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Quietly making an impact: Auroville's solid waste outreach

How does one change deeply entrenched attitudes which are causing harm to the environment and to the most vulnerable sectors of society? This month we identify some of these attitudes in both Auroville and in Indian society as they relate to waste disposal, sanitary pads and to the purchase of drinking water in plastic bottles, and we show how Aurovilians are finding new ways of promoting behavioural change.

One of the key elements here is learning to think beyond the limits of Auroville, to be willing to interact with the larger India in the pursuit of solutions. The recent decision, which we report on here, of the Town Development Council sign a Memorandum of Understanding with a local village to promote co-development is another sign that Auroville is increasingly taking on its larger responsibilities to its bioregion and to India as a whole.



Rajamani explaining the need for trash segragation

he event was planned innocuously enough. It was inspired when Ribhu, our Aurovilian waste warrior, observed the sub-standard quality of the solid waste segregation system at the Unity Pavilion. Shivaya of the Unity Pavilion agreed and requested his help. She said that the Tamil workers generally handle the waste there and they needed training. So Ribhu of WasteLESS and Niranjan of EcoPro prepared an interactive presentation in Tamil on the importance of waste segregation. They sent out a few announcements to the community. 92 workers from different places in Auroville arrived.

The overwhelming interest in this session surprised everyone, including its organizers. "I thought 20-30 people would show up," said Niranjan. Clearly there is a high demand for this information, proven not just in the turn out, but also in the receptivity of the audience. What began as an Auroville-based training for workers quickly became a discussion on solid waste management in general. "All of them understood the importance of segregation but found the systems operating



Barrels for waste separation in an Auroville community

outside of Auroville difficult," said Ribhu. "Some ladies from Lawspet complained about how they no longer have space to compost. Others were happy that the system in Auroville works; it needs continuous effort and attention, but recycling is happening and the place is clean. Most of the ladies were active in the discussion and all understood that action has to start at the individual level, in the home with segregation."

How do Ribhu and Niranjan get people to talk about trash? "We take a big picture approach and examine how waste impacts the environment," says Ribhu. An image of the Earth from space immediately pulls the audience out of their individual lives to remind them that we live together on one planet. The presentation then explains waste issues in terms of finite resources: limited freshwater resources, the fragility of our atmosphere, and the increasingly polluted landscapes that surround us. It focuses on how pollution impacts our lives directly and how proper segregation helps to promote recycling, ultimately to reduce pressure on our resources.

The presentation ends with photographs of the waste barrels at Unity Pavilion: "We customize our waste presentations to each place we go," Ribhu says. Ribhu and Niranjan discuss what they found in each bin, and talk about direct steps for improvement. After an hour and a half presentation, the crowd disperses with new knowledge. Ribhu reflected that it was a good first session "but now is the difficult part of following up and seeing how this can translate into better waste management at each of the units/organizations and then finally in their homes." Inspired by their first presentation of this kind, Ribhu would like to see these presentations continue from July.

Outreach efforts

This collaborative effort between WasteLESS and EcoPro wasn't the first or the only solid waste outreach effort in Auroville. In the past, there have been a variety of outreach efforts to people from the surrounding villages [see box next page]. One recent waste outreach project, begun in 2009 and ended in May 2012, was EcoPro's initiative in Periyamudaliyarchavadi, which approached waste management in terms of systematic change, for example, trying to understand and overcome challenges in the government-run solid waste management system. They conducted waste audits in the village and examined specific challenges that the village faces in proper solid waste management, uncovering a system filled with perverse incentives for government workers not to do their jobs. While the challenge of systematic change was frustrating, there were several valuable lessons learned. What they observed was

that direct incentives work best: if householders can recognize the monetary value of their waste items, and directly reap the rewards by selling to scrap dealers, they will be encouraged to segregate their waste.

Today ongoing outreach efforts in solid waste management continue. They range from direct action, such as the organization of a litter clean up in Kuilapalayam in May, hosted by the Kuilapalayam Cultural Center team, consisting of Selvaraj, Hari and Suryagandhi, to providing a direct financial incentive to waste, to working directly with a municipality on its solid waste management system. Many efforts are focused on education and

advocacy, so their impact is more challenging to document. Below are a few highlights of ongoing waste outreach efforts based in Auroville and extending outward to the bioregion.

AuroScrap

The concept is simple: Auroscrap is a recyclables dealership that purchases less common, bulky waste items, such as table fans, old piping, or fridges. They also take glass or paper in quantity. Auroscrap determines the value of it and then pays for it at competitive rates.

Aurovilians frequently give their ammas or workers valuable waste items such as newspaper or glass jars to sell in the village, but this is an opportunity for Auroville to reap the economic benefits from recycled waste. Auroscrap is managed by Suryan and he hopes that the workers of Aurovilians will soon recognize that they can get a better rate for their waste by coming to him rather than selling it in the village. He estimates that Auroville loses up to 1-2 lakh rupees

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monthly on recyclable waste being sold out of Auroville. His outreach method is to provide a direct financial incentive for people to recycle

Eco-Service Community Outreach

Another outreach method is advocacy. In late 2009, Eco-Service created an outreach branch that was boosted by a grant from Auroville's Project Coordination Group (PCG) in May 2012

(which also helps to fund Seeds of Change, see below). Since then, it has connected with over 60 communities households within Auroville. Eco-Service's Commu-nity Outreach is organized and conducted by the Eco Service team, but is largely the responsibility of R. Rajamanikam. Currently pursuing his PhD at Pondicherry University on waste management in the Pondicherry region, Rajamani visits new communities to help them set up a waste segregation area and assists in improving the waste systems of established communities. He also trains workers, most often ammas. who handle the community's waste.

