

**Concept note 1****Project Name: Improving rice seed availability and accessibility for enhanced rice production and quality****1. Background**

Rice is the second staple food crop for the country after Maize. Rice cultivation is restricted in their ecological areas such as rainfed lowland (85%), lowland irrigated (10%) and upland rainfed (5%). Production is mostly concentrated along the shores of Lake Malawi; Salima, Nkhotakota, Nkhata-bay, Karonga and Bwanje in Dedza; lower shire (Chikwawa and Nsanje), along Lake Chilwa; Machinga, Zomba and Mangochi, Mchinji and Mzimba. Rice is a source of carbohydrates, and which was commonly consumed by urban population during festive seasons like Christmas but the trend has changed due to crop and food diversification. This has led to increased consumption by the new generation as compared to the old generation.

Currently rice is being grown in most of the districts where there are dambos hence crop and food diversification. Some of the notable varieties are Kilombero, Faya, 14M69, Mtupatupa (TCG10), Nunkile (Pusa33), Lifuwu, Wambone, Kayanjamalo, NERICA4, Mpheta, Katete, Nanzolo, Makafaci and Wachangu. Average national yield is 1.9 tons/ha but some of these varieties yield more than 5 tons/ha with good management. Production and productivity are low due limited access to improved rice seed, the seed system is not well developed, low fertilizer use due to high inorganic fertilizers cost, damaged irrigation infrastructures due to natural disasters such as floods, climate change associated with rainfall pattern, limited access to market information as well as markets, poor productivity farmer organizations such as cooperatives, lack of coordination among different prayers etc.

To address the limiting factors of production and productivity there is a need to start with the use of good quality certified rice seed to improve yield and quality of rice. Therefore, NRDS-2 will address the issue of quality, affordable, accessible certified rice seed to push national average yields from the current 1.9 tons to at least 3.0 tons/ha. The Strategy will also put emphasis on promotion of 5 varieties based on the following:

- a. Kilombero and Faya because of high market demand.
- b. Kayamjamalo, Mpheta and Pusa because of their high yielding potential and that they can be produced under rain-fed and irrigated conditions.

**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 contribute to increasing rice production and productivity by increasing the availability and use of certified seed.

### 4. Specific Objectives

- Identify the seed demand for the 5 varieties (Kilombero, Faya, Kayamjamalo, Mpheta and Pussa) to be promoted.
- Enhance the capacity of the seed growers (both commercial and smallholder farmers).
- Enhance the capacity of the seed certification.
- Promote adoption and utilization of certified seed.

### 5. Activity

Identify the seed demand for the 5 varieties (Kilombero, Faya, Kayamjamalo, Mpheta and Pussa) to be promoted.

- Identify seed demand in the market.
- Develop a seed production plan.
- Conducting the seed production training to seed breeders and agronomist.
- Produce breeder and pre-basic seed by Department of Agricultural Research Services (DARS).

Enhance the capacity of the seed grower (Farmer).

- Identify the seed grower.
- Develop the training package for producing certified seeds.
- Conducting the Training of Trainer (ToT) to the officers and lead-farmers.
- Conducting the in-field training to the seed growers by trainers.

Enhance the capacity of the seed certification.

- Develop the training package for rice seed certification.
- Conducting the training for seed inspectors.
- Conducting field inspection visits.
- Supervise seed growers by seed breeders, inspectors and companies.

Promote adoption and utilization of certified seed.

- Promote the publicity of the certified seed through Demonstrations, Field Days, Farm Field Schools and Agriculture Fairs/Shows.
- Introduce the affordable and accessible seed loan system to the farmer's group/cooperative or link-up with financing institutions.
- Identify and engage agro-dealers to stock the seed in rice growing areas.

- Link agro-dealers with seed suppliers (seed companies).

**6. Budget:** TBA

**7. Duration:** 5 years

**8. Implementer**

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

**9. Beneficiary**

Direct beneficiaries will be seed growers (commercial and smallholder farmers), seed processors and retailers. Secondary beneficiaries will be grain producers, rice miller, rice processors and consumers.

**10. Expected Impact**

- Increased quantity of rice seed produced.
- Reduced distance between rice farmers and rice seed outlets.
- Create a financing facility in form of grant, matching grant, credit for seed production, handling and dissemination.
- Increased use of certified rice seed.
- Improved efficiencies in rice seed production, handling and dissemination.

**11. Support Components**

The breeder and pre-basic seed will be produced by breeders by the Department of Agricultural Research Services at Lifuwu Research Services. The pre-basic seed will be sold to private companies and other registered Cooperative seed growers to produce basic and certified which will be sold to farmers for the production of rice for commercial purpose. This will improve quality and quantity of seed as well as commercial grain for marketing and consumption.