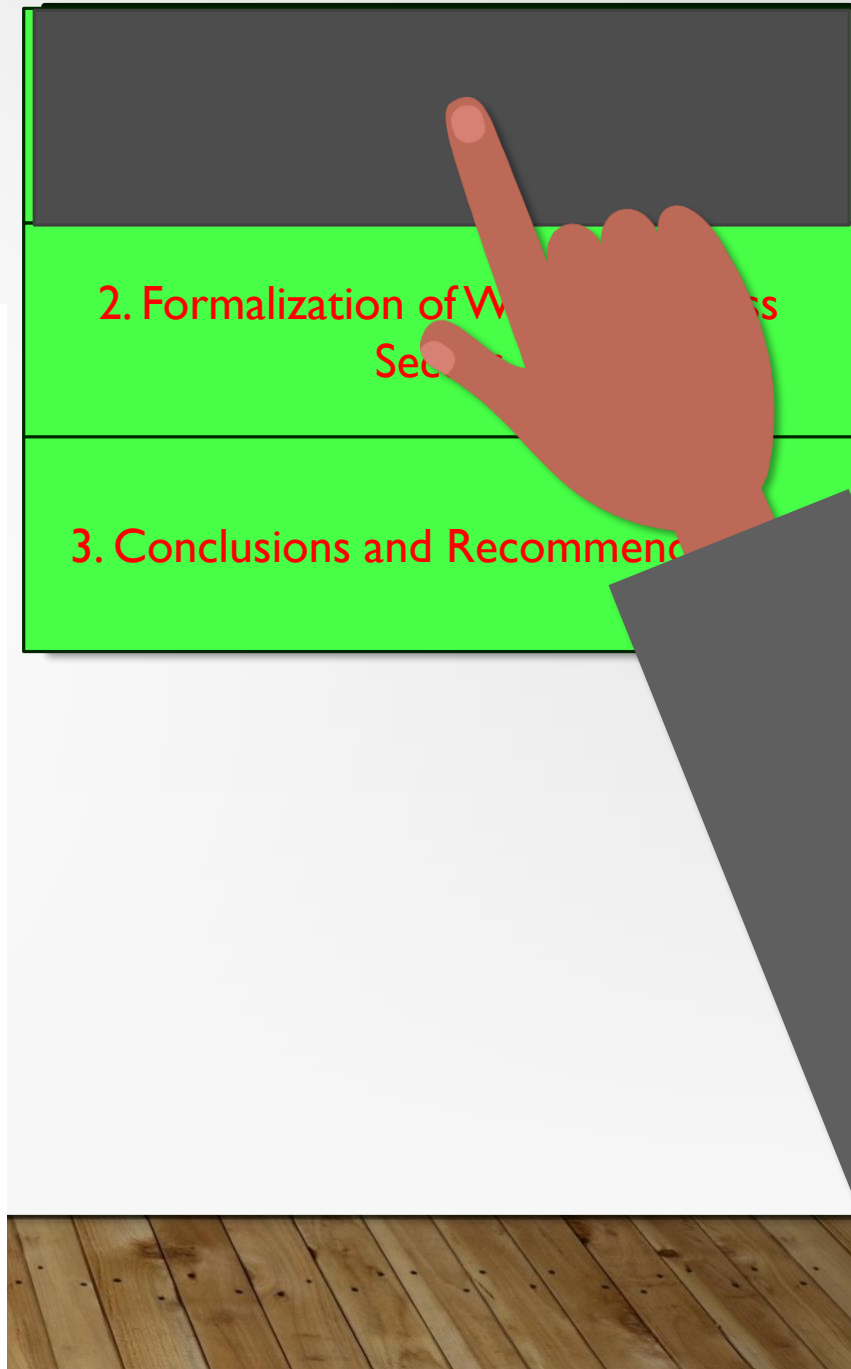
2. Formalization of Wood Sector

3. Conclusions and Recommendations

INTRODUCTION

Importance of Fuelwood Sector in Liberia

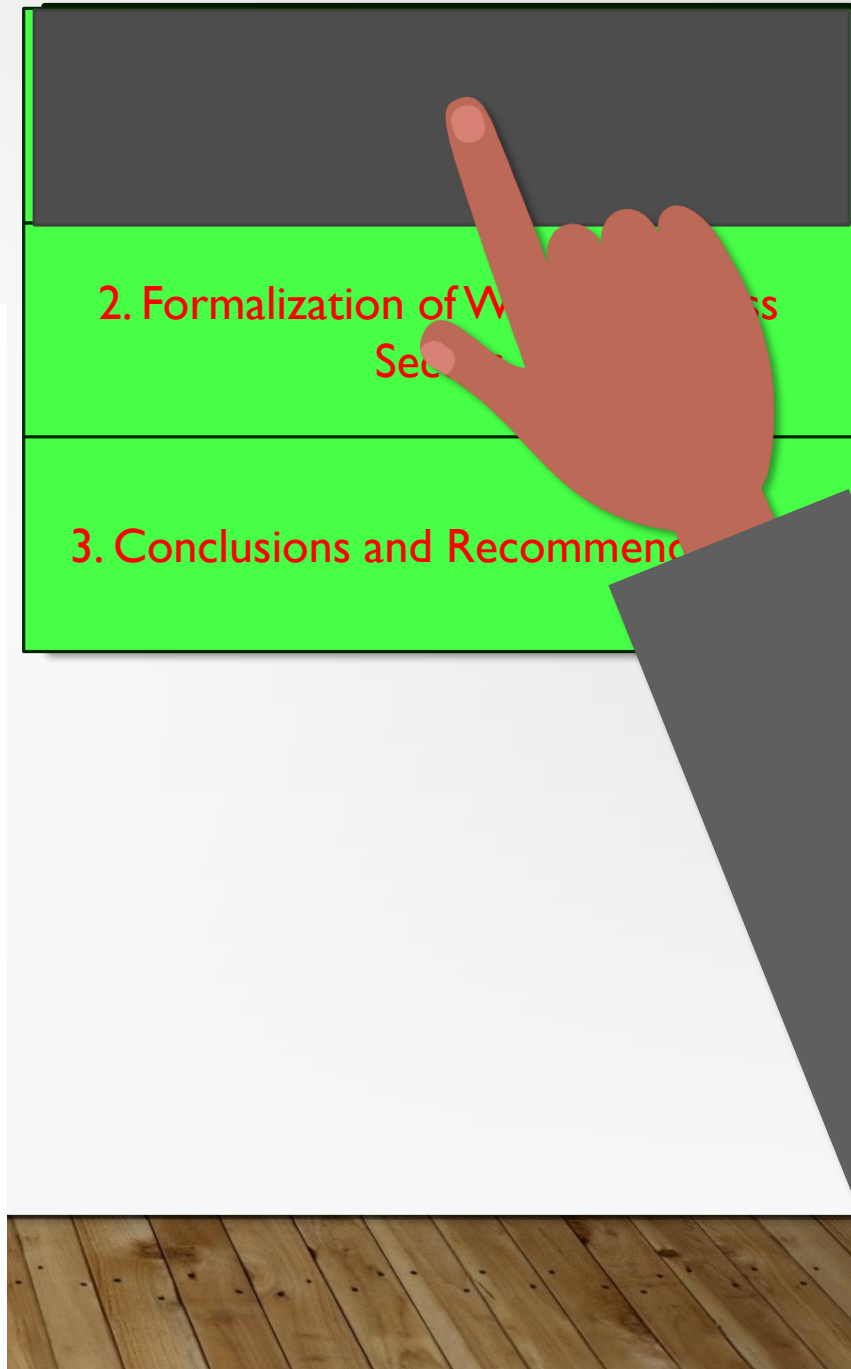
- A recent study estimated:
 - Charcoal demand in 2018 at 337,000 MT/yr. having an annual retail value of US\$46 million .
 - Charcoal industry employment in 2018 was 27,000-28,000 people on full-time basis and 23,500 people on part-time basis (World Bank, 2019).



