



Auroville Outreach

A newsletter from Auroville Universal Township

January 2003

The Colours of Nature

Located in the area of Kottakarai on the north-west fringe of the township is an unpretentious layout of buildings where innovative research into natural dyestuffs and their use in preparing fabrics for clothing manufacture is being conducted, overseen by Spanish-born Aurovilian Jesus Ciriza.

Jesus came to settle in Auroville in 1993 after spending some time in Kashmir, where he learned by direct experience how to dye thread for - and weave - their famous carpets. At the same time he came to appreciate the fact that the secret of these carpets lay in the makers' attitude towards perfection in the quality and purity of the natural materials used, and not just in the time spent making them.

Inspired by this experience, he decided to set up a non-polluting vegetable dyeing unit in south India, but before doing so visited Delhi, where he spoke with the Minister of Handicrafts about his plans, receiving strong encouragement. On arrival in Auroville he started searching for the plants needed to create the dyes, and having found them set about experimenting with them on various fabrics.

Some 18 months later, having established his unit - 'The Colours of Nature' - Jesus was ready to start marketing a first selection of dyed fabrics. However, he found that it wasn't easy to persuade local garment manufacturers to use his materials, so he decided to go ahead himself with production of a small range of garments, initially concentrating on indigo as a colour.



Drying dyed thread prior to weaving

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

Inspired by the vision of Sri Aurobindo and The Mother, over 1,700 people from India and some 30-35 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



Drying batik dyed cloth at The Colours of Nature

This made sense, as indigo, which has been used for dyeing in south India for hundreds - maybe thousands - of years, and is readily available as a locally grown, normally pesticide-free plant (*Indigofera tinctoria*), is today still one of the world's most popular dyes (it was the dye chosen for the original Levi jeans).

Today, in addition to the indigo range he also markets garments in 14 other colours, including shades of purple, violet, pink, red and yellow. His unit has also grown from a virtual one-man operation into an export unit employing 20 people from the local villages, selling its products not only in India but as far afield as France, Italy, Germany, the UK, USA and Japan. His range has also expanded over the last few years from shirts and trousers to include skirts, bedcovers, Japanese kimonos, tie-dyed and batik T-shirts and south Indian "kolam" wall hangings, all on organically grown cotton, and all using indigenous plants only for the dyestuffs.

If there is one thing which is special about The Colours of Nature, it is that no harmful

chemicals whatsoever are used in the dyeing process, which is all done by hand in traditional manner using 30 locally-crafted pottery vats. (The vats remain active 365 days a year, never being emptied; only their content is adjusted for alkalinity on a regular basis to optimise bacterial growth and thereby productivity.) This means that the whole process is environmentally friendly, free of the sort of pollution from waste chemicals one normally associates with dyeing processes elsewhere around the world.

A major priority for Jesus today is to enlarge the operation to reduce production costs without compromising on purity in the process. Ideally this should be possible using an automatic anaerobic reactor of 10,000 litres capacity, but more research has to be done on this. If successful, it could lead to the design and building of a pilot plant using such a reactor, and the overall simplification of the dyeing process, with resultant benefits to the entire dyeing community. To achieve this, however, further research will have to be carried out to identify exactly the bacterium required for the

indigo dyeing process using the reactor; the parameters for that bacterium (temperature, pH, time-frame of fermentation cycle); and the most suitable alkali to use (for maximum effectiveness, availability and cost).

In the meantime Jesus is happy to share the knowledge he has gained to date with others interested, specially other dyers; to be able to promote this age-old method of vegetable dyeing and thereby ensure that tradition is not lost; to be able to raise awareness about vegetable dyeing techniques in general – locally and via international exhibitions he attends in Europe and India; to have a strong basis for convincing local farmers to use organic farming techniques; and to provide employment for local people. In the long run he also hopes to establish a training school for dyers in Auroville; to get local farmers to grow the cotton and dye-crops needed; and to persuade local garment manufacturers to make wider use of the dyed fabrics.

