

Rice - Quality Grain Production (Monsoon)

ALIVE-FNS Project
Irrawady Delta – Myanmar

A sustainable technique for the Delta rice farmers

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



1- Inputs: Certified Quality Seed 1 bsk/ac (21kg) - Lime 70kg/ac- T Super 25kg/ac- IEM 80L- FAA 20L.
Nursery: IEM + FAA by spraying or fertigation: 16L IEM + 4L FAA at land preparation then at 12-20 DAS.
Field: Lime 70kg broadcasting 2 weeks before land preparation; T- super 25kg broadcasting at basal. IEM, FAA at basal, then at 10-15 DAS (initial growth), 30-40 DAS (tillering) and 80-85 DAS (PI stage).

2- Seed flotation: Soak seeds in salt water solution (2 days- 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 2-3 days (depending on varieties) seed in warm moist shaded environment (rice bag, jute bag, cotton lungi) until short sprouts emerge (5mm).



3- Nursery: Broadcast selected and germinated seeds. Use 0.1 ac nursery space for sowing 1 ac of paddy and 21kg certified seed (Paw San yin – 145-150 days). Apply IEM and FAA before sowing, then at 10-15 DAS.
Uproot & Bundle seedlings for transplanting at 20 -25 days; if not possible due to flooded main field, extend up to 30-40 days seedling age (not ideal, only if main field are flooded).



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 TSP 25kg/ac It is recommended to apply 16L IEM and 4L FAA on rice stubble from the previous crop 2 weeks before land preparation, this to stimulate stubble decomposition previous to soil integration during ploughing.

5- Transplanting: Transplant 20-25 days old seedlings; transplant 2-3 seedlings per hill at 25 cm spacing PP & RR.



6- Bio-input application are essential to sustain and stimulating growth. Apply by fertigation bio-input for growth enhancement and P&D control every 15 days or at 10-15 DAS then at 30-40 DAS (tillering) and at 80-85 DAS (PI stage).

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 as 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. Use moisture meter to reach 14 % humidity before milling.

Advantage of Rice Quality Grain Production monsoon season

Using on farm bio-input, quality seed, nominal agrochemical. Better milling ratio - Less pest and diseases- Better yield
Yield increase at about 20 % more than usual practice – 1.45 t/ac or 3.6 t/ha (55 to 70 baskets) - This will be variable according to seasonal weather and farm condition