Rajamani sees lack of segregation as a lack of commitment and lack of consciousness. He observes two main challenges that often face Auroville communities: firstly, that community mem-

bers are unable to organize themselves, and secondly, that the ammas handling the waste don't understand the importance of segregation.

Rajamani conducts an interactive session for workers that provide them with an opportunity to share their experiences. "If I tell them I'm a teacher, they don't listen," he says. Instead, in colloquial Tamil, he shares his personal background and commitment to his work, and then asks about their work and their waste management systems in the villages. "Often times, ammas will think Aurovilians are crazy," he says. "They ask me why Aurovilians spend so much money on barrels just to put waste in them. They say that if they had a barrel for their home, they would fill it with fresh water." Rajamani then goes on to explain the connections between mixed waste and vector-borne diseases, and other risks associated with improper waste manage-

Rajamani observes that the workers value the information more when they are participating and when it's directly relevant to their work and lives. "The more they find the answers themselves," he says, "the more they own it and take leadership". He is repeatedly impressed by the ammas he encounters. "If you give them proper information, they want to change. The beauty of working in Auroville is that people would like to change, they just need information and training. I think if you chose 10 ammas who excelled in segregation and gave them an incentive or reward, this would provide positive reinforcement to them".

WasteLESS

Education is at the heart of the work of WasteLESS, a non-profit social enterprise working to raise awareness about waste issues. Its work involves conducting waste audits and creating educational materials for school children, such as the comprehensive "Garbology 101" curriculum. [More about WasteLESS in the Oct 2012 issue of AV Today.] Its latest waste outreach material was launched on Earth Day, April 22, at a gathering at the Unity Pavilion. The card game 'Pick It Up', aims to spread awareness on waste segregation in a fun and interactive way. It focuses on the informal sector of India's waste system (e.g. scrap dealers and waste pickers). 'Pick It Up' teaches students from 7 years and older how to segregate and recycle their waste through the

sive amount of food waste. So they made a collective effort to take less food.

The other aspect of the Seeds of Change project consists of Rajamani's personal passion: presenting the importance of wetlands. Though wetland ecosystems play a key role in the natural filtration of polluted water, the main focus of the curriculum is on biodiversity and threats to wetlands of the region: encroachment, pollution, over-harvesting and poaching.

Indo-French Solid Waste Management: Karaikal

One outreach effort works directly with a local municipality. EcoPro has been working since January 2013 to raise awareness and to help set up proper solid waste management systems in the city of Karaikal, a municipality of the Karaikal District in the Union Territory of Puducherry, 150 kilometres south of Auroville. In a joint effort between the French Government, EcoPro, and officials in Karaikal, two wards, Valatheru and Kadarsulthan, of 13,000 people and 1300 households were designated for the programme. When the project started, waste collection was not frequent enough and not reliable in regularity and coverage. EcoPro was tasked to improve the situation.

Ribhu and Niranjan began by visiting the wards and simply walking through the streets and observing the waste there. "After we had done this for a few days, people would approach us and ask us what we were doing," Niranjan said. It was then that they would

launch into their "roadshow," which included a screening of the waste-awareness film "Maatram" and a brief interactive session on the importance of waste management. Presentations were purposely not technical. Instead, they centered on the experience of the people and the threats at hand. "We ask the audience why they are working, and they reply, 'for the future of our children'. We then reply, 'Pollution impacts your children. For your future, you need to give your kids good air, good water.'

Their impact has been significant and tangible. In collaboration with the municipality, EcoPro helped to implement a door-to-door waste collection system for the two wards; now 60% of households have door-to-door collection. They have set up waste management systems in three of the eight schools there. They also worked with college students to run a massive 7day campaign for solid waste awareness, which included a rally, an upcycling exhibition of materials made from waste, and a kolam competition on a site that had previously been used for dumping. EcoPro also assisted in setting up a composting system for biodegradable waste.

At the heart of the waste problem, says Niranjan, are people. "Once you have good people to take up the waste challenge, it will happen." The municipality and their French partner, Cotes D'Armor, have been sufficiently impressed to ask for an extension of the programme to four more wards in the current year.

Auroville's current waste outreach efforts are decentralized and all are funding-contingent. Common themes of education and effective communication do emerge, and they revolve around sharing experiences and recognizing finite resources. Each initiative is a small, unique step toward a healthier bioregion for us all

Ing-Marie









Recyclable cards from the 'Pick it up' cardgame

informal sector and highlights common waste items which have high value. Printed in two versions (Tamil/English and Hindi/English) on recvclable cards, the card game is available from WasteLESS.[Learn more at: www.iwasteless.org]

Seeds of Change

Another education-based initiative is Seeds of Change, a joint initiative between Soma Waste, a group working on waste issues in Auroville, and PondyCAN, an NGO in Pondicherry. The work is being coordinated by Auralice, who is also working for Eco Service Community Outreach. This project goes into Pondicherry and Tamil Nadu schools with the goal, explains Auralice, "of imparting environmental awareness and civic consciousness through participatory activities such as classroom and school-based audits, field trips and seminars". Since its inception in 2008, the project has worked with over 3000 students