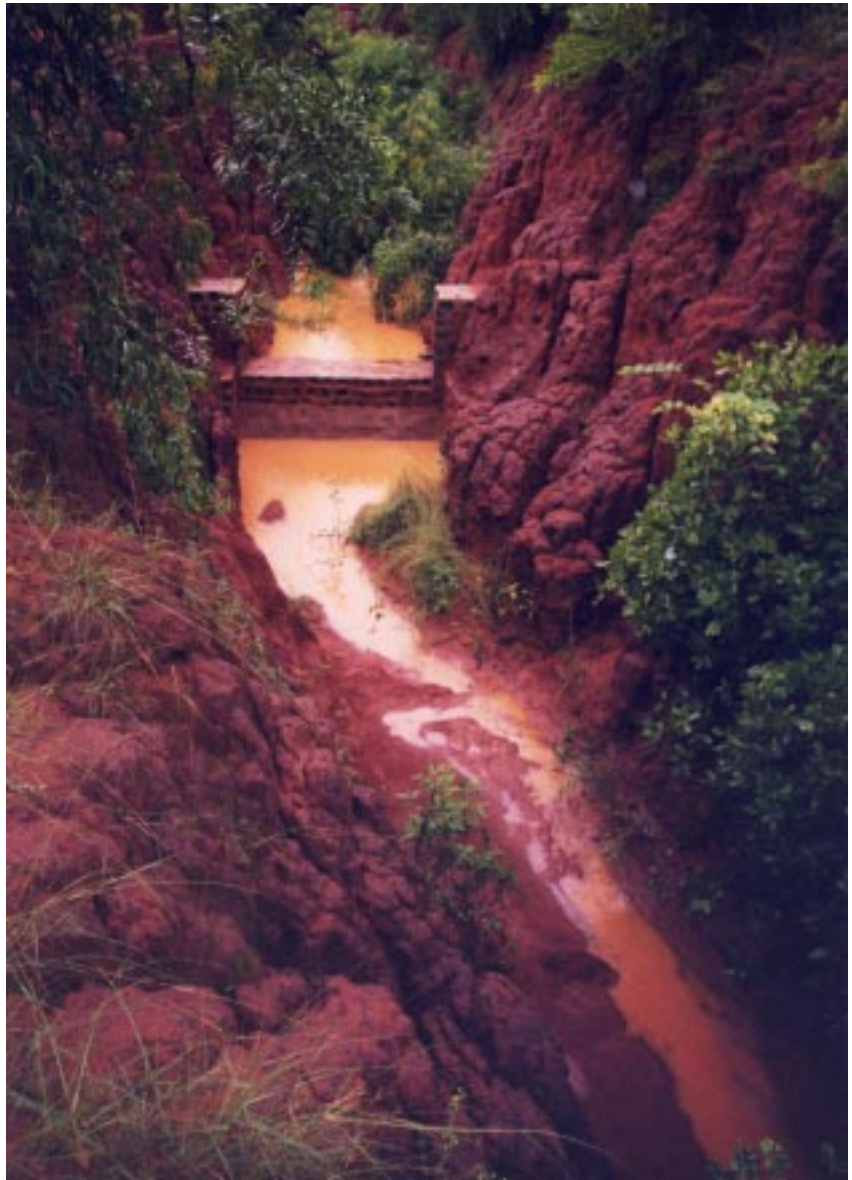
For more information e-mail: colnature@auroville.org.in

Canyon Erosion Control

When Auroville started in 1968, the open, largely bare plateau of village fields which today comprises the Auroville township and Green Belt areas was in such a state of deterioration that it had been officially declared in an "advanced state of desertification". Due to the plateau sloping towards the sea, every year hundreds of tons of precious topsoil were being washed away into the Bay of Bengal via a network of gullies and canyons, some already up to fifty feet deep in places.

Auroville's early pioneers rapidly appreciated this situation, and realising that urgent action had to be taken to halt and reverse the erosion process, they began planting trees. Today it is estimated that well over 2 million trees and shrubs have been planted, which is why one looks out on a relatively lush green landscape.

