

Rice - Quality Grain Production (Summer)

ALIVE-FNS Project
Ayeyarwady Delta – Myanmar
A sustainable technique for the Delta rice farmers

Produce Quality Rice using on farm bio-input, less purchased agrochemical. Increasing rice quality, milling ratio, producing Safe Food for the consumers and the environment



1- Inputs: Certified **Quality Seed** 2 bsk/ac (42kg) - **Straw compost** 900-1000kg/ac (2 piles of 6x4x3') at Basal - **Lime** 70kg/ac at Basal **IEM+ FAA** by spraying or fertigation: 16L IEM + 2L FAA at Basal then same quantity at 15 DAS, 30 DAS, 45 DAS and 55 DAS **Urea** 75kg mix with compost (1 into 3 ratio) in 3 splits at 15, 35 DAS and PI stage - **Potash** 25kg/ac in 2 splits at basal and PI stage.



2- Seed flotation: Soak seeds in salt water solution (16L of fresh water mixed with 2 Viss salt), **remove floating light damaged seeds, keep best seeds sunken at the bottom.**

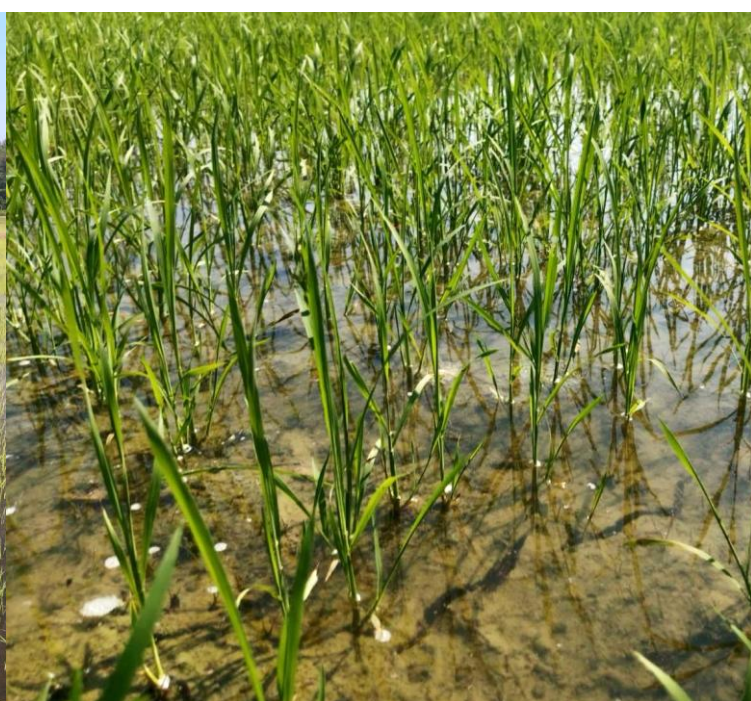
Seed pre-germination: Incubate seed **24h** in warm moist shaded environment (rice bag, jute bag, cotton lungi) until short sprouts emerge (5mm).

3- Urea mixed with compost: Mix 1 unit of Urea for 3 units of compost for better urea efficiency (75kg urea mixed with 225kg compost).



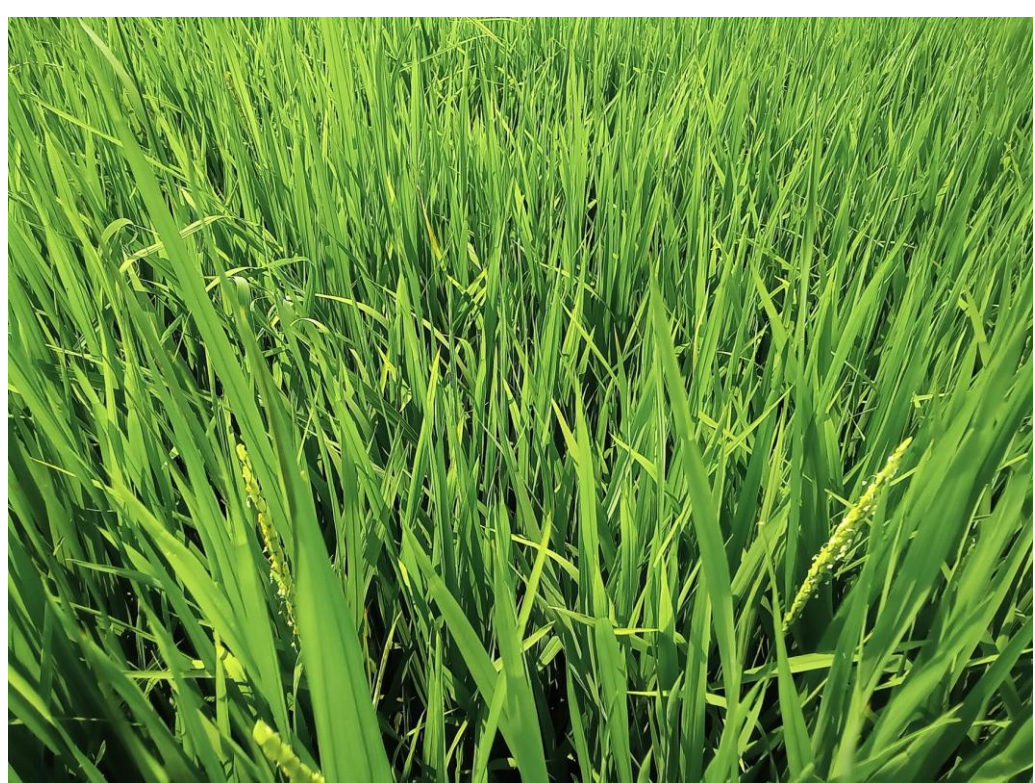
4- Land preparation: Plough the field twice at 7-10 days interval to **remove weeds** and **volunteers rice plants** and harrow to make a good till. **Level the field** for better water efficiency, fertility management and uniform crop maturity. **Basal application** of compost and lime.

5- Seed sowing: Broadcast pre-germinated seeds uniformly in the levelled wet till field at the rate of 2 baskets per acre.



6- Bio-input application are **essential** to sustain and **stimulate** growth in particular when reducing agrochemical. Spray or apply by fertigation bio-input for growth enhancement and P&D control **every 15 days**.

7- Peer learning sessions are **essential** to **share technical and economical information** from the field and from **farmer to farmer**. It helps in learning from experimented farmers and solving problems as well understanding new opportunities.



8- Participatory assessment is an essential aspect where farmers can **assess themselves** the yield and qualitative aspects of Quality Grain Production; seeing by themselves the results of operations is an **essential factor for adoption**.

9- Post-harvest management: Harvest when 85% grains turn yellow - Separate harvesting/ threshing/ drying QGP grain from other varieties - Sun drying for 2-3 days in 2-4" thickness layer - Cover drying grain from night humidity/rain - Clean grain from weed seeds, damaged grain, unfilled grain, soil and stalks before bagging.

Advantage of Rice Quality Grain Production

Cheaper cost of production with on farm bio-input - Less purchased agrochemical input. Better milling ratio - Less pest and diseases
Good yield with less purchased inputs - 2.3t/ac (about 100 baskets/ac or 5.7t/ha) - This will be variable according to season. Up to 50% less Urea - Cost saving