The project consists of two parts. The first is the Green Schools curriculum developed by the Centre for Science and Environment, based in Delhi, which helps students conduct a "green audit" of their school in six categories: land, air, water, energy, waste and heritage. "It's a beautiful tool," says Rajamani, "because through it each one can clearly understand his/her footprint on nature." It is not all plain sailing. Rajamani has visited private school children who refuse to conduct a waste audit, and government schools that fear that if the audit results will be published, it will ruin Pondicherry's national reputation as a clean city with hygienic schools. But overall, Auralice notes behavioural change in students, such as their attention to turning off light switches and fixing leaking taps. At one school, the students did a waste audit and recognized the mas-

Why do they do this work?

here is a strong group of youth (ages 30-45) engaged in solid waste work in Auroville. Indeed, all of the people featured in this article fall roughly into that age range. We asked some of them, "Why are there so many Aurovilians involved in waste work?" Here are their responses:

Auralice: "For the young people, the change in India has been dramatic and alarming. Those of us who were born and raised here have witnessed this change and are shocked at what is happening. Waste is an indicator of environmental degradation that's happening all over. Solid waste issues are also a movement, a trend, and there's a lot of energy around these issues right now globally."

Niranjan: (laughs) "Auroville is totally different from India. In India, young people try to earn money. In Auroville, people are always concerned about nature and the environment. In other places, young people will not be involved in these issues like they are here."

Rajamani: "I don't know the exact reason. I am guessing that Auroville is a place where people want to have a clean and hygienic living environment. Especially people coming from Western countries - they are worried about Indian sanitation conditions and want to be involved in any activity that tries to improve the existing situation. People that I've met in waste work here are never worried about credits or awards; they want to improve the quality of life in Auroville by creating a healthy living environment.

Chandrah: "From my own experience I think that a lot of us are faced with seeing waste everywhere, whether it is in our dustbin at home, or litter that is strewn along the main roads leading to Auroville, and also wild dumps sites that are usually in environmentally-sensitive areas. I think that because it is always in our face and we know that it is harmful to the environment and all living creatures (including ourselves) we want to do something about it. And, of course, Auroville is a city in the making and aspiring to be innovative, creative and experimental and wishes to come up with ways to tackle the increasing amounts of waste that we generate everyday, which includes looking at ways to change our behaviour and the way we 'think' about waste.

I think that another big influence and push for more people to care about and be involved with waste in Auroville was the Litter Free campaign in 2010. I believe that this put 'waste' on the map in Auroville and made more people want to do something about it. Another thing that got people into waste was the fact that for years we had to breathe toxic smoke coming from the Pondicherry dump. So a group of people got together and tackled this issue."

Suryan: "I'd say that the fact that many of us in waste management fall into the 30-45 year old age group probably comes from people at that age getting to a point in their lives where they want to give something back to the community, because maybe now they have more time to do so, or are simply more inclined to take on responsibility in general. Another reason is that waste and its related problems are still quite a recent phenomena. I believe many of the older people are just not as aware or as clued in on the issues as the vounger ones are.

Also, it's a common trend that each new generation is more refined and encompassing in their outlook. And that's clearly the case in our present day globally. 'A youth that never ages' said the Mother. So one could say that it's actually a matter of consciousness, that the youth is simply more able to access higher frequencies, being less bogged down by the lower ones."

from grades 1-9 in 30 schools.

Solid Waste Outreach Efforts of the Past

The history of solid waste outreach efforts parallels the development of solid waste management within Auroville. In the late 1980s, the late Stefano (Aurodam) began a waste collection service that was taken over by Gillian and others and supervised by Amrit (Verite) for several years. The Auroville Health Centre launched a few programmes in the nineties and the Solid Waste Management Task Force came into existence in 2000, with Gillian, Amrit, Lucas and several others involved. Further, attention was given to waste issues as a result of the burning of waste at the Pondy dump and subsequent clouds of toxic smoke that would hang over Auroville communities. The Litter Free Auroville campaign in 2010 had a significant impact as it put solid waste management on another level in the public's awareness.

In terms of outreach, some years ago AV Water Harvest instigated a system of waste segregation in Edaiyanchavady, and there have been the spontaneously organized litter pick-ups. One of the more extensive projects was undertaken in Kuilapalayam village by Gillian. She undertook the project at a time when waste began to change from mainly organic waste to more packaging waste. Inspired by Exnora, a citizen-based movement that began in Chennai, she began a project in 1994 to tackle the mounds of waste in the village. She raised funds through donations from the State Bank of India and local Auroville businesses and, with the support of the Panchayat, launched a door-to-door waste collection service that collected waste twice a week from every household. The householders were expected to pay Rs 10 a month to fund the workers who did the collection and recycled, composted and finally landfilled the leftover waste. This went on for two years until it finally closed due to lack of financial support. Since then, roadside waste collection has been operating instead.

Disposable pads, disposable lives

Eco Femme, a manufacturer of reusable sanitary pads in Auroville, recently met with conservancy workers in Chennai and learnt about the devastating social impact of disposable pads. Bindu reports.

hen you throw something away, where is away?" asks the celebrated environmental activist, Julia Butterfly Hill. Indeed, where is away? "Away" conjures that mythical place, far from one's home, where one is absolved from dealing with the ignominious impact of one's action.

Years ago, as a teenager, when I flushed my disposable sanitary napkin down the toilet, I was not thinking of where was "away". I was celebrating my liberation as a modern, urban woman who was free from the discriminatory superstitions and taboos regarding menstruation that were inflicted on my rural cousins. (In India, as in most cultures worldwide, there are a number of prevalent beliefs and taboos about menstruation that seek to limit a woman's activities. Some of the more common ones in India are refraining from religious rituals, not cooking, and staying secluded from male company during menstruation.) The water flushed away the napkin. And "away" was none of my concern.