INTRODUCTION

Importance of Fuelwood Sector in Liberia

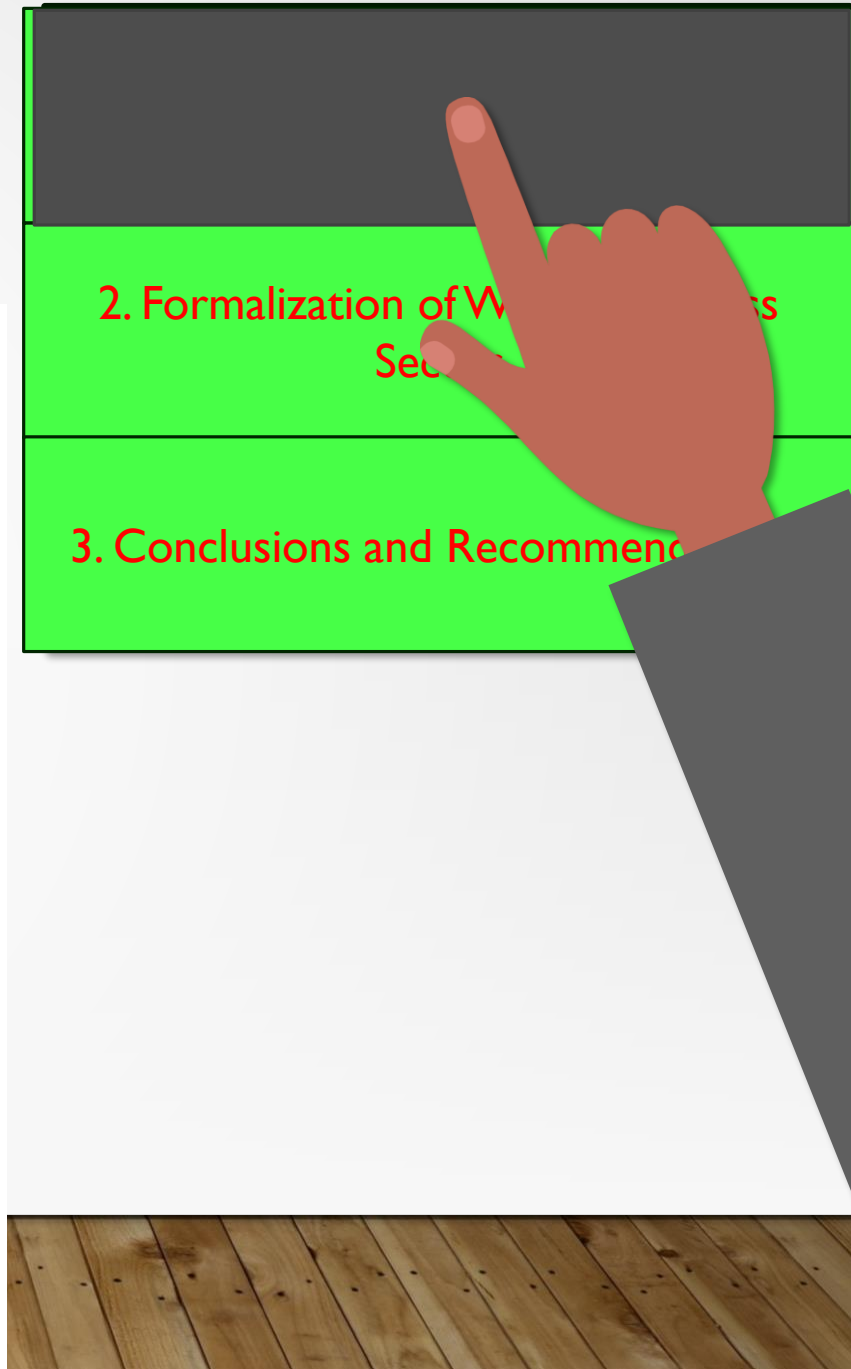
- However,
 - Charcoal is the second largest informal wood based sector after informal timber sector (USAID 2015).
 - Charcoal is a significant driver of forest degradation and deforestation (LTS International).



INTRODUCTION

Importance of Fuelwood Sector in Liberia

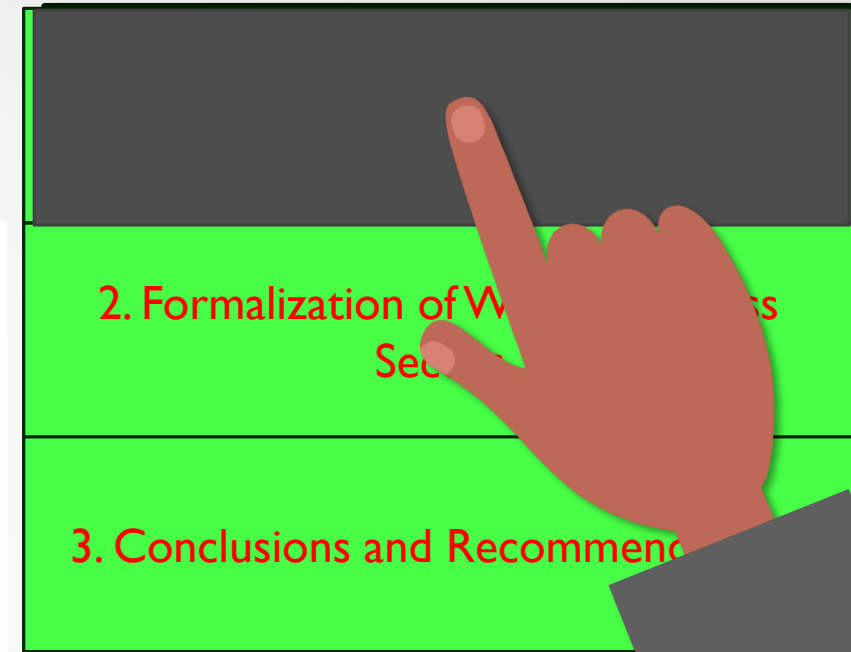
- The charcoal sector is characterized by low efficiency because of using traditional, inefficient kiln which results to low conversion rate.
- Thus, the Government of Liberia (GOL) sees reasons to formalize the charcoal sector to maximize economic, social and environmental benefits.



INTRODUCTION

Aim and Objectives

- **Aim:** To review the current regulation on charcoal production and trade in Liberia.
- **Objectives:**
 - To assess the extent the GoL has addressed issues relating to unsustainable production and trade of charcoal.
 - To Identify challenges faced by producers, transporters, and the GoL.

