

ORANGI PILOT PROJECT RESEARCH AND TRAINING INSTITUTE (OPP-RTI)

EXPERIMENTS AT THE OPP-RTI NURSERY

The Experiments are:

Control of water logging thru construction of an underground channel. After 12 years of functioning, in March 2008, a portion of the channel about 225 rft. was clogged. This segment was replaced with a better designed channel, which is operational.

Recycling of the office sewage water, treated with effective microbe (EM) technology, for use in plantation: continues since 1994. In Jan'10 the old treatment unit was repaired and the design was improved, similar to the low cost EM-Sewage Treatment Unit being extended.

Compost Khad: Continues to be prepared and used.

Forest and fruit trees are growing at the OPP-RTI nursery. We are using recycled waste water for the trees therefore, our nursery is surviving the periods of water shortage in Karachi.

Treatment of sewage water for use in plantation: Addition of EM technology;

A small low cost waste water treatment unit, at the OPP-RTI nursery is functional. EM technology is being used.

It is observed that in villages in Sindh and Punjab, in many areas, sewage is disposed into ponds, located mostly in the periphery of the settlements. Standard designs for sewage treatment units for villages (with 10 to 50 houses) have been prepared for extension and demonstration.

In many places sewage is being disposed into ponds. Small treatment units (STUs) are being focused for villages and some small towns. Standard designs serving 10-50 houses and leaflet for extension and demonstration are being disseminated. Fourty two EM-STUs are functional, two in Khairodero village near Larkana, one in Sharif Sehto village in Shahdadpur, four in Sanghar, two in Sakrand, two in Sinjhora, one in Khairpur Tamewali, one in Jallah Arain, one in a village in Chah Baloch Wala, Harand, one in a village in Battagram – Mansehra, seven in Uch Sharif, eight in Samaro – Umerkot, two in Kotla Moghla, one in Faisal colony and two in Talaiwala in Jampur one in Lutaf Ali Wagan in Shahdadpur. Related to flood rehabilitation work in the villages of Sindh and Punjab, 4 EM-STU's have been constructed; one in village Paryalo Chawro in Jamshoro, second in village Pir Buksh Mugheri in Badin, third in village Dost Mohammad Chachar in Ghotki, fourth in Village Basti Qadir and fifth in Ward No.7 in Keror Lal Eason, Layyah.

Research on the design and functional management of the STU is initiated. Plan is to scale up the model as a rural sanitation system in villages where sewage disposal is not present. Partner organizations are being supported for the research. Two tanks at the office premises have also been rehabilitated to research on the types of treatment (settling process and slow sand filter).

EM (Effective micro organism): It is a kind of manure that can be prepared with fruit and vegetable wastes. Leaflet on the method is regularly disseminated among partners.

