SAPAM WET IRRIGATION TECHNOLOGY

FREE to NGOs & International Help Organisations, together with important piping material (free of charge) for one complete Pilot Project for each NGO, with simple method of preparing the piping by villagers themselves, to start Wet Irrigation System.

This paper is dedicated to the POOREST OF THE POOR, where there is a shortage of irrigation water and resources are limited,

If the goals of MDG (UNO millennium Development Goals) are to be achieved, then the poor villagers with small piece of land, have to be provided with some workable and che irrigation technology. Drip irrigation has notable successes to report (unfortunately beyond the reach of very poor villagers), but wet irrigation saves 75 - 80% water against floo other systems, and save up to 35% against the best known drip irrigation. Wet Irrigation System COST A FRACTION of Drip System.

Wet irrigation of roots occurred to me, when I saw weed breaking through the cemented path in our garden. I asked myself "If the plant roots are so strong to break the concrete those must be strong enough to suck wetness and moisture from distant water source to live and get stronger. So we started working on Wet Irrigation System and were overwhelmed and pleasantly surprised to see the RESULTS EXCEEDING OUR EXPECTATIONS.

First experiments were carried out, on hundreds or perhaps thousands of years old WICK & POROUS CLAY POT Irrigation system.
This confirmed our belief that the plants can suck water from great distance. (DENMED et.al.1962)

Wet Irrigation technology is simple and cheap to install. Unlike all other irrigation systems, where the water is provided to the soil, thereby a high percentage of water get evapo through Sun, high temperature, wind and other factors. Sapam wet irrigation provides, under earth, wetness around the area of the roots, thereby avoiding any evaporation an of water, and eliminates weed growth.

At times of draught and failure of rains etc. the ancient religions like Confucianism, Taoism and Hinduism mention " MULCHING" of Cultivation land as a solution to hunger and famine. There were different kinds of mulching methods, which are at today's concept not suitable or workable. But the principle adopted is the same, to derive wetness from whatever source of water availability. The most important experiments carried out, during last 30 months, were to derive and deliver the wetness from distant water resources from deep lying mulch, to the roots of the plants. Finally, waste of fibre material, covered with thin plastic piping) worked perfectly. OUR MOTO:- Don't give poor people ONE FI DAY TO EAT. Give them a fishing rod and teach them the methods of catching fish, for family and rest to sell for money. Agricultural scientists suggest mulching of the soil, to sa water. This is a part of wet irrigation.

<u>Wet irrigation</u> is not a competition to drip system, which is an excellent water saver for Medium and large farmers to increase their income. Wet irrigation is designed to help t under- poverty-line villagers, living with malnutrition and hunger and having small piece of land, without any recourses.

Aloisia & Sat Mehra's adopted Austrian Volunteers village learning the wet irrigation

SAPAM WET IRRIGATON SYSTEM has two different wetting components.

1. The moisture or wetness is brought through (plastic covered) waste of fibre, up to the roots of the plants from water source.

2. Mulch material is put around the plants. A fibre waste is put across the lower mulch and brought up to the plant's roots or seeds. As long as the mulch has moisture, the plant sucking water. From occasional rains, or little extra water during long dry periods, the mulch store a huge quantity of water, which it provides to the roots, during dry periods. Experiments show that plants suck water, simultaneously through both the systems.

It is confirmed during 2005 garden cultivation and presently tried out method, by one of the world's known NGO -- Gram Vikas, Orissa, India, that the total water requirement o components put together, at least 35% water was savaged as there is against Drip Irrigation.

Advantages of SAPAM Wet Irrigation System -- Pilot projects - Supplied free to NGOs.
1. No evaporation due to heat, wind or other factors. Permanent wetting of the soil is not required because water is brought up to the roots and the roots suck only, as much wa they need. There is an enormous saving of water over all irrigation systems.

2. Mulching at low level and transport of water from mulch wetness, up to the roots is an additional advantage to save water. Occasional rains or little extra water during long dry periods, supply a huge quantity of water in and around mulch area, which become available to the roots, when less water is available.

3. After 6 – 8 weeks, Mulch turn to Bio Fertilizer, so the plants don't need chemical Fertilizers. However, any kind of liquid fertilizer can be used through the system.

4. Leaves and fruit doesn't get wet, helping control pests and prevent deceases.

5. There is no weed problem, because the soil top does not go wet to feed the weed.

6. Wet irrigation doesn't require excessive manual work, so the poor women can use their time for other productive activities and bring up their children properly. Men can go a work for additional income.

7. Harvesting can be done at any time, without disturbing irrigation.

8. Irrigation is possible on slopes or plain fields without runoff.

9. Filters are not required, because there is no clogging of pipes like in drip irrigation.

10. Absolutely no pressure or any kind of energy required for cultivation areas.

11. All the materials used are cheap and the mulch is a gift of nature, to all the poor farmers and villagers.