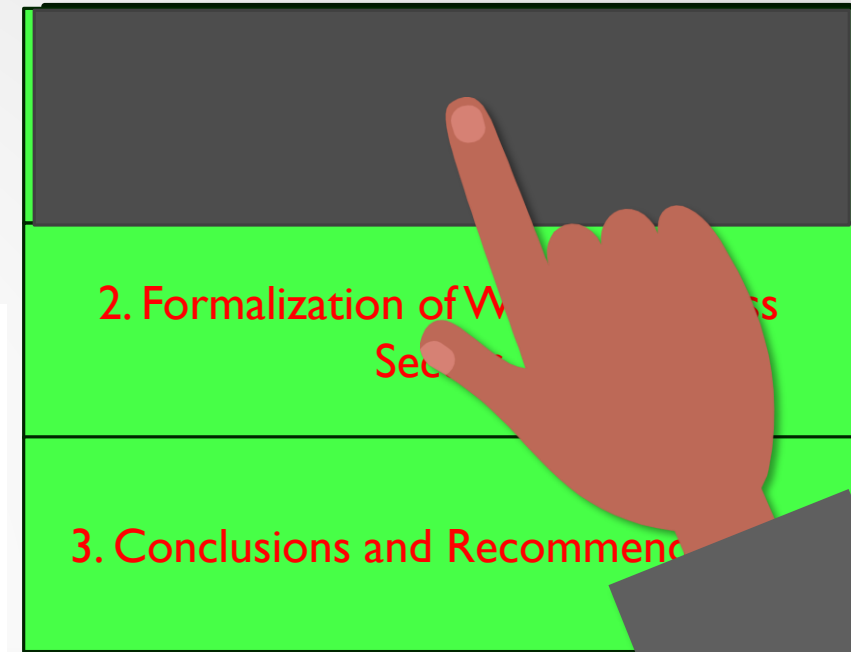


INTRODUCTION

Methodology

A desk study on the current charcoal regulation of Liberia focusing on

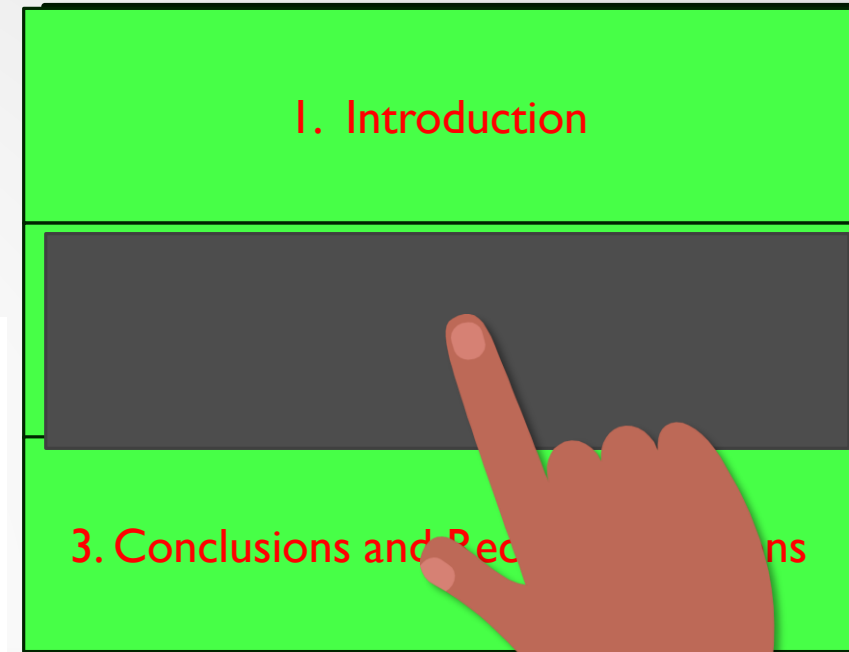
- Issues of formalization and sustainability of charcoal value chain
- Challenges of the producers, transporter, and the GoL.



FORMALIZATION OF WOODY BIOMASS SECTOR

Regulations

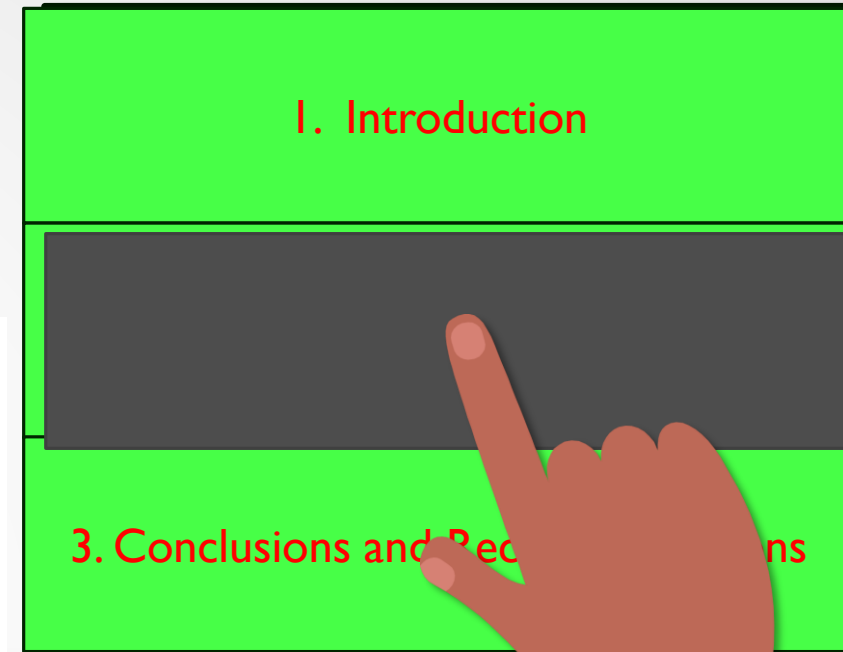
- The GoL through the Forestry Development Authority (FDA) issued regulations to formalize the wood based biomass energy sector as follows:
 - Regulation No. 19 (1990) on sustainability of the resource base for fuelwood and charcoal production;
 - Regulation No. 23 (1998) on administrative fees on forest and wildlife conservation;



FORMALIZATION OF WOODY BIOMASS SECTOR

Regulations

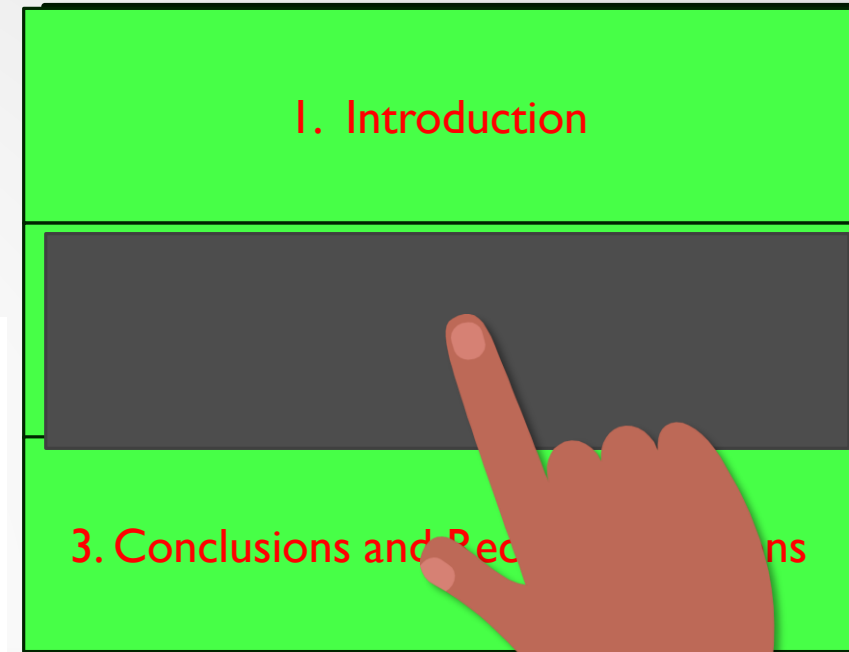
- Regulation No. 24 (2000) on utilization of minor forest products;
- Regulation No. 111-08 (2009) on the Commercial and Sustainable Extraction of Non-Timber Forest Products; and
- Regulation No. 119-17 (2017) on Sustainable Wood-Based Biomass Energy Production and Marketing in Liberia.



FORMALIZATION OF WOODY BIOMASS SECTOR

Regulations

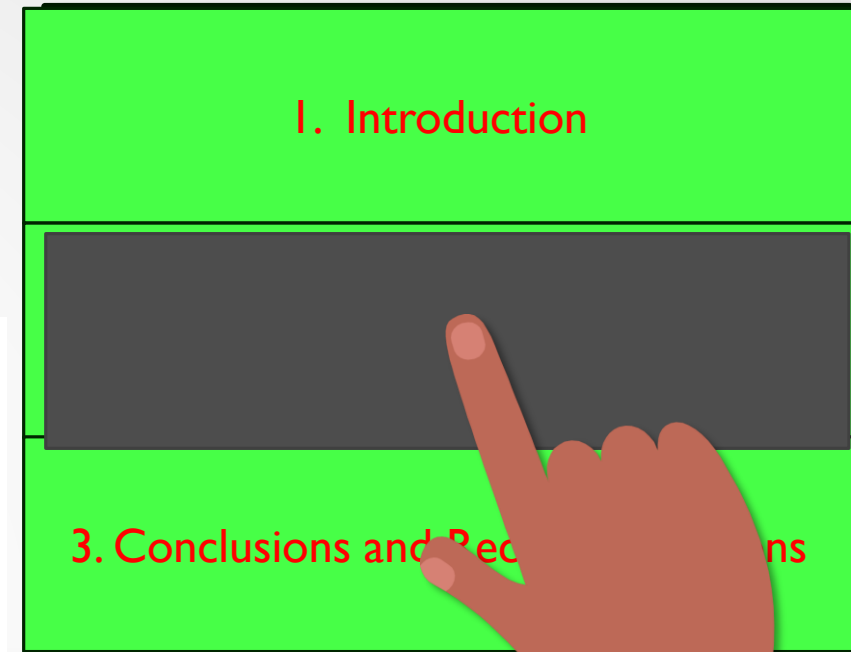
- Regulation No. 119-17 is the most comprehensive of the above-mentioned regulations.
- Its objectives are:
 - To provide guidelines on the legal requirements for producers, transporters, and traders of all sizes involved in woody biomass energy business;