As the years passed, and I switched to more eco-friendly alternatives for menstrual hygiene (I have to confess for economic reasons as much as environmental reasons), but I was still not bothered by that far-away place called "away", until my friends at Eco Femme invited me to a round-table discussion with conservancy workers in Chennai on various aspects of menstruation. "Conservancy workers" is a euphemistic term for manual scavengers and sweepers who, due to society's blind oppression, continue to work for urban municipalities cleaning toilets, removing with inadequate tools and their bare hands human excreta and discarded waste like sanitary napkins, and worst of all, going down the manholes into the muck of sewers to clear blockages. It is a term that neatly obscures the fact that in the city of Chennai, 95 % of the 10,000 odd conservancy workers hail from one particular caste, the Arunthatiyar caste, who are condemned to manually handle the 5 000 tons of solid waste that is produced by the city every day.

When the roaches die: the dangers of diving into a manhole

When one flushes something down a toilet in Chennai, it ends up in the city's sewer network, which spreads across 2,800 km with 80,000 manholes. And unlike manholes in developed countries, in India there are no vents, fans, or lights to assist those who are periodically forced to go down the manhole, swim through the filth holding their breath, to try and clear the blockage. Such is the danger that lurks beneath cities that in Hong Kong a sewer worker is permitted to enter a manhole only after rigorous training and gaining at least 15 licenses. In India, because labour is

conveniently cheap and because our prevalent belief in the caste system justifies the practice, we send men down the sewers bare-bodied, with nothing more than a rope round their waists. The rope is euphemistically called a safety belt but is actually more like a death noose, for it is useful in hauling up the body if the worker faints or dies from the

Death by asphyxiation is a known occupational hazard for conservancy workers. Despite the 2012 law prohibiting employment of individuals as manual scavengers, at least onr person dies every month in Tamil Nadu, by diving down a sewer to clean blockages. This is because the anaerobic decomposition of underground sewage results in a variety of toxic gases. Hydrogen sulphide, with its

Eco Femme

Since its launch in 2010, the Auroville unit Eco Femme has grown from an idea to a thriving social

enterprise with an international reach. Eco Femme washable cloth pads have become a popular

item among Aurovillians, volunteers, and guests and are available for sale in 14 countries around

the world and throughout urban India. Sales have more than doubled from the first quarter of this

past year. About 50% of sales take place internationally, while 35% of sales happen in urban India,

and the remaining 15% through non-governmental organizations (NGOs) or private partnerships

In April 2013, Eco Femme launched the Pad For Pad Programme, an educational outreach pro-

gramme for schoolgirls, funded by international pad sales. Pad For Pad sessions include an expla-

nation of the menstrual cycle, a discussion of menstrual hygiene products, information on the com-

position and environmental impact of disposable sanitary napkins, and a chance to reflect and ask

questions in a safe environment. So far Eco Femme, in collaboration with other NGOs, has dis-

tributed 2,702 washable cloth pads to 637 school girls through 29 Pad For Pad sessions. Eco

Femme is excited to continue partnering with NGO's throughout the state and country to distribute

and sell pads and to expand its environmental advocacy work.

For more information on Eco Femme products see ecofemme.org.

with leaders interested in bringing washable cloth pads to the women with whom they work.



A conservancy worker descends a manhole to clean out a blocked drain

distinctive smell of rotten eggs, is the most common one. At a concentration of 100ppm, hydrogen sulphide causes asphyxiation, and at lower concentrations, such as less than 10 ppm, which is routine. it results in conjunctivitis and headaches. The other big danger is methane, a highly combustible gas. Without any gas-detecting devices, the conservancy workers check for the presence of methane by throwing a lighted match in. Any build-up of methane bursts into flames and burns out, and after that, a conservancy diver still has to enter the hellhole. Carbon monoxide and dioxide, which cause suffocation, are the invisible killers as being colourless and odourless they escape detection. One worker reported that the method for checking the toxicity of a manhole was to open the cover and check if there were dead cockroaches, for it is a well-known fact that roaches do not die easily. If there are dead roaches, the conservancy workers just allow the manhole to aerate for a while and then enter the sewer, knowingly risking death.

Even for those who survive that inevitable descent into hell, their lives are curtailed by inevitable bacterial and viral infections such as leptospirosis, viral hepatitis, and typhoid that they

issuing better equipment to conservancy workers.

Disposable pads and disposable lives

Daily newspapers routinely report deaths of conservancy workers, and alternative media have sought to highlight the plight of the conservancy workers. But on talking to members of the Arunthatiyar community, what I realized with a shock was that disposable sanitary napkins (the term "sanitary" is truly misleading for the toxic chemicals present in disposable pads can absorbed by the body through skin contact) can directly lead to fatality among conservancy workers. What I had not grasped until recently is that the thick Carefree cushions that I had used as a teenager had morphed into something more slick and inorganic. Disposable sanitary napkins today have a high content of LDPE plastic polymers and a layer made out of polyacrylate. The polyacrylate layer, a superabsorbent gel which absorbs the menses to give one that feel-dry feeling, also soaks up water when it is flushed down the toilet. It continues to bloat as it makes its way through the underground rivers and clogs up the sewers, causing conservancy workers to dive down and remove them by hand.

