



## THE TALKING AGRIBUSINESS IN LIBERIA PROJECT

The Role of the Private Sector/Entrepreneurs in Agricultural Mechanisation in Liberia's Rice Value Chain

CERATH

**Fifth Communication Event** 







### The Talking Agribusiness in Liberia Project

The Role of the Private Sector/Entrepreneurs in Agricultural Mechanisation in Liberia's Rice Value Chain

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18 September, 2024









#### **Presentation Outline**



Background & Context of Research



**Objectives of Research** 



Methodology



**Results & Findings** 



Conclusions









Context of the EU-funded Talking Agribusiness in Liberia project

#### □ West Africa Competitiveness Programme (WACOMP)

The programme aims to strengthen the competitiveness of West Africa and enhance the countries' integration into the regional and international trading system.

#### Expected Project Outcome

To disseminate information and raise awareness about opportunities

- for business performance and growth (competitiveness),
- regional (trade) integration of Liberia's agri-/food business value chain, and









Context of the EU-funded Talking Agribusiness in Liberia project

An improved environment for agri-/food businesses to thrive in accord with the objective of the WACOMP.

Project Activities

- Validate six (6) selected agribusiness topics among stakeholders
- Undertake research on validated topics
- Organise events for information dissemination and stakeholder interactions on research findings









Context of the EU-funded Talking Agribusiness in Liberia project

#### Project Outputs

- Output 1: The Status of Youth Engagement in Agribusiness
- Output 2: AfCFTA in Liberia The Ratification Process and Involvement of Agribusinesses
- Output 3: Fisherfolk Access to Financial Services in Liberia: A Demand-Side Exploration of Liberia's Agri-/Food Value Chain Financing Space
- Output 4: Children's Perspective On The Liberian Food System
- Output 5: The Role of the Private Sector/Entrepreneurs in Agricultural Mechanisation in Liberia's Rice Value Chain









Increased accessibility and effective use of agricultural technology are required to overcome agricultural productivity challenges and to ensure agricultural and economic transformation in Liberia, a fact reiterated by Liberia's National Rice Development Strategies (LNRDS).

□ The LNRDS was aimed at improving productivity in smallholder rice farms through a value chain approach with mechanisation as a strategic component.

□ In keeping with the importance of mechanisation and the value chain approach, the Government of Liberia has emphasised mechanisation in the six-year National Agriculture Development Plan (NADP), including the establishment of mechanisation centres across agroecological zones.

□ Considering the role that private actors play in facilitating agricultural value chain actors' access to agricultural technologies, the project sought to document their role in the mechanisation of the rice value chain in Liberia.









#### **Objectives of the Research**



#### **Research Goal**

To understand the importance of the private sector/entrepreneurs in the access to, and use of agricultural mechanisation in the rice value chain in Liberia's Nimba and Lofa Counties.



#### Research Objectives

- Identify the types of agricultural mechanisation technologies used by different rice value chain actors,
- Ascertain how rice value chain actors access agricultural mechanisation technologies and services









Methodology

Data Sources	Data Collection Method	Sample Size	Data Variables
Rice Farmer Cooperatives (Individual rice farmers)	Focus Group Discussion	12	<ul> <li>Types of agricultural technology used by rice farmers in the study area.</li> <li>The sources of mechanised technology for rice farmers and their modes of access and use in the study area.</li> <li>Challenges of accessing mechanised agricultural technology</li> </ul>
Agricultural Mechanisation Distributors, Marketers, Fabricators, and Service (hiring & repairs) providers	Key informant interviews	30	<ul> <li>Types of agricultural mechanisation equipment and services they provide and their modes of providing them to farmers.</li> <li>Challenges of providing mechanised agricultural technology &amp; services as a business</li> </ul>
Rice Post-Harvest Value Chain Actors	Key informant interviews	20	<ul> <li>Types of agricultural technology used for their functions.</li> <li>The sources of the mechanised technology used.</li> <li>Challenges of access and use of mechanised technology.</li> </ul>
Secondary data	Desk review of relevant literature	-	<ul> <li>Agricultural mechanization and related programmes/ policies in Liberia.</li> </ul>





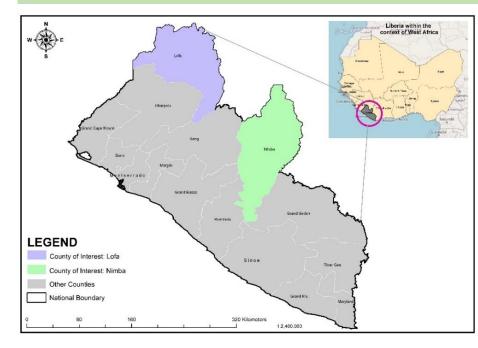


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#### Methodology

Map showing the Study Area - Lofa and Nimba Counties



- The study was organised in Lofa and Nimba counties in Liberia
- □ The counties were purposively selected as two of the three constituting Liberia's traditional rice farming zone, having been ranked the highest in rice production, undertaken predominantly in upland environments by smallholder farmers.
- Although the study's findings cannot be generalised, they provide entry points into the state of mechanisation in the rice value chain, and the role of entrepreneurs and agro-enterprises in this.



