

**List of Technologies which may be taken up during 2<sup>nd</sup> phase of the programme**

1. Micro Irrigation (Drip and sprinkler)
2. Rain water harvesting structures (water storage tanks)
3. Soil moisture conservation (Mulching, dead furrow, opening of furrow, tied ridging, Conservation agriculture, Dry farming technology, improved irrigation and water management etc)
4. System of Rice intensification (SRI)
5. Broadbed & Furrow irrigation
6. Deficit irrigation
7. Land leveling / configuration
8. Precision farming irrigated crops/Dry crops
9. Zero tillage/zero till drill
10. Multiple use of water

Micro Irrigation (Drip and sprinkler) technology may be extended to sugarcane/ cotton crops and CPRI, Shimla may take up demos in Kandi areas. WTC, IARI in Delhi; Gujarat Agriculture University, Junagadh; IIVR, Varanasi; MPUA & T, Udaipur may also take up demonstration on micro-irrigation.

Rainwater harvesting structures may be taken-up by more institutes like Konkan Krishi Vidyapeeth Dapoli ( Maharashtra); ICAR Complex Goa, WTC, IARI, New Delhi.

System of Rice Intensification (SRI) may be taken up in states like Gujarat, Uttarakhand, Uttar Pradesh etc.

Broadbed & Furrow irrigation may be taken up in Indo-Gangatic plains by Indian Vegetable Research Institute, Varanasi; ICAR Research Complex, Patna; IARI, New Delhi and Project Directorate on Cropping System Research, Modipuram .

Deficit irrigation may be extended to the Northwestern Regions and IIT, Kharagpur; WRDTC, Roorkee & GBPAU & T , Pantnagar may be included.

Multiple use of water may be taken up by ICAR, Patna; CSSR, Karnal; WTC Tamil Nadu Agriculture University, Coimbatore; Directorate of Water Management, Bhubaneswar; CARI Port Blair etc in water logged, shallow water table and salt affected or any other typical situations.

Following new technologies are also recommended for inclusion in 2<sup>nd</sup> phase of FPARP;

- Use of recycled water for irrigation
- Application of subsurface drips for irrigation
- Application of low cost drips for irrigation
- Application of treadle pump technology for irrigation in shallow water table areas

## Ministry of Water Resources

**Proforma for Submission of proposals by Agricultural Universities/ ICAR Institutes/ other  
Research Institutes / WALMIs for Participatory Action Research Programmes**

- Name of University/ Institute:
- 2 Name of the programme coordinator:
  - 3 Address and Email ID:
  - 4 Experience in water related works
  - 5 Nature of works done by the Institutes/ University during last 5 years
  - 6 Description of technology (ies) to be used:
  - 7 Places where the technology (ies) have already been in use:
  - 8 Cost/ hectare (in Rs.
  - 9 Crops/ farming system for which suited:
  - 10 Water use efficiency/ water conserved  
Increase in agricultural Yield and other benefits in livestock & fisheries etc.
  - 12 Benefit – Cost Ratio
  - 13 Villages/ Blocks/ Districts where the technology is proposed to be demonstrated with data on rainfall and soil as also current land and water use pattern:
  - 14 Payback period e. when the benefits will start accruing: ~
  - 15 Participants to whom the technology to be demonstrated e. group of farmers, WUAs, Panchayats and NGOs etc.
  - 16 Information on training/ educational programme to promote proposed technology (ies)
  - 17 Total cost of the programme together with information on the other water related programmes in progress in the area: *As per proforma enclosed - 1. moisture - II*
  - 18 Strategy for sustainability of this programme:
  - 19 Benefits in monetary & ecological terms:
  - 20 Time frame for implementation of the Action Research Programme (should not normally exceed 2-3 crop seasons)
  - 21 Any other details

Signature of the authorized signatory  
with date

## Proforma for submission of Estimate for Farmer Participatory Action Research Programme (FPARPs)

## Subhead wise Abstract

<u>Subhead</u>	<u>Amount (Rs.)</u>
Salary	
Travel Expenses (TE)	
Infrastructure/ Equipment	
Demonstration cost	
<b>Sub Total</b>	
Contingencies (5%)	
Overhead charges (upto maximum 15%)	
<b>Grand Total</b>	