AFFORESTATION

AN ECO-PARK IN CHENNAI

For more than 40 years now Joss Brooks has been a pioneer in afforestation in Auroville. He created the Pitchandikulam forest, which is one of the most beautiful forests of Auroville. Joss has been invited to share his vast knowledge of plants with the Tamil Nadu Government, and this has been a success.

HE ADYAR POONGA is a 58-acre wetland eco-park near the heart of Chennai. It encloses a part of the creek which runs into the backwater of the Adyar estuary, which then drains into the Bay of Bengal. The story of the eco-park began in 2004, when ecologists and designers from the Auroville International Township were approached to put together a master plan to transform the Adyar Poonga, which was then a polluted wasteland and rubbish dump, into an ecologically balanced wetland and environment centre. In 2005 the Adyar Poonga Trust was formed, and in 2007 Pitchandikulam Forest Consultants, a unit of the Auroville Foundation, were engaged as lead consultants to draw up a master plan for the estuary's restoration. The master plan was accepted, and in 2008 Pitchandikulam Forest Consultants began the process of restoring the Adyar Poonga. In 2009, with growing interest in a holistic restoration approach to Chennai's waterways, the Adyar Poonga Trust was renamed the Chennai Rivers Restoration Trust, with a larger mandate to restore all the waterways and waterbodies in Chennai.

The restoration challenge was huge; it involved the removal of 60,000 tons of rubble and garbage accumulated over decades, and engineering solutions to deal with storm water runoff and sewage pollution. The land and waterways were reshaped and access designed. Planting began with a focus on the species native to the Coromandel coast of Tamil Nadu (known as 'Tropical Dry Evergreen Forest') and wetlands, mangroves and medicinal plants

(complimentary to the rich local health traditions in the region). In total 200,000 indigenous plants from over 173 different species were planted. Finally art was installed with the aim of educating and sensitising by way of scientifically accurate and aesthetically pleasing depictions of wildlife. Different media were used to capture the diversity of nature: Cuddapah stone and plywood paintings, mosaic collages and cement wildlife sculptures.

RELATION TO AUROVILLE

The project drew on Auroville expertise and best practice to design and restore the landscape. This is evidenced by the design principles, which maximised the use of natural, local materials and 'green' alternatives. For instance, most steps and benches in the park are made of stone, not cement, and the roof of the solid waste management shed, which at first glance looks like colourful asbestos, is made from recycled tetrapaks. Compressed mud blocks, made on site with input from the Earth Institute, another unit of Auroville, have been used to construct the buildings.

Similarly the seedlings planted at the Adyar Poonga were grown in nurseries in Auroville, which has over many years collected seeds from fragments of remaining TDEF at temple sacred groves in order to restore indigenous plants to the degraded Tamil Nadu landscape.

This exchange opens people's imagination to the transformations that can be achieved at Adyar Poonga, and likewise in Auroville, by demonstrating and promoting the technology and practices that have been developed in Auroville over the past 50 years.

IS IT 'SMART'?

The Adyar Poonga is 'smart' through its use of eco building techniques (outlined above), landscape design, environmental education, and technology, including solar energy for lighting, wind energy for water, waste segregation and innovative vortex wastewater treatment. Working models of fuel cells and biogas reactors can also be seen there. It is hoped that the spectrum of materials and technologies used will spark off interest in engineers with a green bent of mind, and through them spread to the larger community. The education and outreach programmes are based on the philosophy of 'learning about the environment, in the environment and for the environment' and are an integral aim of the Poonga.



IS IT REPLICABLE?

The Adyar Poonga restoration is the product of a meticulously planned transformation, which considered ecological, social, governmental, technological and economic aspects, which were locally adapted and appropriate. Such an approach could be adapted to similar large projects or small community led projects all across the water bodies of Tamil Nadu, India and the World. A key factor that we have identified for the success and sustainability of such restoration projects, is complementary environmental education to inspire in people a sense of value and connection to nature and environmental protection. Through the Adyar Poonga we demonstrate that with vision and perseverance, wasteland can be transformed into an eco-park sanctuary, which can be replicated anywhere in the world.

Lucy Garrett









Photo A: The river, which once carried only wastewater and rubbish most of the year, has been transformed into an oasis of greenery B: Entry and information panels C: Joss Brooks, the project coordinator D: The park is enlarged, solar lighting is installed