Reversing the desertification process, reforestation and regenerating the land, has undoubtedly been Auroville's first major environmental achievement, but still serious erosion was continuing via the already established system of gullies and canyons gouging the land. This motivated Auroville to begin the construction of kilometre after kilometre of earthen "bunds" to hold back the water, while at the same time



A check-dam successfully holding back water for percolation into the ground, and eventually the aquifers



A canyon site before ...



... and after damming

allowing it to soak down into the earth to finally reach the aquifers from which virtually all Auroville's and the local villages' water supply is drawn.

The bunding work further improved matters, but bunds can break in heavy rains, and also get constantly broken or eroded by other agents, so the run-off continued, even though somewhat reduced.

It was in these circumstances - and specially in awareness that with Auroville's population constantly growing and the aquifers falling everywhere - that Dutch born Kireet Jak started building check-dams in the canyons to hold back the run-off, bring the erosion process under control, and give the water a better chance to get down into the aquifers.

Today Kireet has overseen the construction of more than 35 check-dams of varying size in the Auroville area. Each has been hand built by teams of masons and their helpers, using mostly granite blocks for the core and surfacing materials. The results are impressive: where just a few years ago any medium to heavy rainfall resulted in a raging torrent racing down the lower stages of the canyons, today one typically sees a series of ponds or small catchment lakes upstream of the dams, from which the water is quietly seeping down into the earth.

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

Genius of India acclaimed

Auroville, or more specifically its 'Editions Auroville Press International' unit, has been making quite a name for itself over the past few years as a producer of outstanding educational slide shows focusing on aspects of Indian culture.

The first of these creations, a 40-

minute slide show on Sri Aurobindo and his dreams for the future of mankind, was put together in 1997 by the Auroville Press team, with French-born Aurovilians Christine Devin and Olivier Barot primarily responsible for the text and photos respectively, to coincide with the 125th birth anniversary of Sri Aurobindo. Wherever it was shown, and whoever saw it - including today's Prime Minister Sri Atal Bihari Vajpayee and Home Minister L.K. Advani, both at the India International Centre in New Delhi - it received wholehearted acclaim. A letter received from the Vice Chancellor of Banaras Hindu University referred to it as "superb", and expressed the wish that it "be seen and heard by millions".

This enthusiastic response to the show in Delhi led to it later being shown all over India, with projections arranged in schools, colleges and other institutions from north to south, east to west, usually with audiences of no more than 100 people at a time to create a more concentrated atmosphere: though this sometimes meant their showing it 6-8 times a day in the larger institutions. It was also shown several times on India's Doordarshan TV channel, including on August 15th, the date of India's Independence and Sri Aurobindo's birth anniversary.

Inspired by the success of this show, the Auroville Press team decided to make another slide show a year later in 1998, this time of 30 minutes duration, titled 'The Genius of India', based on an essay by Sri Aurobindo written in 1918 titled



Christine Devin receiving award in Delhi

'The Renaissance in India'.

This slide show, which was also put together with a Tamil commentary, was equally well received, with compliments from many eminent people - including famous personalities like Jagmohan and Kiran Bedi - and has been shown in educational and other institutions all over India, also on Doordarshan, like its predecessor. Additionally, it was shown in Paris, France, with a French commentary.

The continuing success of this show led to the production of a video version, in English and Hindi, which towards the end of last year won Editions Auroville Press International an award in the 14th University Grant Commission annual educational video competition, held in cooperation with the National Open School, New Delhi, for 'The Best Programme of the Year'. At the same time Auroville's 'Raintree Records' unit also won the award for Technical Excellence in Sound Recording for their work on the video, making the occasion a double triumph for Auroville.

For more information on the slide show/video e-mail aurovillepress@auroville.org.in, and on the sound recording raintree@auroville.org.in

Enquiries or feedback relating to this newsletter and its contents are always welcome, and can be communicated to: Auroville Outreach, Bharat Nivas, Auroville 605101, India E-mail: outreach@auroville.org.in