FORMALIZATION OF WOODY BIOMASS SECTOR

Regulations

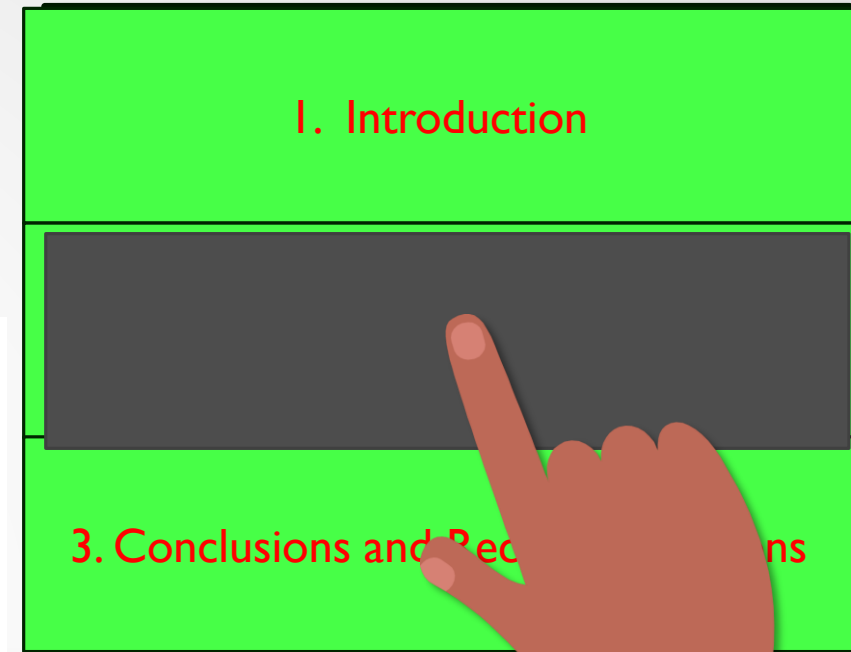
- To establish a structured process by which authorization for woody biomass energy production and marketing or trade is requested, reviewed, and granted or denied; and
- To ensure that woody biomass energy production and marketing or trade is carried out in an environmentally appropriate manner.



FORMALIZATION OF WOODY BIOMASS SECTOR

Liberia's charcoal value chains

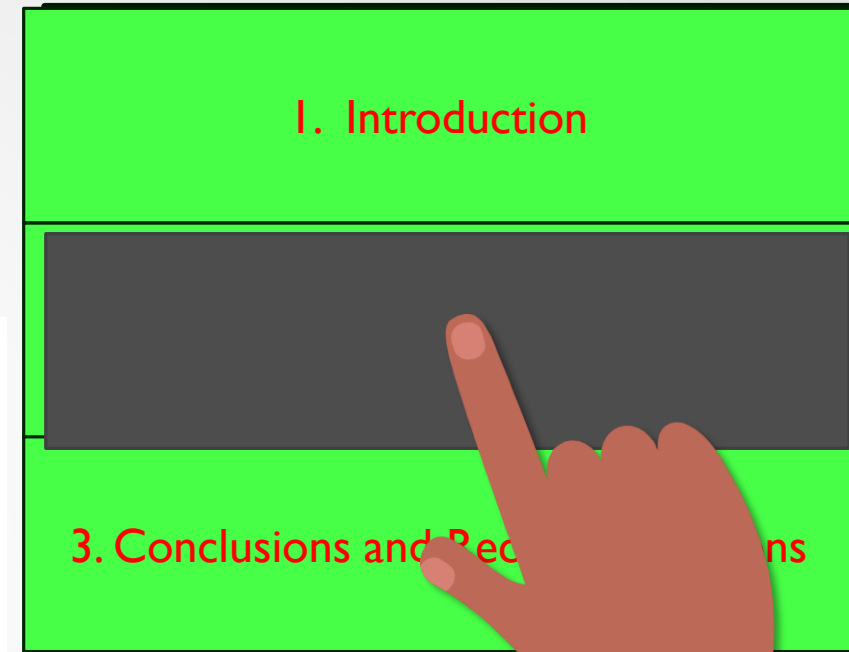
- The charcoal value chain includes (World Bank 2019):
 - Sourcing: from indigenous hardwood and over-aged rubber wood;
 - Production: professional producers and short-term producers.



FORMALIZATION OF WOODY BIOMASS SECTOR

Liberia's charcoal value chains

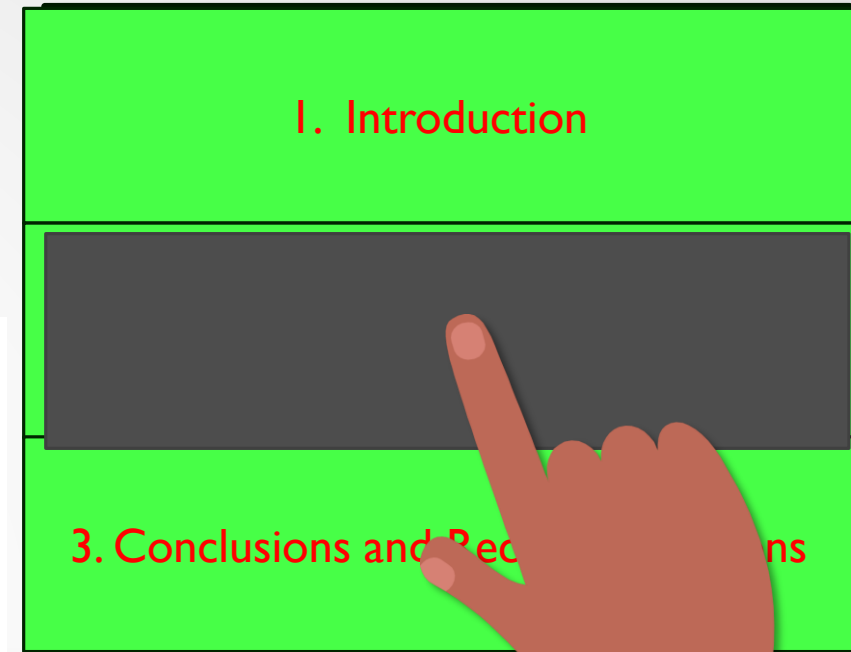
- Transport: all types of vehicles – private cars, government vehicles, public taxi, pick-ups and trucks.
- Trade: Wholesaling of 23.5 kg bag of charcoal and retailing of the same bag into 9 plastic bags.



FORMALIZATION OF WOODY BIOMASS SECTOR

Regulation 119-17 provisions at each value chain

- Sourcing:
 - Specified areas allowed for commercial woody biomass energy (WBE) production, and
 - Any person or WBE producers' or markers' association that desires to use an eligible forest area for commercial woody biomass production shall register with the FDA.

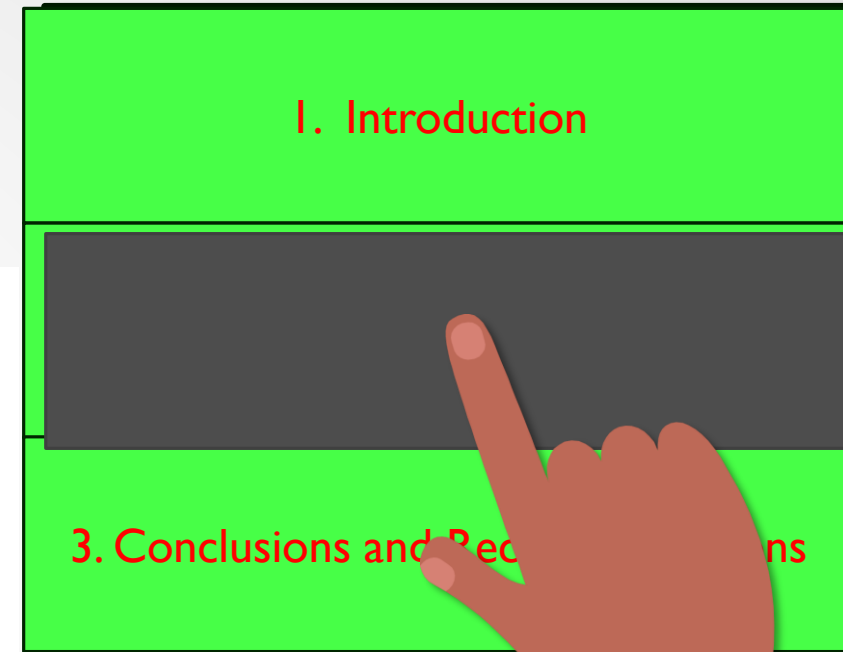


FORMALIZATION OF WOODY BIOMASS SECTOR

Regulation 119-17 provisions at each value chain

■ Production:

- All commercial WBE producers may organize themselves into an individual value chain Association (producers' or marketers' association),
- That individual or WBE association must register with FDA to obtain a license before engaging in production, transport and marketing of WBE products.