## **RESULTS AND FINDINGS**









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### Mechanised Technology Used by Rice Value Chain Actors

#### Slow progress towards agricultural mechanisation in Liberia?

- There is improvement in the mechanisation of the rice value chain (VC) as it relates to the types of agricultural mechanisation equipment in use by the actors compared to what existed, for instance, in 2019 - MOA Survey.
  - Rice value chain actors are not using ox carts or other animal-drawn equipment
  - Simple hand tools are used in complementarity to motorised equipment or advanced tools such as the tractor, power tiller, irrigation technology, rice mill, thresher, sewing machine, and (tool) sharpening machines by significant numbers of farmers









#### Slow progress towards agricultural mechanisation in Liberia?

- However, as in 2019, the majority of farmers, who often processed rice as well, performed a great quantity of activities, with simple tools cutlass, mattock, axe, hoe, shovel, 'harvesting knife', tarpaulin, spraying can, and sewing needles.
   The cutlass is 'king' of the tools in the rice value chain
   Harvesting is predominantly a manual activity performed with a
- Harvesting is predominantly a manual activity performed with a hand tool, the knife









# Rice value chain actors understand the advantages and the need for mechanised technology

- The farmers understood the advantages of a mechanised value chain and argued that while basic tools consume more energy (effort), machines reduce the drudgery of work required, improve productivity and incomes, produce better quality rice, and mitigate labour challenges
- The rice mill is the most significant mechanised equipment used in the value chain while the power tiller is the equipment most demanded for.









# Rice value chain actors understand the advantages and the need for mechanised technology

- However, study respondents noted that there are other significant mechanised equipment that will further enhance the productivity and efficiency of the value chain.
- Examples of such include the rice parboiling machine, rice packaging/bagging equipment, and forklifts to haul and position heavy loads of rice.









### How Rice Value Chain (VC) Actors in Liberia Access Mechanised Technology

# There are three principal actors rice VC actors access mechanised agricultural technology from

□ Three primary actor blocs through which rice VC actors, particularly farmers who are mostly processors as well, could access mechanised technology in Liberia.;

- GoL agencies and development partners, intergovernmental development agencies, and nongovernmental organisations (NGOs) providing, showcasing, or marketing technology to value chain actors, often through funded programmes and projects.
- Private actors/ entrepreneurs including fabricators, importers, marketers, and distributors of technology, and repair/maintenance and hiring/rental services providers. These actors consider themselves as running businesses and all those engage were formally registered.
- Agricultural value chain actors, mostly in the rice VC who share the use of their technologies with other VC actors.









# Access to mechanised technology through GoL and development initiatives

□ This is the access route preferred by farmers, including those who have gained access, often through cooperatives and farmer groups and those who have not benefited.

□ Membership in a farmer cooperative/ group makes access to mechanised technology more likely for farmers

■ Major players in the agricultural value chain, including enterprises, farmer cooperatives, and groups can access free or heavily subsidised technology from typically donor-funded initiatives through GoL and its development partners.











## Access to mechanised technology through GoL and development initiatives

□ Potential technology recipients are sometimes required to make applications and the government agency, intergovernmental development entity, or NGOs distributing mechanised technology employ screening processes

□It was understood that significant numbers of farmer cooperatives and groups are often not aware of the requirements or are unable to meet them, becoming a source of exclusion.











# The role of private actors/entrepreneurs in agricultural mechanisation in Liberia's rice value chain.

Private businesses frequently have commercial incentives for supplying and promoting technologies to rice value chain actors and play very significant roles in the value chain actors' access to agricultural mechanisation technology through their functions.

□ Through these functions, the private sector, particularly enterprises involved in the sales and marketing of technology, is playing the essential role of *ensuring* (*re*)*distribution of mechanised technology across the country*.

□ By providing services such as the operation of machine stations, rental of machinery, and repairs/ maintenance of machinery, private actors ensure that rice value chain actors who would otherwise not get access to mechanised technology can access and use them.







# The role of private actors/entrepreneurs in agricultural mechanisation in Liberia's rice value chain. (cont.)

Local manufacturers (fabricators) craft hand tools mostly but also some machinery for primary processing

■Private actors in repairs and maintenance, including fabricators also ensure that available machinery can be used when they malfunction by extending repair and maintenance services.

□ The private actors also grant-based acess, a significant opportunity for the development of workable public-private-partnerships (PPPs) in the mechanisation agenda.











# "Value-chain situationship": Value chain actors sharing the use of their machinery with other value chain actors

□ Value chain actors who have received a specific technology from the government or a donor, or have paid for that technology in full, can rent it out to other value chain players.

□ This 'renting out' to other value chain actors is perceived as a favour by a value chain actor to his neighbours rather than a business even though the user must pay a fee to use these resources. The service is charged to maintain the technology.

□ Cooperatives that have not been provided access to machinery by donors or the government generally rent from other co-operatives or friends.





### **CONCLUSIONS AND RECOMMENDATIONS**







#### Conclusions

Access through GoL and development initiatives appears to be the most common way by which rice farmers access mechanised technology in Liberia.

Despite the availability of the three access models for agricultural machines, the majority of rice value chain actors do not have access to particular machinery, sometimes in a whole district.

Several challenges, including low income, unaffordable equipment, difficulty in getting machine spare parts, a very key challenge and a lack of expertise about machine operation are all factors contributing to agricultural machine inaccessibility.

Provision of service payment under the entrepreneurs distributing and directly marketing technology to value chain actors as well as the 'situationship' access model have the potential to improve accessibility of agricultural machinery by value chain actors in Liberia.



### WACOMP



## THE TALKING AGRIBUSINESS IN LIBERIA PROJECT Thank You for Your Attention





