

RUCHI – A Technology Resource Centre

Once we were identified by CAPART under the aegis of Ministry of Rural Development, Government of India as a Technology Resource Centre in 1994, RUCHI started doing adaptive research on some selected tried and tested technologies and added them to their basket of technologies. To name a few, these are:



Roof Top Rain water Harvesting:

Harvesting rain water from roof tops was a major breakthrough for RUCHI in the technology field and it has won RUCHI many accolades over the period of time. The rain water was passed through a filter before it is stored. The first rain was not stored as it was supposed to clean up the roof. About 90,000 litre of rain water was stored from roof catchment in one of its office building and was used for drinking purpose besides, of course, washing and flushing in toilets.

The storage was done in highly durable ferro-cement tanks. The ferro-cement technology was subsequently patented by us.



Ferro-cement Tank:

Ferro-cement tanks are constructed with M.S. bars, chicken wire-mesh, cement and sand mortar and are stronger and cheaper in comparison to other types of storage devices.

Organic Composting:

a. NADeP composting:

1Kg of dung can produce 40Kgs of organic manure through this method. Chopped biomass and sieved earth soil were other materials mixed up with dung. It is suitable for dung scarce areas.



b. Vermi-composting:



Earthworms are used to convert organic waste into manure within 45 days. This process is highly accepted by farmers since this is cost effective and the manure produced is of high quality.

Terracottem Soil Conditioner:



Terracottem is a modern soil conditioner that helps in increasing moisture retention capacity of soil and accelerates plant's growth. Its application is very beneficial in drought prone areas.

We tested it with vegetables at our premises and also at nearby farmers. To our surprise the results were more than satisfactory.

Biogas from biomass (Batch Fed):

This model of Biogas as an alternative fuel was introduced in the State by RUCHI. This particular batch fed system used 30-35% cow dung along with other non-fodder biomass and less water than traditional biogas system.



Plastic film technology:



Plastic film technology was demonstrated to farmers to save young plants from frost and other adverse conditions; grow vegetables in areas where soil is scarce and raise plant nursery under controlled conditions. Green houses were also introduced to practice floriculture and off season farming.

Hydarulic Ram Pump:

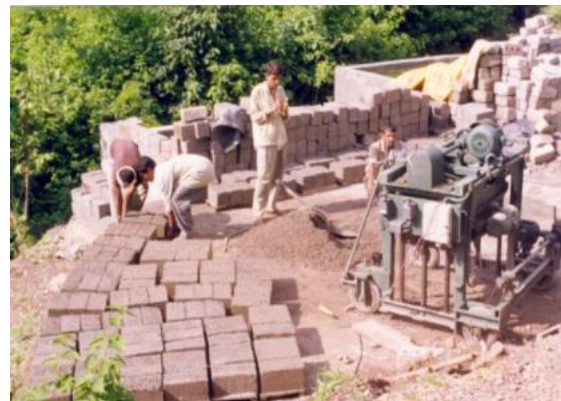
This is a fuel less device used to lift water in remote locations where electricity and other sources of energy are not available.

It works in relation to fall of water and can pump water 13 times the water head.



Random Rubble Block:

In recent times these blocks have become one of the most widely used methods of construction. They can be manufactured by local people at site using rubbles, cement and sand. Depending on the need they can be made as hollow or solid blocks of any size.



Fuel efficient Crematorium (FEC):



FEC reduces consumption of fuel-wood by 30% in cremation of a deceased and is an environmental friendly technique.