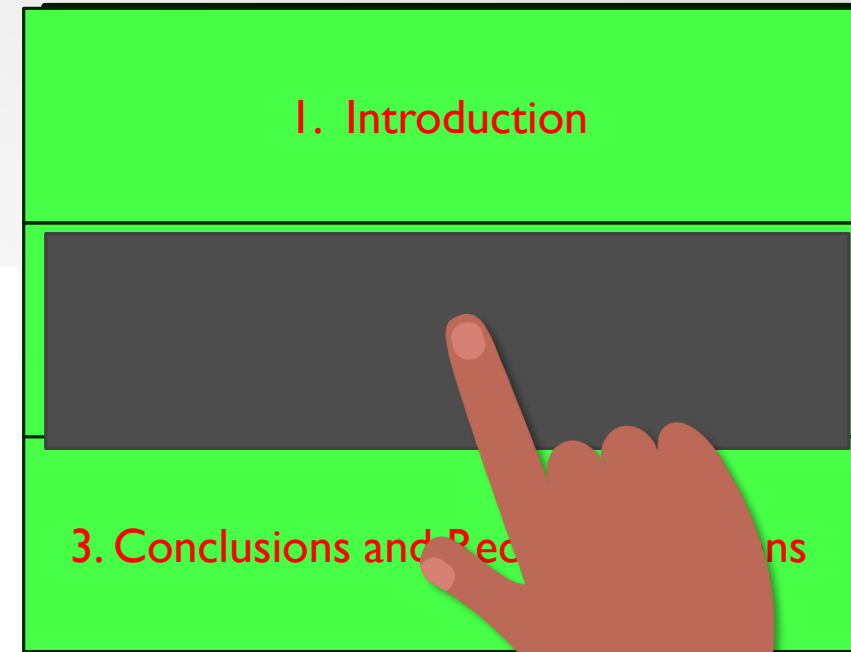


FORMALIZATION OF WOODY BIOMASS SECTOR

Regulation 119-17 provisions at each value chain

■ Production:

- Private and community landowners producing WBE products for their own household use do not require a license.

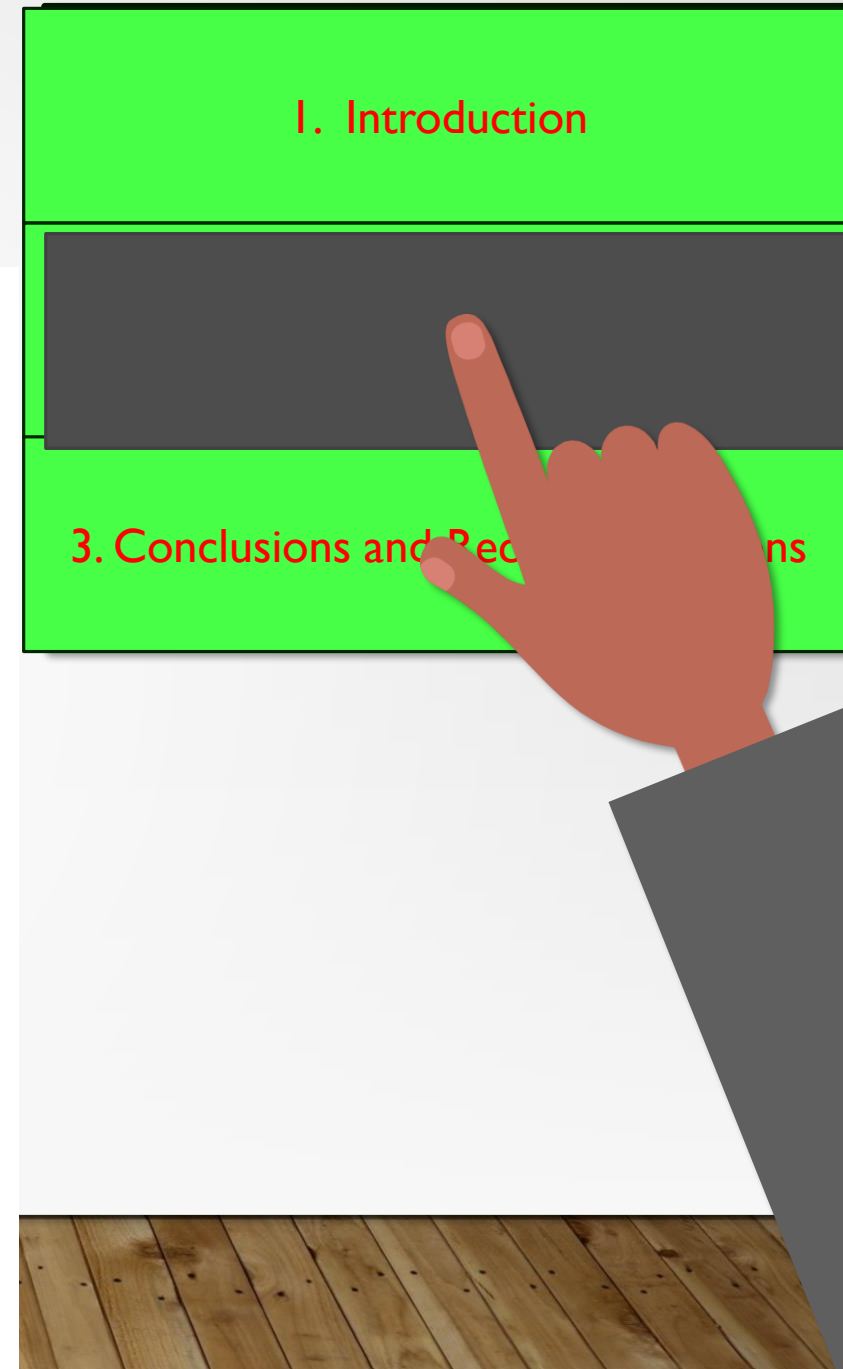


FORMALIZATION OF WOODY BIOMASS SECTOR

Regulation 119-17 provisions at each value chain

■ Transport:

- Any person or WBE association desiring to move woody biomass energy products from one place to another in excess of 7 bags for charcoal, 7 bundles of firewood, or 20 kg of wood briquettes must
 - ✓ obtain a transportation permit.
 - ✓ Show proof of community benefit payment of 10% of production.

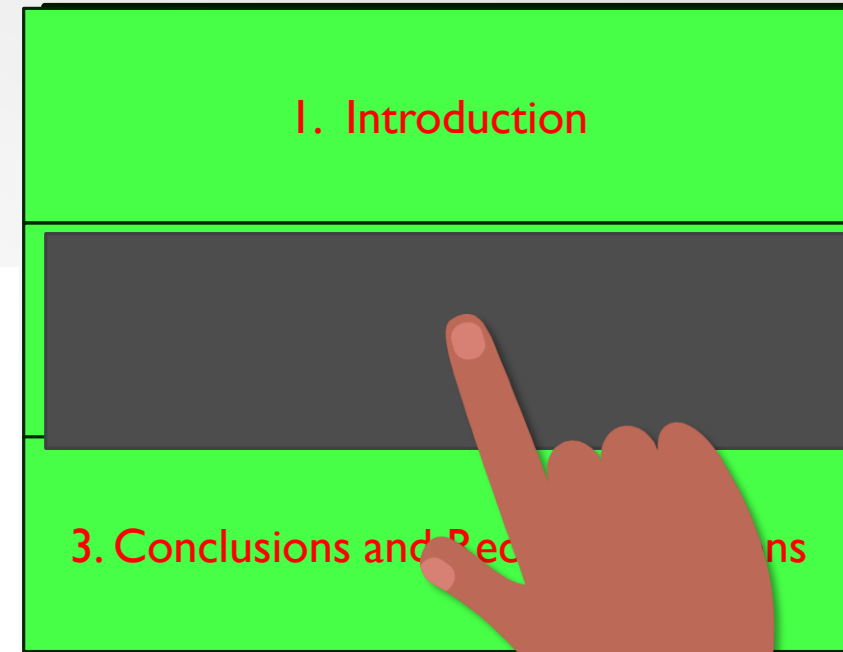


FORMALIZATION OF WOODY BIOMASS SECTOR

Regulation 119-17 provisions at each value chain

■ Trade:

