Topic 5: Water management:

Principle followed: Recycle of waste water, harvest of rain water, conserve soil moisture by mulch- putting straw,..etc bio materials as soil cover, use of mulch/ cover crop, sub surface irrigation (Pitcher Irrigation), micro drip irrigation, '0' tillage and relay (Poira) cropping, mixed crop, introduction of low water requirement.

Name of the PIA: Loka Kalyan Parishad, Kolkata

Sl. No	Crop (name of the crops)	Method of irrigation	When to be done (time of irrigation)	What are the benefits of this treatment
1	Rice	Irrigation as per SRI technology	Intermittent dry and wet	Reduction of irrigation cost, there by low cost of cultivation
2	Wheat	Irrigation as per SWI technology at 21, 41,65 DAS (Days After Sowing)	Do	Do
3	Maize	Irrigation as per SMI technology21,41,,65 DAS	Do	Do
4	Home Nutrition Garden	Pitcher irrigation to make available water at root zone of vegetables. Growing vegetable on permanent bed (specially double dig/ storied bed)	Rabi and summer season	Recycling of waste water at low dose- assume harvest at low cost

1. Water conservation:

Sl. No	Method of seed treatment (physical/ biological/ microbial/ organic- please choose one option at a time)	When to be done	What are the benefits of this treatment	How it is done- the method
	The relation between method of seed treatment under water conservation is clear. However method of Seed Management is already provided.			

2. Land development

Sl. No	Method of land development. How land is developed?	When to be done	What are the benefits of this treatment
	Conservation of waste fallows adjacent to home by leveling, development of drainage, irrigation channels, compost pit, waste water storage tank, permanent/ double storied beds, etc through IBS under MGNREGS/ other support/ own effort.	At the initiation of the farm based activities	Utilization of space, inputs, increase in cropping intensity, productivity and production

3. Briefly elaborate the water conservation and land development method in your area.

The best practices for water conservation and soil health improvement under MKSP are as follows:

Water conservation :

- Poira cropping system to utilize residual soil moisture & early harvest
- Cover crop to restore soil moisture
- Use of sub surface irrigation by pitcher irrigation system
- Integrated mulch technique- bio mulch (straw, trash, crop waste used) crop mulch with cover crop
- Storing domestic waste water & use/ recycle for irrigation particularly in home nutrition garden, backyard fruit plantation etc
- Storage of rain water in dug ditch and use.

Soil Health Improvement:

- **Use of Farm Yard Manure(FYM), Bio compost**
- **Vermi compost**
- **Liquid manure**
- **Green manure**
- **Cow dung slurry**

- **Popularization of legumes in cropping cycle etc**

For land development, it is already mentioned in the above table.

4. In the above method please specify the convergence components

Home stead development through convergence with MGNREGS, BRGF etc government programmes, CADC, bottom up plan preparation & incorporation in GP plan.

5. What are the role of the PIA and the benefits to the community in all the above mentioned practices?

- Capacity building of MKs, CRPs, CPPs, GP representatives and functionaries & PIA staffs
- Handholding in preparation of bottom up plan & participatory implementation process
- Strengthening community with interventions through communication & functional education.

Soil moisture conservation

Pitcher Irrigation in Home / Community Garden: Indigenous irrigation technique- Use of domestic waste water