Unbleached cotton flannel

Cotton and polyurethate layer

Brushed cotton flannel with non-toxic dyes

Super Absorbent
Polymers (gel) 0.6 gm
Non-woven
fabric 1.1 gm

Silicon paper 0.67 gm
Hot melt seal 0.45 gm
Hot melt positioning
sheet 0.96 gm
Super Absorbent
Bleached cellulose
wood pulp 4.5 gm
Wood pulp 4.5 gm
Silicon paper 0.67 gm
Hot melt seal 0.45 gm
Hot melt positioning
sheet 0.96 gm

contract through their skin. Typically, Indian cities do not provide easy access to water for the conservancy workers to clean themselves after working in the sewers. They often have to walk for kilometers before they can rid themselves of the filth. In one reported case, a city municipality provided for a protective suit and an oxygen cylinder, but so clumsy and heavy was the equipment that the conservancy workers rejected them, claiming that it was an additional millstone to ensure that they would drown. The average lifespan of a conser vancy worker, assuming he does not die at work, is a mere 45 years. For a nation than can send satellites into spaces, rovers to probe the moon, and test nuclear bombs, surely it is chilling indifference and not technology that prevents the government from

The people from Arunthatiyar community that we met were incensed by the irresponsible disposal of these polymer-based sanitary napkins that were directly affecting their health and lives. So much so that Parvati, an outspoken woman-leader of the community, has got the women to switch to washable cloth pads. As she says, "We are the ones who have to clean up this waste, so why should we be producing it?"

The health hazards of disposable sanitary napkins are not just due to the clogging of sewers.

kins are not just due to the clogging of sewers. Such is the lack of health and sanitation facilities in India that public toilets often lack a dustbin, and one often finds used and unwrapped sanitary napkins left in a corner to be manually picked up by conservancy workers. Given the fact that Hepatitis B and C are known to survive in a drop of blood or even on a dry surface for days, there is always the risk that soiled feminine care products contains such blood-borne pathogens. And yet, as per common interpretations of India's ambiguous laws on waste management, soiled napkins are considered as municipal solid waste and not bio medical waste. An Arundhatiyar woman related a harrowing story of how she had to daily remove piles of used, unwrapped sanitary napkins with her bare hands from a women's hostel bathroom at a medical college. The resulting infection that she got on her arms eventually forced her to stop this work.

Last year, rag-pickers in Pune were so fed up with having to deal with used sanitary pads that they sent sack-loads of it to the companies that were manufacturing them. In the past decade, multi national corporations, having smelled the profits to be made in India by supplying women with sanitary napkins, aggressively entered the market, tar-

geting even rural women who traditionally used cloth. In accordance with the recent Plastic Waste (Management and Handling) Rules, 2011, producers of plastic are legally accountable for organising and financing the end of life of plastic products in an environmentally- and socially-responsible way, but they typically fail to do so and the government too does not enforce its own laws. Ironically, as did my Carefree pad years ago, most producers of sanitary pads still recommend flushing the pad down the toilet, totally oblivious of the hazards that this causes further down the line.

Environmental impacts of disposable pads

In recent years, in an effort to stem the disturbing trend that cause girls to drop out of school when they are menstruating, both the central government and state government have started to distribute free disposable pads, and UNICEF has sought to provide in schools both sanitary napkin vending machines as well as incinerators to burn soiled ones. Incinerators such as NapiBurn and Reprocide are now currently cited as the scientific solution to the waste management problem of disposable pads. Yet a closer study reveals that these incinerators do not reach the necessary temperature of 800 degrees Celsius to allow for the safe incineration of napkins. When plastic polymer products, such as disposable pads, are burned at lower temperatures, they typically release asphyxiant and irritant gases into the atmosphere. Further, disposable pads are also known to contain furans and dioxins. Furans and dioxins are among the most deadly toxins known to science, being highly carcinogenic even in trace quantities. When pads are burnt, these toxins are released into the atmosphere and can travel a long way from the point of emission. Dioxins are, additionally, hormone disruptors that cause reproductive and developmental problems, damage the immune system, and can be transmitted by mothers directly to their unborn babies. By choosing to burn napkins rather than flushing them down the toilet, we merely shift the problem from affecting individual lives to affecting entire populations including future generations.

Nor is collecting soiled sanitary pads separately and dumping them into the landfill a solution. A market survey estimates that only 12% of the men-

struating population in India or about 36 million women use disposable sanitary pads. Assuming an average usage of 12 napkins per woman per month, India disposes of 432 million soiled pads every month. These pads will last over 500-800 years and occupy a landfill spread over 24 hectares. Given the increasing scarcity of land in India, "away" no longer connotes "far away" but is our own backyard.

Unfortunately, for modern Indian women, cloth pads have an association with

the menstrual taboos that they once faced, so initially at this meeting there was a great deal of opposition to re-introducing reusable cloth pads. Most were not aware that pads like those of Eco Femme are ergonomically designed and technologically advanced with layers of absorbent flannel and a leak-preventive laminated cloth layer. The mood in the room palpably changed when a working woman suddenly proclaimed that she was perfectly satisfied with Eco Femme pads, having bought them online. In concluding the round-table discussion, Kathy Walkling, founder of Eco Femme, passionately argued for giving women a choice in feminine hygiene products but also emphasized that given government negligence, society's apathy and feudalistic attitudes, as well as corporate indifference, it was up to the individual to make informed choices and take responsibility

The group of students, human right lawyers, doctors, activists, public health workers and representatives of the Arundhatiyar community who had gathered for this discussion are likely to meet again to come up with strategies and policies to manage the problem. As an immediate strategy, Kathy said, "Spread the word - don't flush soiled napkins away." But in the long run, I believe a massive behaviour change strategy needs to be engineered to shift Indian women away from disposable pads to reusable pads and menstrual cups. Even a simplified social and environmental lifecycle analysis shows that a reusable cloth pad is vastly superior to the disposable polymer-based pad. And, with proper care, a reusable cloth pad is actually more hygienic than the so-called "sanitary" napkins of the disposable kind.