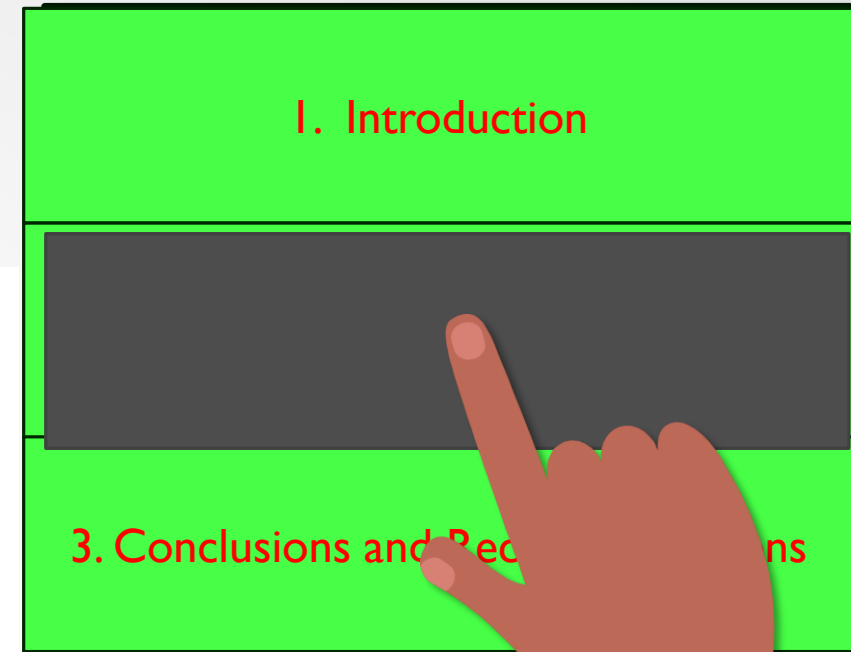
- No person or WBE association shall engage in wholesale trade in WBE products with an unlicensed producer or trader.
- Any person or WBE association desiring to engage in export or import of WBE products must obtain a permit.



FORMALIZATION OF WOODY BIOMASS SECTOR

Regulation 119-17 provisions at each value chain

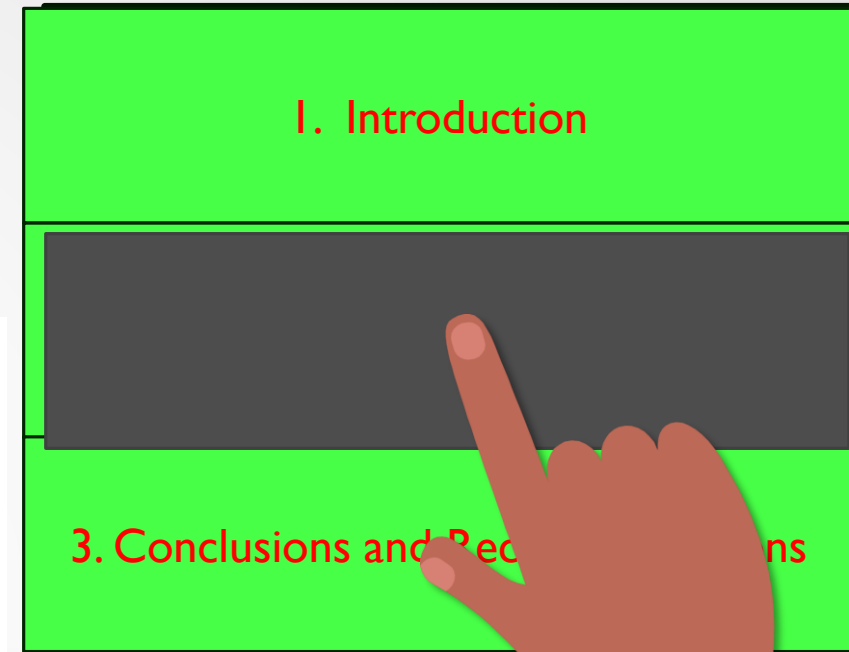
- Regulation 119-17 sets requirement for and procedures to obtain a permit at each value chain.
- It also specified the role and responsibilities of the FDA, offences and their corresponding penalties.



FORMALIZATION OF WOODY BIOMASS SECTOR

Challenges

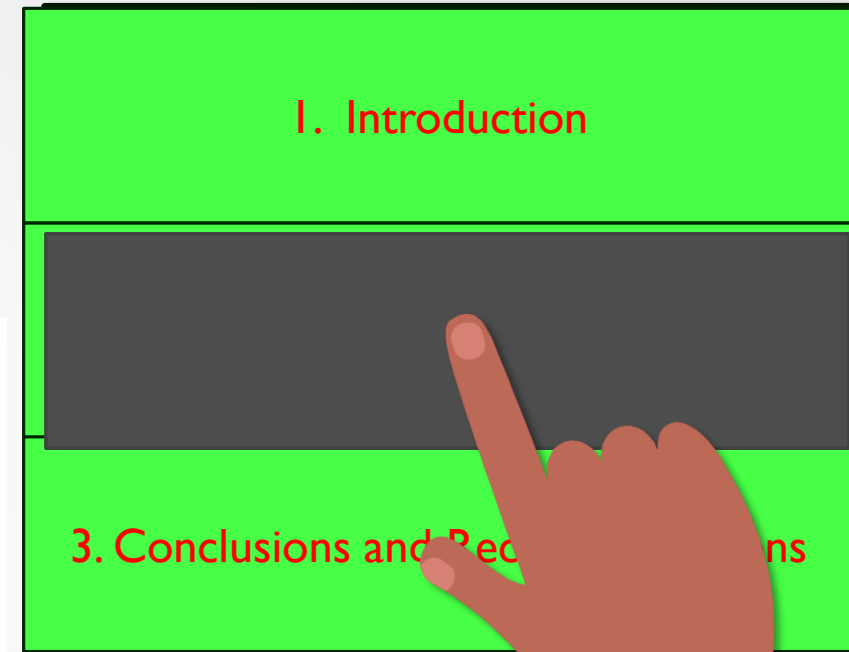
- For producers:
 - Local FDA offices are only located in county capital cities. There are also eligible forest areas that are far away from capital cities, making the registration of land for WBE production difficult for WBE producers.



FORMALIZATION OF WOODY BIOMASS SECTOR

Challenges

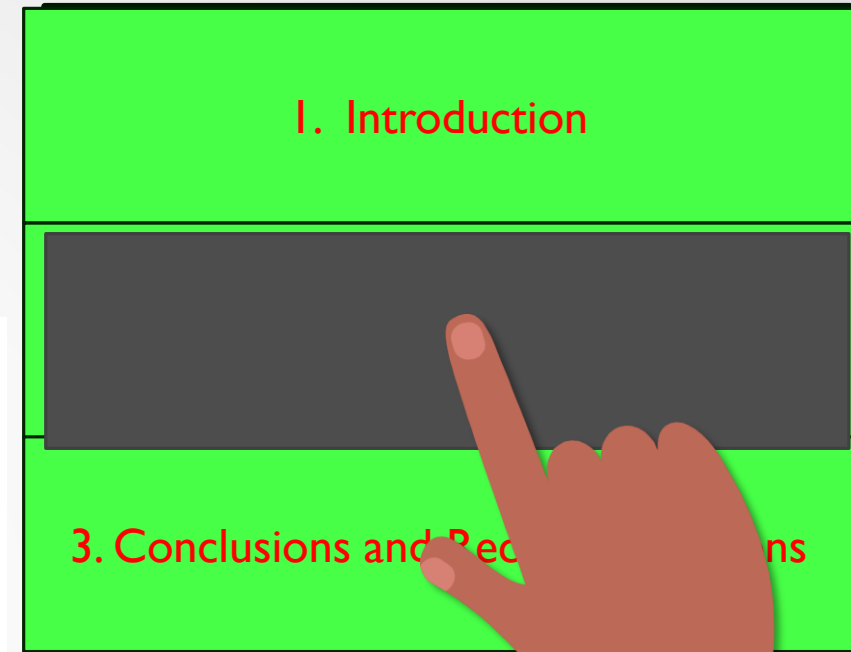
- Transporters:
 - Vehicle indicated on the transportation permit is no longer available to transport the WBE products within the time limit of the permit because of bad road conditions or mechanical defects.



