

Auroville Outreach

A newsletter from Auroville international township

April 2000

Palmyra: a force for bio-regional improvement

Palmyra was founded in 1990, and functions as a unit of Auroville's Auromitra Trust with the prime purpose of restoring the land of the greater bioregion surrounding Auroville. Subsequently it also took up work in the villages, helping to improve them by way of creating essential infrastructure; building and maintaining schools, toilets and sports facilities; encouraging the empowerment of village women; transferring skills and technology through workshops and training programmes; etc.

Today Palmyra oversees a large tree nursery, a soil analysis laboratory, a biological laboratory, a modest computer centre, a unit for editing video films (made by them to record their work and encourage

further support and understanding), and a training facility with accommodation for participants, all at their 'Aurobrindavan' premises just off the Pondicherry-Tindivanam road. Their formal team includes experienced activists, well respected members of the organic farming community, scientists, agro-forestry experts and administrative staff, but also extends into the villages, where they have enthusiastic support from among women's groups and the village youth. The latter, in particular, participate widely in Palmyra-established sports activities and volunteer regularly for work in other areas.

One of the secrets of Palmyra's success has been its commitment to involving local people in the various schemes it has taken up, wherever possible. This has not only provided employment opportunities, but more importantly - with the longer

Auroville is an international township in Tamil Nadu, South India, founded in 1968.

Inspired by the vision of Sri Aurobindo and The Mother, about 1,500 people from India and some 30 other nations are building a township dedicated to an experiment in human unity, with the eventual hope of contributing to international understanding and the evolution of human consciousness. Nearly 5,000 of the 40,000-plus local people living in the dozen-or-more villages that comprise the Auroville bio-region are also involved in the project, providing their skills and labour.

The township, projected for 50,000 people, will radiate out from the central Matrimandir and its surrounding gardens in 4 zones, the International, Cultural, Residential and Industrial. A large forested area, the Green Belt, will eventually surround the entire township area.

Present activities in Auroville include wasteland reclamation and reforestation, organic farming, village development, education, health care, renewable energy, appropriate building technology, arts and culture, handicrafts and small-scale industries, architecture and town planning.

As described by its founder, Auroville aspires to be "a universal town where men and women of all countries are able to live in peace and progressive harmony, above all creeds, all politics and all nationalities."

For more general information visit the website: www.auroville.org



A recently constructed water catchment check-dam near Thuruwai village

term in mind - has ensured active support of the local population, and the development of a sense of civic pride and collective responsibility among them.

Another factor has been Palmyra's systematic approach to projects, involving the careful collection and assessment of relevant data to ensure that all parameters are taken into account, often in partnership with experts and consultants in specialist fields. This has included making maps in collaboration with the local landowners, noting the natural resources and eco-habitats to be protected, studying socio-economic factors, etc, all of which gets fed into a computerised data base for ongoing use.

Funding agencies for Palmyra's work to date have included the National Wastelands Development Board (NWDB), Ministry of Rural Areas and Employment, Ministry of Environment, Ministry of Science & Technology (MST) and the Kalakkadu Mundanthuradi Tiger Reserve from within India, and the Danish International Development Agency (DANIDA), German & Austrian Indian Children's Fund, Overseas Development Administration (ODA) and the

Commonwealth Science Council from abroad.

Actual work in the field to date has included carrying out wasteland development programmes around 10 villages, involving the re-forestation of over 2,750 hectares (7,000 acres) of land and the planting of more than one and a half million trees; building or renovating some 60 check-dams for soil and water conservation; constructing a dozen-or-more village toilet complexes and soak pits; helping to establish facilities for sports like football, kabbadi, cricket and volleyball in 19 villages; arranging free medical camps in 6 villages; building a common gathering place and repairing an existing fair price shop in Edayanchavadi, a community hall in Alankuppam village, and a village 'park' in Kulapalayam villages; and carrying out integrated pest management programmes in 6 villages.

The most recent project undertaken by Palmyra is the ICEF project, sanctioned in July '99. This massive five year project, the largest so far to be sanctioned to any organisation in the area, intends to cover 23 large irrigation tanks and 3,000 acres of soil and water conservation plus afforestation work

involving 48 villages of the Marakanam and Vanur blocks of Tamil Nadu, with an outlay of Rs.9.6 crores (approx US\$ 3,400,000). The project, which is funded by the India-Canada Environmental Facility, proposes to implement a holistic watershed development programme and become a model for the restoration of highly degraded watersheds, including their associated tanks and irrigation systems, with management handed over to the local community on completion for ensured sustainability.