Bindu

The 'Aspiration' programme: We

oining Auroville has always implied going through an entry process. At the beginning, when the Mother was physically present, a three-member committee (namely Shyamsundar, Roger and Navajata) acted as "filters". Then the photo of the applicant was presented to the Mother, who would give the final decision.

Over the years, while the criteria for admission have remained fundamentally the same, the entry process has changed. The Aurovilians had to take up the responsibility of admission, which now includes a probationary period during which the Newcomers and the community got to know each other.

When Mother launched the project, the force of her presence influenced the lives of Newcomers, even if she never came physically, and the spiritual aspiration for the ideal was more influential in the day-to-day life. Today, it is less easy for Newcomers to get in touch with what Auroville truly is.

Auroville has become more complex. Consequently, new people entering today sometimes get stuck on one single aspect of Auroville without understanding the bigger picture because they don't mix with people beyond their immediate circle.

It was this awareness that led some residents to draw up a 'welcome programme' for Newcomers. It was felt that such a programme could substantially hasten and deepen the integration process.

Shivaya, Sonja and some other friends created the first welcome programme in the mid-nineties. After a successful series of one-week programmes designed initially for guests to inspire them to join Auroville, the idea came to organize a similar programme for Newcomers from different backgrounds to foster social networking, and to share the inspiration and enthusiasm of co-creating Auroville.

This programme stopped after four years as the people who organized it moved on to other jobs. It also ceased because several Entry Groups felt that these kinds of programmes were not in line with the "Spirit of Auroville". They believed that just as the first Aurovilians (the pioneers) had had to find their own way, so Newcomers should not be "spoon-fed".

In 2009, a small group reviewing the Entry Process recommended in a General Meeting that the Newcomer programme be revived. While some people felt that such a programme was unnecessary as all the relevant information was on the Internet, others argued that Newcomers needed more than 'impersonal' information. The Auroville collective experience thrives on thousands of human contacts every day and it was felt that the programme, among other things, should foster this important aspect in life. The meeting approved this approach and a new orientation programme for Newcomers was created which continues, with modifications, till today.

While the programme is voluntary rather than mandatory, it is "highly recommended" by the Entry Service. In fact, even those participants who were initially reluctant to attend because they had already been connected with Auroville for some time, were afterwards very grateful to have attended, for they discovered many new things and made many new connections with people. Most of all, the programme made them feel welcome and "at home".

The programme

The aims of the programme are to help participants develop meaningful relations with each other and all the Aurovilians participating in the programme; to help participants better understand how they can integrate into Auroville's life; and to understand its multifaceted reality, its evolution, and its explicit and implicit organisation. It is also designed to help the participants deepen their understanding of the goal of Auroville, its founding principles and how they translate or not into day-to-day life; and, finally, to create a space where participants can experience diversity and unity according to their own openness and commitment.

The programme runs for six and a half days, during which everybody travels by bike from venue to venue. The first morning is dedicated to forming a living collective where each person feels secure and begins to appreciate the others. Then they go to hear about the history from early pioneers, including the special energy that allowed them to put up with extreme discomforts and simple living, and the basic work of land rejuvenation which was like a taming of the terrain.

There are field visits to Auroville farms and forests, where Newcomers learn about soil and water conservation and the challenges of organic farming. Commercial units are also visited, where Newcomers learn about how doing business in Auroville differs from what happens outside.

There is a presentation on the 'invisible aspects' of the Matrimandir, an 'Awareness Through the Body'session, and there are, of course, presentations on the Auroville economy, health, housing, town planning and Tamil culture. One of the facilitators introduces the organization of Auroville and how decisions are made (or not made).

Crucially, there is also a session on Sri Aurobindo and one on "the Spirit of Auroville", which the facilitators present interactively on the last day in the closing session when every Newcomer shares his experience

Since its inception in 2009, this programme has proved very popular. What makes it so appreciated?

One reason is that the organizing team is at ease with each other. Each member feels free to offers his or her uniqueness, through sharing his/her vision, ideas, or simply their role. This diversity encourages the expression of a corresponding diversity in the participants. It creates a 'safe container' where a two-way process of discovery rather than a one-way process of imparting information can happen.

"Being part of this team as a relatively new Aurovilian", says Jo, "has been an interesting and enriching experience because I have seen the programme grow and mature. I believe this happens because the members of the team are engaged in constant self-evaluation and consequent adaptation."

In fact, the team enjoys being a creative channel of energy. They have learned to relax and play among themselves, and this playfulness is contagious.

Another reason why the programme is a success is the passion and faith of those Aurovilians who present an aspect of Auroville and share their deepest dreams; the participants acknowledge how precious this contact is. At the same time, one can see how these Aurovilians appreciate the contact with the Newcomers, and how sweetly they encourage them to dedicate themselves to this ideal.

One of the extraordinary things that regularly happens is that the values of Auroville get reinforced and deepened as one speaker succeeds another, almost as if each speaker knows the piece they need to bring to complete the whole.