FORMALIZATION OF WOODY BIOMASS SECTOR

Challenges

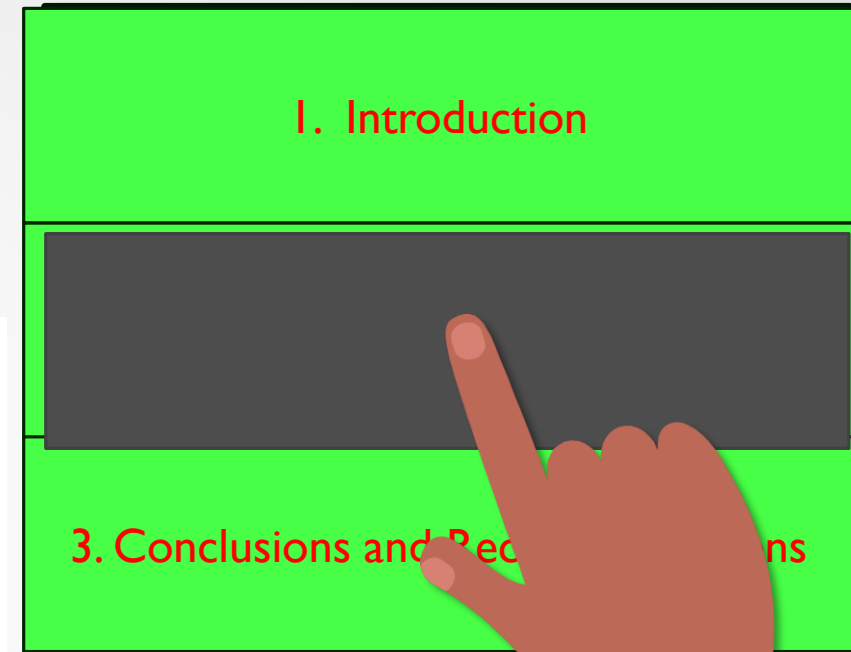
- FDA:
- Faithful implementation of the Regulation 119-17 because of lack of resources;
- FDA has limited number of employees in WBE production areas, making it difficult to register forest land area eligible for WBE production;



FORMALIZATION OF WOODY BIOMASS SECTOR

Challenges

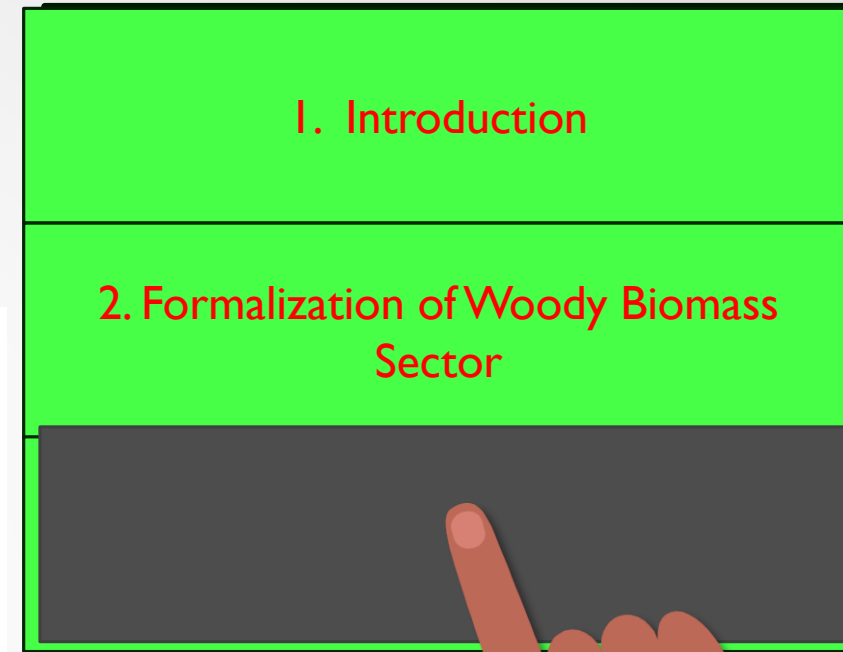
- FDA:
- How to ensure WBE products for own consumption are not sold; and
- How to ensure there is no cohort between producers and transporters, and between transporters and FDA agents at various checkpoints to deliberately underestimate the number of charcoal bags.



CONCLUSIONS AND RECOMMENDATIONS

Conclusions

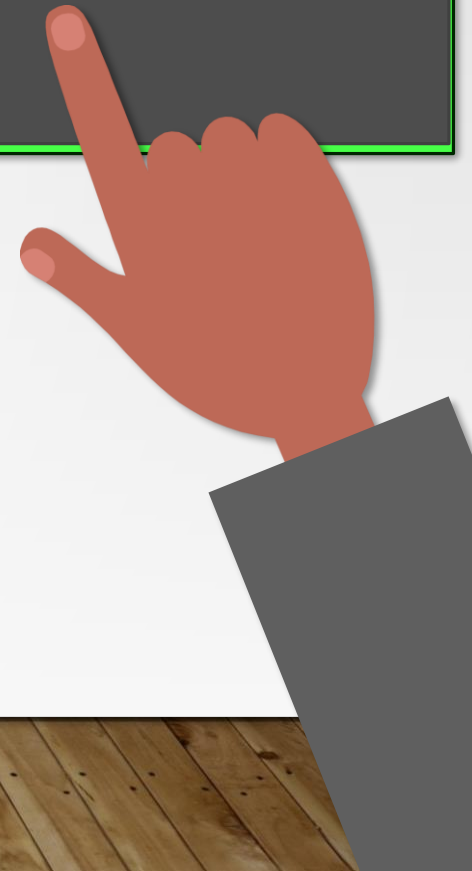
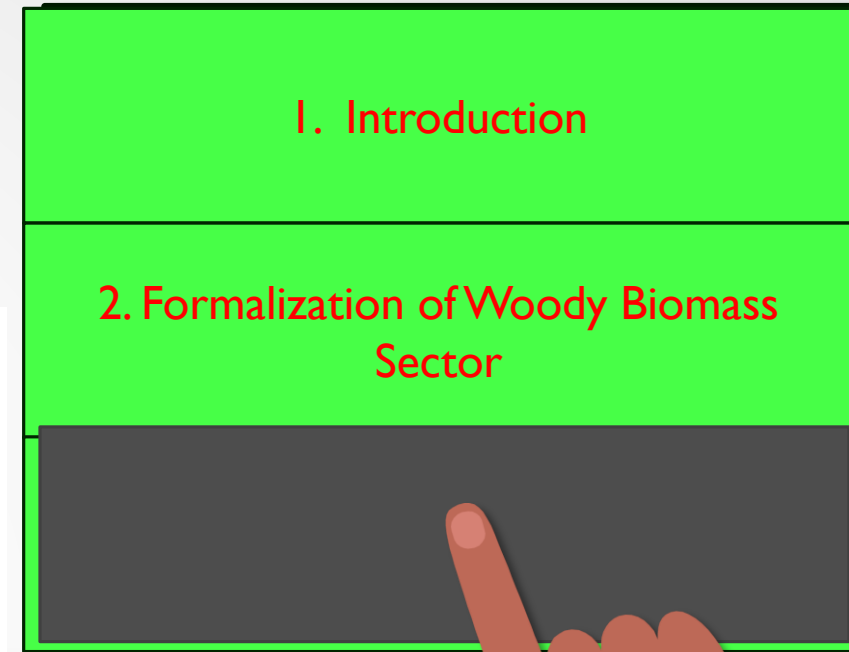
- The Liberia's charcoal sector, partially informal and if completely formalized, represents a substantial source of income for people and revenues for GoL.



CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- Among energy sources (cooking gas, electricity and charcoal) for cooking in urban cities in Liberia, charcoal is the cheapest (World Bank, 2019), making it a necessity commodity with inelastic demand (USAID, 2015; Rotto, 1970).



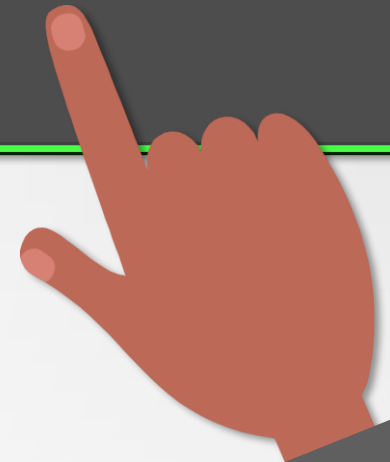
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- FDA does not have the financial resources to faithfully implement Regulation 119-17.