In addition to the above practical work, since 1994 Palmyra has been involved in conducting regular training programmes for Forest Officers, Village Forest Protection Committees, NGO staff, farmers and women's groups, not only from the local areas and other parts of South India but also from as far afield as Kenya and Zimbabwe. In the past 3 years alone, over 50 such workshops and programmes have taken place.

While continuing its pioneering work in the field of wasteland development and environmental regeneration, Palmyra is increasingly becoming a decisive factor in the upgradation of the surrounding villages as far as rural development activities are concerned, mostly in cooperation with the local Panchayats, BDOs and other concerned parties and people groups. With the help of the various funding agencies that have provided support to date, they look forward now to strengthening that base, and further improving the quality of their activities to meet the expectations of the many inadequately developed villages, not only in the immediate Auroville bioregion, but also further afield.

For more information e-mail: palmyra@auroville.org.in



Community toilet under construction at Pillaichavadi

Dynamised water

There are many adjectives to describe water, and many types of water, such as pure, polluted, heavy, fresh, salt, stagnant, running, deep, still, etc, but recently a new type of water was introduced in Auroville, known as DYNAMISED WATER. This new water is currently being researched and made available (in limited quantities at present) by Auroville's Aqua Research Centre (ARC).

ARC's Aqualab, under the direction of a highly qualified French chemist/water specialist, has been carrying out research into safe drinking water supply since 1995, with the overall aim of developing a system ideally suited to India. The prime aim has been to employ simple technology to provide safe drinking water at a reasonable cost, without use of delicate or over-sophisticated technology. Initially quartz and ozonising filtration/purification systems were developed (UV technology was avoided because it doesn't always remain effective over time), but more recently a revolutionary new filter/purifier system called the "Aqua-Bio-Dyn" was developed.

The Aqua-Bio-Dyn water



Aqua-Bio-Dyn installed in office

purifier employs a unique 4-stage filtration/purification process, beginning with a 10-micron ceramic filter to take out physical impurities, followed by sodium hypochlorite treatment to eliminate all germs and bacteria, followed by a second ceramic filter to remove dead bacteria, and finally an activated carbon filter which removes all traces of pesticides, herbicides, chlorine and heavy metals (like lead, cadmium and mercury).

The Aqua-Bio-Dyn purifier has been tested by the King Institute in Madras, the Indian Council for Medical Research and the world renowned Frederic Institute of Plant Protection & Toxicology. In each case it has been confirmed to give pure and safe water for human consumption. Now the system is being test marketed in Madras and Auroville, with initial emphasis on its suitability for schools. At the same time a project for the surrounding villages of the Auroville area is in preparation, involving Auroville's 'Palmyra', 'Water Harvest' and Health Centre.

So far so good, but there's an exciting bonus. Not only is the water absolutely safe for drinking after the 4-stage purification process, and remains safe (because the system - unlike ordinary systems - reprocesses the water after a few hours to avoid the usual build-up of fresh bacteriological content), but through a process of "dynamisation" is restored to the same high vibratory level found in pure spring or rainwater. The dynamisation technique, developed by French scientist M.Violet, permeates the water with high frequency biologic waves, making it equivalent in potency to the body's own fluids.

Kirlian photography shows the water to have a much stronger aura than ordinary tap water (which is considered relatively 'dead' by comparison, largely deprived of its cosmo-telluric magnetism and other

properties). People drinking the dynamised water regularly claim better health and increased energy levels. The same water used experimentally on plants has also induced up to 35% more growth.

A number of Aurovilians are now taking this water on a regular basis, and claiming noticeable benefits in terms of their health and energy. It is hoped that these same benefits will soon be accessible to schools and the villages surrounding Auroville, and then to the rest of India as marketing plans for the Aqua-Bio-Dyn develop.

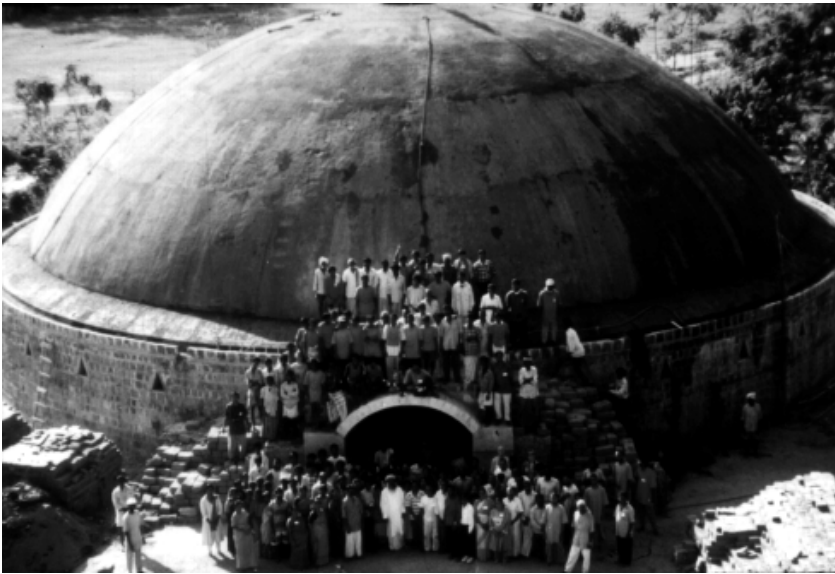
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22m wide 570-ton dome

