Demo Community Fish Ponds Design
- Pond measurement (43560 Sq-ft one acre approx.:)
- Internal side, height of Dike 5 ft.
- Width of dike 8 to 10 ft.,
- Inner slope of dike from bottom to top 16 ft. (1:3 slope)
- Outer dike from top to bottom 12 ft. (1:2 slope)
- Pond Shape rectangular (290’X150’P preferred)
Construction of outlet and inlet 1ft dia 18ft length of RCC pipe with wing wall both with grill gate of 2X2 ft. of iron bar
Hut for Watchman 10X10 Kacha local type wooden Bamboos structure

Solar System (one Solar panel with GI pipe stand of 10 feet height, 50 LED Bulb with battery backup wiring fitting and complete in all respect
Water Source: Water should be sourced from tube-well; good robust green color water is important. (as Per PIM © Mohan Thakur - WASH Engineer - RSPN)
Cross section
Construction of outlet and Inlet 1 feet dia 18ft length of RCC pipe with wing wall both with grill gate of 2X2 ft. of iron bar
Cross section
1) **Site Selection:**
   - Maximum elevation
   - Distant from floods
   - Adequate water supply
   - Access to market road

2) **Soil sampling:** Clay soil is most desirable for water retention so it needs to be taken care of.

3) **Water Depth:** It’s important that the water depth is not shallow as sunlight is important.

4) **Water Quality:** Water should be sourced from tube-well; good robust green color water is important.

5) **Farm Designing:** Rectangular shape, pond should have an independent inflow as well as outflow water structures.

6) **Manuring / Fertilization:** Organic manure, cow dung or poultry waste can be used.

7) **Stocking Densities:** For a Nursery Pond: 0.2 to 0.5 gm, & Main Fish Pond: 50 to 75 gram fingerlings,

8) **Ideal aquaculture specie:** Tilapia is most suitable as it’s a freshwater fish inhabiting shallow streams, ponds, rivers and lakes.

9) **Optimum Temperature for Fish Growth (OTG):** It needs to be 25 to 30 °C,

10) **Supplementary Feeding:** Rice bran + Rice Polishing + Oil seed Cake, or Fishmeal can be used.

11) **Fish Harvesting:** Its recommended to be done through nets.

12) **Marketing within community :** Packing of the fish in the polypropylene bags, polystyrene boxes.