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Welcome to the AWH Newsletter

The topic of Community Borewells immediately brings to mind Auroville's goal of Human Unity. But let us not jump to conclusions. After reading the article, you will see that it is a practical need for higher income that causes the farmers involved to cooperate. Yet, can we not hope that a more spiritual awareness of the meaning of cooperation may also occur for some of the participants?

Traditionally in Tamil Nadu as well as other parts of India, water for agricultural purposes has been collected... let us say harvested... in large Tanks. Perhaps most of you are familiar with the huge tanks or ponds you have seen in front of temples such as the one in front of the temple in Kulapalayam (Ellai Pidari Amman Temple). So you can imagine how huge the village Tanks are. Each village has one Tank, but this Tank can take care of the irrigation needs of even 100 farmers. Depending on the location and position of a farmer's field, a full season's irrigation needs can be assured. The water stored in one Tank is sufficient for the rainy season plus 2 to 3 months, i.e. one growing season. Tank position is important. A Tank must be located at the top of a high gradient. A gradient channel system is then employed to distribute the needed irrigation water. Any villager may use the Tank water as long as the position of his field is within the gradient channel system. Tanks are owned and maintained by State Governments (Public Works Department) through the Panchyats.

Of course, the farmers had undergone Social Mobilization, an interactive, preparatory training given in each village by AWH at the beginning of a project. Altogether, SM takes two months. During SM, the farmers are taken on Exposure visits to successful farmers in other districts. There, they are introduced to new technology, e.g. drip irrigation; alternate cropping; new crops. These Exposure visits allow them to compare their own practices and way of living, their present income compared to that of the Exposure-visit host farmers. The learning farmers are amazed at how a small amount of water can irrigate the large fields of the host farmers even throughout the year. With such a small amount of water, the learning farmers would have left their fields fallow.

Based on the SM meetings and Exposure visits, Dry land Farmer Associations are formed in each village. The DLFA farmers who have their own borewells are trained in which crops it is best to cultivate. However, there are farmers who do not have access to the Tank / Channel system and so need to use borewells or would have to leave their land fallow.

After a Tank is emptied, borewells are the only other water supply, as there are no rivers in our bioregion. Even in wetland farms, after the first season, borewells are needed. In addition, there is the problem of marginal farmers. In some of the villages of our bioregion, there are marginal farmers whose landholdings are 2.5 acres or less and are located outside the Tank/channel system. In such cases, without a borewell to provide irrigation, these lands would lie fallow, providing no income, especially in times of drought. Some marginal farmers have fields which are next to wetland farmers with borewells. Such farmers 'rent' the needed irrigation water. Such rental is not cheap; in the case of paddy, the rent can be one third of the rice produced.

In some villages, these small land holdings outside the village Tank/channel system form an area within which an irrigation system can be made. When seeing such a layout among those small landholders who had no access to groundwater, AWH proposed that they cooperate to obtain irrigation water by drilling a Community Borewell. AWH proposed the borewell along with training in Dry land farming technology to all regardless of caste, but usually farmers of the same caste own land near each other. Occasionally, a scheduled caste farmer may join a group. With the most economical and sustainable use of groundwater in mind, AWH has thus brought the idea of Community borewells through cooperation to the project villages.

Having been made aware of the benefits to be gained by cooperation, the farmers understood that drilling a Community Borewell would provide them income, which is especially to the advantage of those marginal farmers who cannot afford to drill their own borewells. Thus, farmers of all economic levels participate in drilling the Community borewell and using the groundwater extracted from it. AWH then guided them in planning the area to be irrigated, water sharing strategies, member contributions and aspects of sustainable maintenance. AWH has also given a monetary contribution to encourage dryland farming and to reduce the burden of the farmers in spending a huge amount in drilling and setting up of the new borewell. One borewell provides irrigation for 10 to 15 farmers with small land holdings.

Having been made aware of the benefits to be gained by cooperation, including additional income, which is especially to the advantage of those marginal farmers who cannot afford to drill their own borewells, Community Borewells were drilled. So far, there are six Community Borewells in the project region of AWH. Thus, farmers of all economic levels have participated in drilling the Community borewell and using the groundwater extracted from it. AWH then guided them in planning the area to be irrigated, water sharing strategies, member contributions and aspects of sustainable maintenance. AWH has also given a monetary contribution to encourage dryland farming and to reduce the burden of the farmers in spending a huge amount in drilling and setting up of the new borewell. One borewell provides irrigation for 10 to 15 farmers with small land holdings.

At a Planning Meeting, the participating farmers are selected based on their small land holdings and need for irrigation water and a Community Well Association is formed. Each farmer's contribution is Rs.3000/acre, which includes

well-drilling, casing and the pump motor, while AWH has contributed one lakh per borewell. Water distribution is direct from the borewell through channels to each land holding. GPS is used to determine the best site for drilling the borewell within a given border. The Association takes responsibility for maintenance of the borewell and other related structures.

The training in dry land farming technology is necessary as it insures that the crops to cultivated can be grown throughout the year, providing each farmer with much needed income. The focus is on crops and techniques to conserve water. Some farmers choose to grow paddy either by the usual method or by the System of Rice Intensification (SRI). Other crops include watermelon, flowers, vegetables, groundnut (oil). In order to prevent over-extraction, the following strategies are employed: paddy is cultivated for only one season, followed by other alternate crops. In addition, training is given on the efficient use of available irrigation water including explaining the dangers of salt-water intrusion and how over-extraction is a major cause.

Rainfall October 2010

Although 160 mm rain in a month, like what we had in October, looks quite a lot, it was almost the driest October month in 12 years (only 2009 was more dry; 127,3 mm). The average is almost 300 mm and if we compare it with 2004 we received 478 mm it doesn't look so much. The same accounts for the days. Look at the table. 'Only' 7 days of rainfall, normally we have almost one and a half week.

It is too early to predict the rainy outcome of this year. With a little more than 40% of the average rainfall to go, a lot can still happen. If we take the highest rainfall of November and December (2008 and 1998; 784.8 and 650.6) then we have still have 1435.4 mm to go. But if we compare the lowest two measurements (2002 and 2003; 71.2 and 2.1) then we are done with only 73.3 mm. Let's see what this monsoon brings us.
for some of the participants?

	Actual rainfall 2009		Actual rainfall 2010		Benchmark rainfall (10yy)		
	Rainy days	Rain in mm	Rainy days	Rain in mm	Rainy days	Rain in mm	in %
January	2	13.0	1	6.0	1	11.8	0.9
February	0	0.0	0	0.0	1	40.7	3.1
March	1	43.0	0	0.0	2	32.0	2.4
April	0	0.0	0	0.0	1	17.4	1.3
May	1	4.0	6	120.1	4	56.3	4.3
June	1	5.0	9	238.4	3	38.1	2.9
July	2	97.0	4	45.2	5	57.5	4.3
August	4	118.0	7	138.2	7	106.6	8.1
September	1	35.0	6	203.0	7	128.1	9.7
October	3	127.3	7	160.0	11	292.1	22.1
November	12	663.2			11	349.9	26.4
December	6	244.0			6	193.7	14.6
Total:	33	1349.5	40	910.9	59	1324.2	100.0