I. Introduction

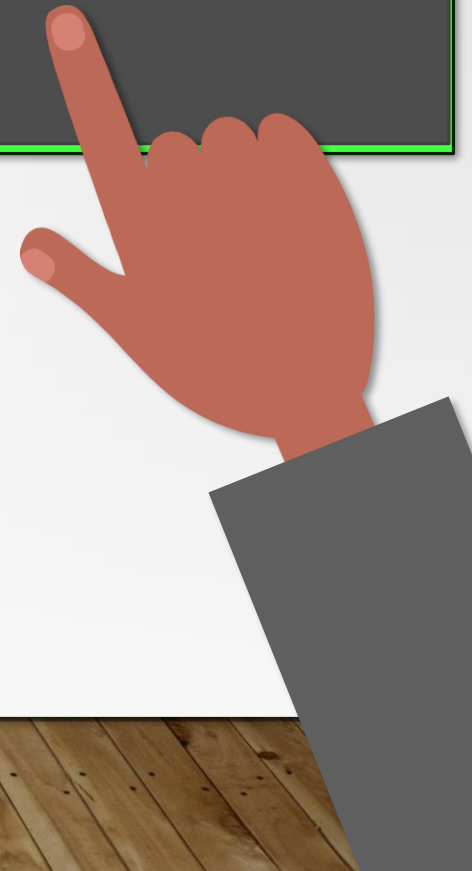
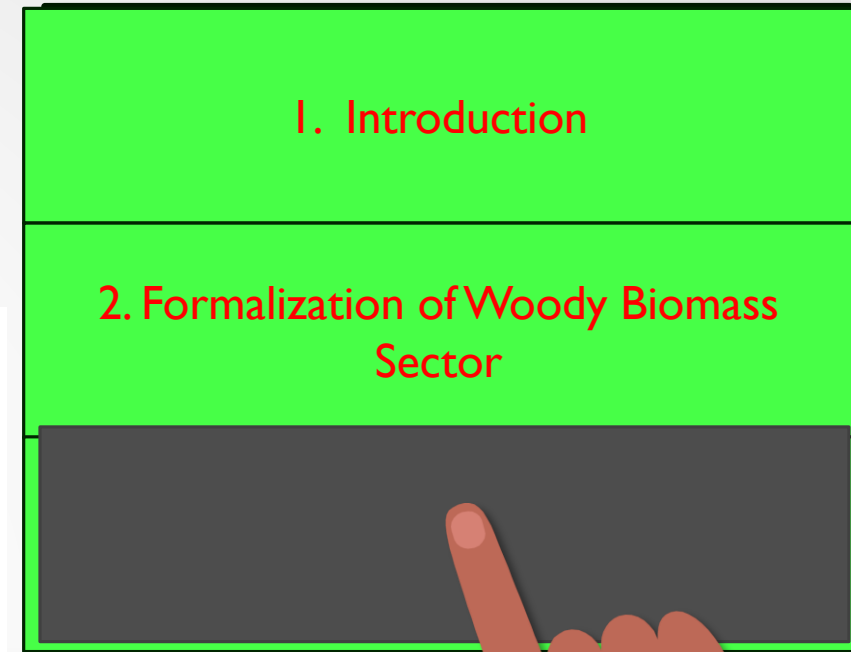
2. Formalization of Woody Biomass
Sector



CONCLUSIONS AND RECOMMENDATIONS

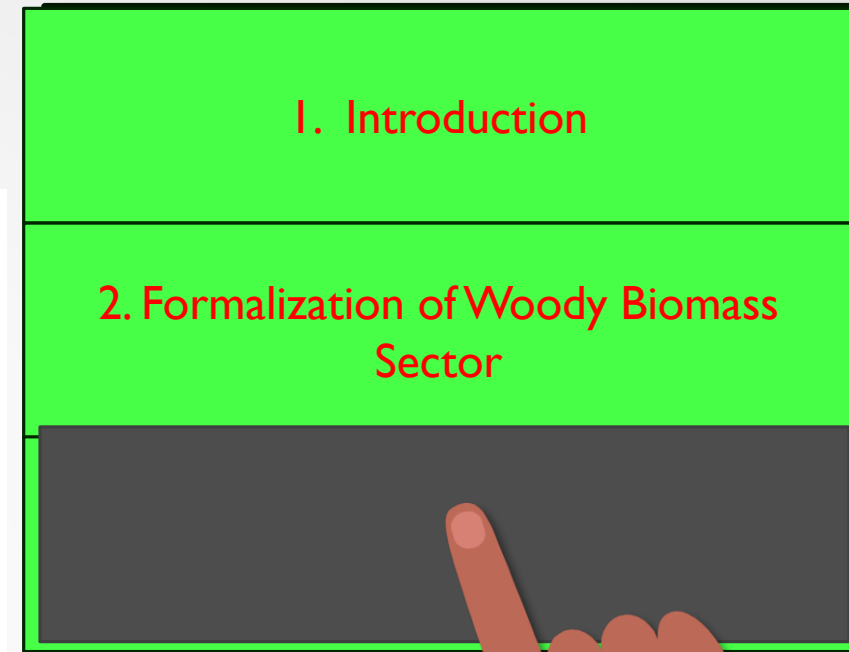
Recommendations

- More funding should be provided for the FDA by the GoL; and
- The National Charcoal Union of Liberia, other charcoal value chain associations should be involved in the implementation of Regulation 119-17 and should be provided a financial incentive for monitoring and collection of charcoal data.



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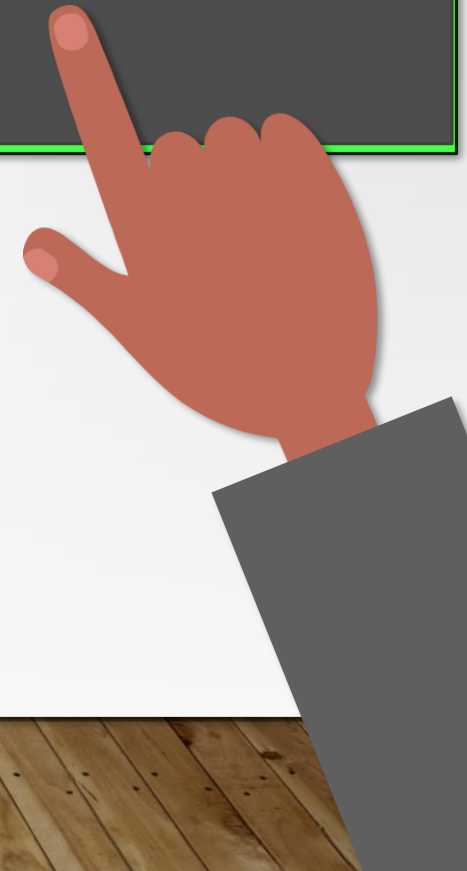


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I. Introduction

2. Formalization of Woody Biomass Sector

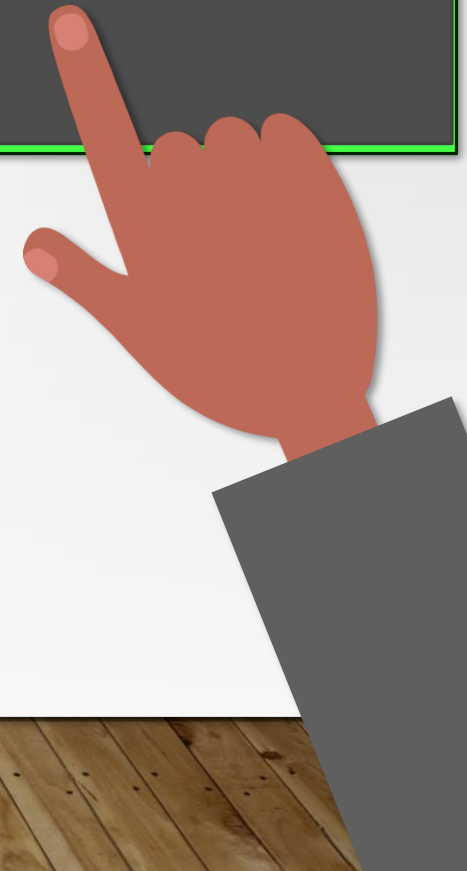


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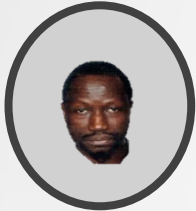
I. Introduction

2. Formalization of Woody Biomass Sector



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THANK YOU!



Ibrahim M. Favada



+231770545599



lfavada@gmail.com



Facebook.com/Ibrahim.favada