The Auroville Building Centre's Earth Unit rose to an unusual challenge not long ago, the design and construction of a huge dome for the Dhyanalngam Temple for the ISHA Foundation at Poondi near Coimbatore. (The Temple is consecrated to Lord Shiva, but is not used for religious rituals, only for meditation.) The architect in charge of the concept of the Temple, Mr. R.P. Karthikeyan, had already built the foundations and walls, but the dome was a challenge beyond his experience, requiring expertise in materials other than reinforced concrete. Hence the call to AV-BC's Earth Unit.

Sathguru Jaggi Vasudev, the Guru of the Temple, had set a tight schedule for construction of the dome. This ruled out use of compressed earth blocks, as they require 3-4 months for drying.

Fired bricks were chosen instead, to be laid with stabilised earth mortar, though they had the problem of often being odd or irregular in shape. In most cultures hell is associated with fire, and



indeed - in the words of the young Auroville architect heading the AV-BC unit - "it was a hell to work with those fired bricks"! It would have been so much easier to work with stabilised, but raw, compressed earth blocks, because the accuracy of the Auroville's Auram 3000 press would have ensured very regular blocks, with identical dimensions for the width and height to within half a millimetre.

The finished dome, which is free spanning i.e. built without forms, has a diameter of 22.16 metres and a cross section in the shape of a segmental ellipse with height of 7.90 metres. It took 9 weeks to lay, without any support, taking around 214,000 bricks and employing more than 220 workers (with up to 110 on the scaffolding at any one time, including 22 masons). The finished weight for the dome alone came to around 420 tons. When added to the 150 tons of granite blocks used for loading the haunches for stability, the total estimated weight came to 570 tons.

No reinforced concrete was used in any part of the building, neither for the foundations, nor the plinth

or ring-beam for the dome. Sathguru Jaggi Vasudev wants the dome to last for at least 1,000 years, and reinforced concrete hasn't yet been proved to last that long! Therefore the dome stability had to be studied to have only compression forces. The foundation and walls were built in random rubble masonry with granite stones in lime mortar. The dome was completed on an auspicious full moon day, and should still be there for the next ten centuries i.e. 1,000 years hence. So should Auroville's reinforced-concrete Matrimandir. It will be interesting for the Aurovilians of 2999 to compare the condition of the two structures!

Auroville in cyberspace

As tourism grows in India, so the number of visitors to Auroville is steadily increasing, with hundreds now coming up from Pondicherry every day by bus, car and motorcycle. These are the visible tourists; but unseen there are other visitors to Auroville every day who make use of cyberspace to visit the Auroville

website on www.auroville.org. It may be of interest to readers of this newsletter to know that in the 8 weeks prior to March 16th this year there were no less than 7233 visits to the site – an average of 178 per day! Although a substantial proportion of these hits were from unknown sources, networks, commercial enterprises, educational institutions and such-like, the remaining list broken down by country makes interesting reading:

Germany	677	Greece	20
France	508	Estonia	20
Netherlands	249	Mexico	19
Italy	241	Saudi Arabia	17
Belgium	187	New Zealand	16
Australia	173	Indonesia	16
Spain	162	Peru	14
U.K.	157	Czech Republic	12
India	156	Hungary	12
Switzerland	150	Thailand	10
Canada	148	Iceland	10
Russian Fedn.	113	New Caledonia	9
Finland	103	Brunei	8
Singapore	70	Chile	7
Israel	63	South Africa	6
Sweden	59	Slovakia	6
Austria	59	Sri Lanka	4
Japan	53	Oman	4
Brazil	52	Republic of Korea	4
Denmark	51	Ireland	4
United States	44	Taiwan	3
U.A.R.	30	Bulgaria	2
Poland	29	French Polynesia	2
Argentina	27	Nicaragua	2
Portugal	24	Guadeloupe	2
Malaysia	23	Latvia	2
Norway	23	Kazakhstan	2
Ukraine	23	Venezuela	2
Turkey	22	Slovenia	1

Enquiries or feedback relating to this newsletter and its contents are always welcome, and can be communicated to:
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