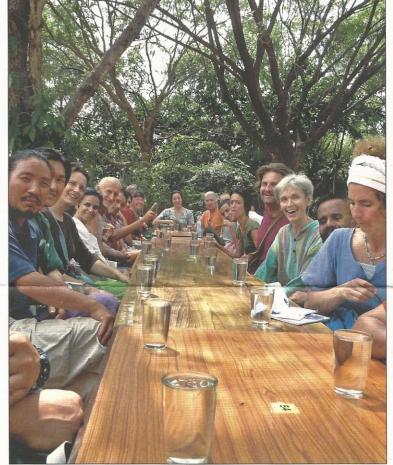
A third reason for the success of these workshops is the participants themselves: so many unique human beings! People have come from all over the world (including the "far off villages" nearby!) on their individual journeys, stumbling, aspiring, and yet often so simple and genuine in their openness toward Auroville and its Spirit.

But there is one more reason and this is an invariable happening: a feeling of fulfilment and unspeakable gratitude coming out of a palpable sense of unity in diversity.

Anamika, Jo, Rakhal and Sonja











And the weaving

t is only 8.45 a.m. on this beautifully sunny morning but already downstairs in the Pavilion of Tibetan Culture a dozen people have gathered. Some greet each other joyfully as they recognize one another, some shyly stand by, while the Aspiration team members walk up to prepare the upstairs room for the first day of the new session of the Aspiration Newcomer programme.

Chairs are set out in a big circle. Questions are being written on a flip chart. Paper, crayons and felt pens are within reach. Meals have been booked and the resource people for the programme have been reminded. Namgyal passes by to ask whether all is ok for the day. Busy, concentrated, we silently wave back.

The schedule has been crafted over the past weeks over countless cups of coffee and yummy chocolate. The modules hardly change but the venues and speakers vary from one programme to another to preserve the spirit of discovery for both Newcomers and facilitators.

While the founders of the "Aspiration programme", Rakhal and Sonja, still discuss what is going to be said by whom and review the course of the morning, Cecilia and Anamika welcome the participants as they enter the room.

I joined the facilitators team a little more than a year ago and have participated in six or seven programmes. I am happy to be part of this effort to welcome the Newcomers to integrate into Auroville in all its complexity and diversity. My three year term at the Entry Service deepened my connection with Newcomers, and I am a "Newcomer fan". 20 years have passed now since I landed here in 1994 and if I thought I knew it all, this course is a quick reminder that there is more in this tiny corner of the planet than meets the eye. And that Auroville is developing more beautifully each day, despite what I sometimes think!

One or two older Aurovilians have also joined the pro-

gramme to rekindle the flame, curious to visit places they have perhaps never been to, or not gone back to, in 20 or 30 years, and to hear about the work of other busy people like them. And, above all, mingle with the Newcomer vintage of March 2014. It takes them back to the times when they were called to this special place on Earth. And, of course, there are the Newcomers of all types. Some are fairly new. Some have been coming regularly for years. A few were here 15 or 20 years ago and are returning Aurovilians. Some come from the local area and are familiar with Auroville in their own way, but the cultural distance from Edayanchayadi to Auroville is huge.

All of the participants have one thing in common: they have read and been touched by the Charter and have all walked in at some point in their lives to the Entry Service office to make a formal request to become a "Newcomer". And now they are in the so-called "Newcomer process". The programme was recommended to them as an integral part of the Entry process. Today, there are 20 of us and the room is filled with the refreshing air and soft light flowing from the windows.

9.00 a.m. Everyone is settled, sitting in silence, ready to embark on the "Aspiration" journey. A few close their eyes. Some stare uncomfortably at the floor, grasping their English pocket dictionaries. There are those who look around wondering what they are doing there, imagining, perhaps, that it will all be a waste of time. After all, isn't there an easier way to discover Auroville? A few hours on Google Earth and surfing the Auroville website, plus a few meals at the Solar Kitchen and Aurelec Cafeteria would surely do the trick.

Others eagerly look forward to a week of exploration. Now that they are settled into their work routine, they don't see much of the community any more. And then there are those who rejoice at the prospect of being fully taken care

Icoming Newcomers to Auroville











From top left clockwise: Gilles explains the galaxy town plan; The participants and organizers from a recent course; Kireet speaking about water harvesting; Bernard explains the beneficial action of termites; Krishna (with turband) introduces Solitude Farm; participants take a break; the organizers of the welcoming programme, from left: Jo, Sonja,

Rakhal, Anamika and Cecilia.

work starts...

of for a few days, of breaking out from their routine.

9.05 a.m. Rakhal offers a few words of welcome. Together with Sonja, he has been associated with the programme since November, 2009, and this will be their 24th Session. Over that time, 369 people have participated in the programme. Still every time it is new. Today Rakhal talks about this magic moment at the beginning of a group gathering when our story and our connection to Auroville is known only to us.

Sonja introduces the facilitators and talks a bit about the history of the programme, and shares some ground rules. Participants are expected to attend all the modules. Meals are taken together to enhance the group's identity. Some questions and answers follow, then silence falls. We are to be together till next Thursday, same time, same place!

Next, everyone comes into the circle, says their name and makes a gesture, and then the others repeat it. And the weaving work starts.

Then comes the moment when we share in pairs what made us come here. Cultural differences or shyness sometimes make it difficult at first to share intimate thoughts or events in a group. And how to phrase the inexpressible?

