Concept note 3

Project Name: **Strengthening Rice Value Chain through Improved Post-Harvest Systems**

1. Background

The quality and quantity of rice grains depend heavily on proper postharvest handling and processing. However, smallholder farmers and rural traders often lack access to the necessary infrastructure and knowledge, such as understanding the physiological conditions of grains (like moisture and debris) that impact market prices. Domestic rice is typically processed through single-pass mills, which remove the husk and bran in one step, while Asian rice undergoes multiple stages of processing, resulting in higher quality. This difference in processing techniques makes locally produced rice less competitive in mainstream markets.

Several challenges hinder progress, including insufficient awareness of modern postharvest technologies, a lack of research on low-cost solutions for processing, inadequate infrastructure for drying, cleaning, and storage, and poor implementation of quality control standards. Moreover, smallholder farmers face limited financial incentives to produce higher-quality rice. To address these issues, certified warehouses under the Warehouse Receipt System, infrastructure for research and capacity building, financial support for farmer groups, and improved linkages between farmers, traders, and millers are needed. The growing interest from rural women and youth in the warehouse system also offers opportunities for improvement.

2. Project Site

The Project will be implemented in major rice growing areas in Malawi covering all the three regions. The focus will be on the ten districts as follows: Karonga and Nkhata-bay in the Northern Region; Nkhotakota, Salima and Dedza in the Central Region; Chikwawa, Nsanje, Zomba, Machinga and Phalombe in the Southern Region.

3. General Objective

To enhance harvested rice quantity and quality through improved post-harvest handling practices.

4. Specific Objectives

- To enhance the capacity in modern post-harvest management technologies for officers, farmers, traders and millers.
- To enhance access to technologies and practices for drying, cleaning, milling, grading, and packaging of rice.
- To increase access to infrastructure for drying, cleaning, and packaging, and transport logistics in rice growing areas.
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5. Activity

To enhance the capacity in modern post-harvest management technologies for officers, farmers, traders and millers.

- Conducting the stakeholder's workshop on rice Postharvest management.
- Harmonizing the modern post-harvest technologies.
- Develop the training package for post-harvest management.
- Sensitization Workshop of the training package.
- Conducting the baseline survey on rice post-harvest management status in target site.
- Conducting of Training of Trainer (ToT) to the officers and lead farmers.
- Conducting In-field Training to the rice production farmers.
- Monitoring the post-harvest management.
- Conducting the endline survey.

To enhance access to technologies and practices for drying, cleaning, milling, grading, and packaging of rice.

- Facilitate development of regulatory standards and quality control measures on post-harvest handling of rice.
- Disseminate the developed post-harvest handling technologies and practices.

To increase access to infrastructure for drying, cleaning, and packaging, and transport logistics in rice growing areas.

- Identify the farmer friendly post-harvest handing small tools to be promoted under the Project.
- Conduct the training how to use and maintain the machineries to the farmers.
- Conduct the stakeholder meeting with LUANAR and MUST to interact with Agro-machinery dealer, financial institution and rice farmers on promoting mechanization.
- Construct and rehabilitation of storage.

6. Budget: TBA
7. Project Duration: 5 years
8. Implementer

Government, Development Partners, NGO, Academia and Private sector.

9. Beneficiary

The Project will directly benefit farmers, traders and millers.

10. Expected Impact

- Increased Number of farmers, traders and millers practicing modern postharvest management technologies.
- Enhanced Research and dissemination of post-harvest technologies and practices.

- Increased availability and access of post-harvest handling tools and machineries increased.
- Increased availability for regulatory standards and quality control measures on post-harvest handling of rice.
- Reduced post-harvest losses.
- Increased farmer incomes.
- Enhanced rice quality.
- Improved market access.
- Increased food security.

11. Support Components

Strengthen market connections by forming cooperatives, using ICT for market information, and exploring value-added processing like rice packaging.

End