



## Seed management

Under



### Q.1. How community select seeds (please mention crop wise, ex. Rice, wheat and vegetables)?

Farmers are the best selectors of the quality seeds. Selection of seeds largely depends on successful demo effect, peer learning etc, community identify source of good seed from own community even through exchange traditionally within themselves. However, seed stores supply branded seeds/varieties also play important role now-a-days.

### Q.2. How community preserve seeds (please mention the method in detailed)

- **For rice, wheat, maize & other cereals etc.-** Sunning of seeds for 4-6 hours at 2 months intervals. Stored in mud bins at dry and cool place.
- **For Cereals, pulses & oil seeds-** Seed dressing with Pamarosa oil or with neem oil 2 tsf/kg seed/ Use of wood ash & charcoal during storage
- **All seeds- cereals, pulses, vegetables-** Use of neem/ karanj ( Pongamea) etc. shed dried leaves or neem seed kernel powder

### Q.3. How community is availing the quality seeds in time (please mention the mechanism and the strategy ex. Seed bank etc.)?

In rural Bengal, there is traditional practice of collecting seeds from the farming community. Particularly in our project area, women Farmers are vigilant to search for good germ plasm within reach. Mks preserve seeds in seed bank after proper seed treatment to protect seeds from fungal and micro bacterial infection and meets group's own need during their cultivation. This process assured quality seed in time at fair price. In addition to that, they also store seeds individually. Women farmers identify crop wise growers who maintain quality germ plasm with specialty and collect seeds and store. The collection of seeds is generally done through exchange system and the farmers try to regenerate. There are more than 100 group based seed banks in our project area.



**Loka Kalyan Parishad**



**Q.4. Please describe the seed treatment elaborately?**

Sl. No	Crop (name of the crops)	Method of seed treatment (physical/ biological/ microbial/ organic- please choose one option at a time)	When to be done (how many days before sowing?)	What are the benefits of this treatment	how to prepare the seed treatment mixture?
1	Rice, wheat, maize & other cereals etc.	Sunning of seeds for 4-6 hours at 45-60 days interval.	Before using seed	Reduce fungal presence on grains	Cereal seeds- morning 8 to 14 hours, 3-4 times stirring Sunning of vegetable should exposed to sun only in morning hours
2	Rice	Seed deep in 16.5% saline water solution	After 1-2 sunning	Screening bold seeds, healthy seeds	Dissolve 1650 gram of common salt in fresh water , put seeds and stire, take out seeds settled at the bottom & wash in fresh water
3	Rice, wheat, maize & other cereals etc.	Seed soaking in diluted cow urine solution for 2 hrs. to kill both fungal and bacterial infection	After screening of seeds	Control both fungal and bacterial contaminants out side and inside of the seed husk	1 part of 2-3 days old cow urine mixed with 4 part of fresh water
4	All cereals, oil seeds, pulses	Seed dressing with Trichoderma Viridae (TV)4g/kg of seeds & seedling deep	At seed sowing as seed dressing materials	Check sheath blight, sheath rot, brown spot,	4 g TV+ 20ml Porise in 1 kg of seed dressed



**Loka Kalyan Parishad**



	seeds, vegetable seeds & seedlings			leaf blight for 45 days	
5	Cereals, pulses & oil seeds, vegetable seeds	Seed soaking with Pseudomonas fluorescense solutions & seedling deep	Alternative to TV	-do- 45 days	10g P. fluorescense mixed in 300 ml fresh water and soak 1 kg seed for 4 hours
6	Cereals, pulses & oil seeds	Seed dressing with Pamarosa oil or with neem oil of 2 tsf/kg seed	Before storing seed	65-75 days repel store grain insect pest, fungal	Seed dressing in 4 tsf said vegetable oils. Pudina oils equally effective
7	Cereals, pulses & oil seeds, vegetable seeds	Use of wood ash & charcoal during storage	After drying of seed	Reduce moisture considerably in storage (control 3-6 months)	Seed mix with cool and dry wood ash & charcoal: 300g/ kg of seed in storage bean
8	All seeds- cereals, pulses, vegetables	Use of neem/ karanj (Ponganea) etc. shed dried leaves or neem seed kernel powder	-do-	Repel store grain insect pests for 3-6 months. Equivalent to Malathion	1-2% neem seed kernel powder or 2-5% neem etc. said leaf powder mixed thoroughly with storage seed. Effective for 3-6 months.



**Loka Kalyan Parishad**



**Q.5. what is the mechanism of minimizing the seed requirement without compromising with the yield? Please mention the strategy and the reason behind it.**

Ans. By adapting latest changes in approaches of cultivation like:

- SRI (for rice)- seed requirement reduced to 1/10<sup>th</sup>
- SWI (for wheat)- do-
- SMI (for maize)- do
- TPS (for potato)- need 50gm true potato seed against 4-5 quintal of seed tubes/acre



## Loka Kalyan Parishad **SEED MANAGEMENT**



*Group seed bank for seed sovereignty and income generation activity, Majidih, Purulia.*





**Loka Kalyan Parishad**



## **SYSTEM APPROACH (SRI)**



**Preparation of seed bed**



**Raising seedlings in seed bed**



**Uprooting seedlings from seed bed**



**Transplantation of seedlings in the field**





**Loka Kalyan Parishad**  
**SYSTEM APPROACH- SWI**



Germinated seed before sowing



SWI- Sowing of seeds



SWI- MK in her field



**Loka Kalyan Parishad**  
**True Potato seeds**







**Loka Kalyan Parishad**  
**PIA'S Role**



Handholding in the field



Handholding by project staff



Handholding through home visit