

First Issue

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Contact AWH

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Welcome to the AWH Newsletter

We tend to take water for granted. That is, when we are thirsty or need to wash we need a steady reliable source. Even then, we also presume our water will not make us sick, nor be contaminated with harmful minerals. Water is not free. It must not cost too much to collect and distribute. No matter how we use water, it becomes waste water and that must be disposed of without harm to the Community or to the environment. Please, then, do not take water for granted.

The AWH Newsletter will inform you of the present situation and what is proposed regarding all of the above issues. Please read the future issues and learn what we must all be aware of concerning water. Furthermore, AWH looks forward to hearing from you on any water issue. Please don't hesitate to get in touch with your comments, concerns and suggestions.

WATER IN AUROVILLE AS IT IS AND AS IT SHOULD BE

Today, wherever you go in Auroville, there is water to drink and to bathe with. But will this always be the case? From a resource point of view we are rich in rain-, sea- and ground water. Unfortunately there are no rivers that run near Auroville, so all of our drinking water comes from the ground...from aquifers. Research has indicated that these aquifers, especially the main ones are getting depleted due to over extraction. We are quite careless with water. We use a lot, our systems are below quality standards and often we find contamination of the water. Unfortunately we don't have rules and regulations to deal with this situation. In this respect, Auroville is a decentralized jungle (unorganized water system). That is, every community has its own water system, maintains (or ignores!) its own quality, its own maintenance, its own problems and inefficiencies. At present, with 2,000 Residents we have more than 170 bore wells running. And most of them are insufficiently maintained; this is an unfortunate situation. Furthermore, the pipes used in distribution are also most unsatisfactory: most are PVC, which starts leaking after 5 years; It is estimated that we lose about 30% to 40% of water during transport from bore well to the taps.

Actually, even if Auroville would be inhabited by 100,000 people with an average consumption of 150 liters/person/day of drinking water (a common standard), this amount could easily be supplied by approximately 20 well-maintained bore wells. One of our objectives should be that we have to raise the general standard towards a system that ensures:

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- Optimal quality of drinking water; this means that the water is clean, and people remain healthy and don't get sick from drinking water;
- Sufficient and uninterrupted delivery; actually 24 hours/7 days a week; interruption of water supply should happen only when controlled and cannot be avoided and with prior announcement;
- Environmentally friendly: the whole structure should have at least a neutral effect on the environment (water usage!)
- Lowest cost possible.

These 4 so-called internationally standardized bench mark criteria give a direction for the outline of a water system that we want to have. With this in mind, Water Harvest has started to create and build a water system that has the 4 mentioned basic bench marks as central objectives.

As a starting point, Auroville Water Harvest has together with L'avenir d'Auroville conducted a water supply study where medium and long term scenario's are being presented. This is not the place for a full description of the study but a modular system that integrates the different sources (rain-, sea- and ground- water is the basis. Furthermore, this system would connect the different community systems with a central distribution system. So you get the best of two worlds. The second step includes the caretakership of the Residential Zone water system (the Water Tower) to start from this point building the Aurovilian water system. Because the 'Water Tower' will not only service the Residential Zone we are thinking of renaming it into 'Hydron Auroville' but any other suggestions are welcome.

A project which is very actual at the moment is the connection of the six building in the Habitat & Administrative area. This area is now connected to a single bore well which has to run for more than 20 hours a day. Even now there are evenings when certain building have no water.

During power cuts, the Habitat residents often go without water. This is clearly an unsatisfactory situation and it has been decided by Water Harvest and L'avenir d'Auroville that it requires immediate action. In order for this great increase in distribution area by the Tower to be possible, Harvest has constructed two additional sumps at the foot of the Water Tower

In the middle-long term, Water Harvest plans to create a system do the same for:

- Schools in the area who have asked to be connected: Transition-, Future-, Last-School and the Pre-Crèche;
- All existing and new communities stretching from the Residential Zone 1 till the Industrial Zone;
- The present need of the Habitat and the Administrative area are huge. As the first stage, we will enhance the water system from Surrender directly to the Habitat

It goes without saying that the present work described above involving the Tower is just the beginning of the Auroville Township's water system. Auroville Water Harvest is open to your responses, question comments and description of your water needs. Please feel free to contact us: hydron@auroville.org.in

AWH IN THE BIOREGION

The office of AWH has been in Kottakarai since 1999. From our office, a well-trained staff goes out daily to several villages of the bioregion around Auroville and interacts with the villagers to improve their lives on several levels. The focus of this interaction is sustainable management of available water resources. A participating village becomes very much involved through the formation of Water Users Associations (WUA) which meet regularly. The women of each village are trained to participate in Women Entrepreneurial Groups (WEG). These groups cooperate in such

income producing activities as vermicompost production, the distribution of potable water throughout their villages, raising fish in village ponds, and etc. The women are also trained to follow hygienic practices at home. AWH found that some village women did know the relationship between their children's diarrhoea and contaminated drinking water.

Modern, ecologically sustainable agricultural practices such as Dry Land Farming which employs organic techniques are practiced intensely. These

are meant to replace such cash crops as sugar cane and cashew. The income realised from the new agricultural practices exceeds that of single crops.

RETURN TO TRADITION

It is understood that in former times, agriculture practices were productive and ecologically sustainable. Field structures called 'tanks' were maintained to harvest the monsoon waters. Furthermore, these tanks were connected by channels to form irrigating distribution systems. However, because of the detrimental economic policies of the colonial period as well as those of the post-independence governments, these structures and the sustainable practices went to waste. So, part of AWH's interaction with the farmers of the bioregion is to revive both the field structures and several farming techniques. These include bio-fertilizers produced by the farmers themselves and replacing soil-depleting chemical fertilizers.

We invite you to see the details of AWH's work in the bioregion at our website: <http://waterharvest.org.in/>

RAINFALL TILL JULY 2010

Starting with a fairly dry first 4 months, May and June gave us nearly 28% of the average rainfall which is normally 15% for these months. Although it is raining during this write up, July was comparatively dry; the lowest amount of rain in 15 years. However, June gave us a lot water: 238.4 mm was measured by the Water Harvest Weather Station. This is exceptional. In the last 15 years it has happened only two times that more than 200mm rain has fallen in one month. That was in February 2000 (409mm) and May 2004 (346mm). The highest monthly rainfall in the last 15 years was November 2008; 784mm came down and contributed to one of the wettest years.

	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	23.3	5	57.5	4.3
August	4	118.0			7	106.6	8.1
September	1	35.0			7	128.1	9.7
October	3	127.3			11	292.1	22.1
November	12	663.2			11	349.9	26.4
December	6	244.0			7	193.7	14.6
Total:	33	1349.5	16	387.8	60	1324.2	100.0

In the rainfall table the actual rainfall figures speak for themselves. The benchmark is the average of the last 10 years. The average amount of rainy days in January is '1' and the average mm rainfall in January is 11.8mm. This accounts for 0.9% of the yearly rainfall.