However, soon people begin to relax. Laughter fills the air at funny anecdotes or strange details. For this one, it was a conversation with a a fellow passenger on a bus that began their "spiritual quest". For others, it was a book found on a dusty shelf in a library with the title "The Adventure of Consciousness" or a clipping from a Geo magazine entitled "Auroville was a dream". Someone felt an immediate deep sense of gratitude at seeing a picture of the Mother in the "Indian Coffee House" in Pondy, another stayed on after coming for a yoga workshop. Some have been familiar for a decade or more with the work of Sri Aurobindo, others barely know who Sri Aurobindo's was.

10.30 a.m. It is already tea time and we are no longer

complete strangers. Threads start to interlace.

11.00 a.m. The schedule of the one week programme is distributed. Practical details are discussed, like "Where is CRIPA?", "What is G.P. Café?", "How do we get to Samriddhi?"

A little later, small groups are invited to explore with crayons or through writing what they sense as being their next step as they stand on the threshold of Auroville. Creativity and concentration are in the air.

As the programme unrolls through the week, the participants harvest more than information. It is all about impressions, colours, knowledge, as their network of understanding is enlarged. Passion is expressed through the faces and voices of the resource people who contribute to the programme. It is rejuvenating to see Auroville so beautiful and so alive, so inspired and so inspiring. Perhaps all Aurovilians should take a week off to simply "celebrate" in this way this multi-faceted experiment in the making.

9.00 a.m. One week later. We are gathered for the last time but as a family now. The facilitators invite feedback about what was great, what may have gone wrong, what there was not enough of, what could be improved, and so forth. The facilitators listen carefully, taking note of constructive suggestions, for this feedback is crucial for planning future programmes.

11.30 a.m. It is already closing time. But before we all depart, we form a standing circle in the downstairs hall to say goodbye to those who are now brothers and sisters forever. Somehow we end up in a close spiral of laughter and togetherness, interlaced both literally and figuratively.

The weaving work will continue on Auroville's loom. Whatever our history, this time spent together will be a landmark for each and everyone of us, a foundation stone established in time and space on our collective journey.

Cecilia

Participants' feedback

The Aspiration programme is the first public forum I have encountered that celebrates the first perceptions of new community members, which grounds these within the founding principles of the dream, and which enables access to the wealth of knowledge generated in the 46 years of Auroville's existence.

This programme has helped me uncover channels of awareness and understanding within me, of a deeper sense of my own self, of Auroville's presence in my life, and of my role in Auroville.

The incredibly generous sharing we have been privileged to experience this week has shown a glimpse of the great faith, love and grace at play.

You have been both inspiring and practical - a wonderful 'integral' approach. With heartfelt gratitude.

Because I come from a local area, I thought I knew it all. During the programme, we went into communities whose gates I only passed by and got to meet people that I only knew by face, not even by name. After the programme, I realized that I know so little of this place that is so familiar.

My suggestion would be that all the Aurovilians should do this programme as a refresher course!

The spirit of Auroville module has given me the opportunity to put into my own words the "teachings" of the Mother and Sri Aurobindo and internalize the true meaning of Auroville.

I have the feeling that I have grown during this week and understood some of the reasons that have taken me here.

I was at first reluctant to attend because of the timings and length of the programme but it turned out to be an opportunity to meet new people with innovative ideas for the growth of Auroville and to work collectively. I am glad I did it. For Newcomers who have just arrived, it is a great programme to better integrate. I guess it is less profitable for Newcomers who have been here already a few months ... or years!

**

I never felt reluctant but I did not expect it to be so inspiring as it proved to be. I was persuaded and enthused from the very moment it started.

I think it should be an integral part of the Entry process, otherwise Newcomers may miss out by not making the time to participate. Regardless of one's history with Auroville, it is an incredibly important and valuable experience.

The programme gave a new vision of spirit and a thirst for collaboration.

**

Several Aurovilian friends came up to me. "Oh, I hear you participated in the Newcomer programme!" Yes, I did. Why? As one of the "older" Aurovilians (having first arrived in 1975) I am contented and not yet disenchanted with my life and work in Auroville. But for some time I also vaguely sensed it might be high time to get in touch with another Auroville.

As the week went on, I began to gradually feel that each and every one in the group was here for a higher purpose, and that each and every one had been guided here and had gone through a more or less long, more or less conscious preparation for their life here. For me it was a unique experience. I definitely risk sounding pompous when I say that I sensed the very subtle emergence of a group soul this past week. And this feels like an unexpected answer to an ancient almost forgotten longing.

One thing that could be complementary to this programme is once a month reunions when the Newcomer can reconnect. Maybe they can play the collective games like we did in the programme or listen to more talks, visit more places or just meet and talk. It would be wonderful to have something like this. Otherwise our normal circle of people we meet is limited.

I think you should always visit a community outside the geographical circle of Auroville -e g Sadhana Forest like we did. In a way, it did help me to see Auroville from a distance and give me a different perspective.

Spending a full day in a community to partake in the daily activities, including physical activities, would be nice to be better acquainted with day to day living.

For a fruitful community life, I wish there was a module on conflict prevention or resolution since we live in a place dedicated to Human unity.

The rhythm is intense due to the time constraints. Yet I would suggest to give more time to each participant to express themselves. Perhaps less modules?

Helping the development of Bommaiyarpalayam village

Recently the Town Development Council (TDC) announced that a Memorandum of Understanding had been signed with Bommaiyarpalayam panchayat. What does this mean, and what is the significance of this initiative? Auroville Today spoke to Cristo, one of the executives of the TDC.

Auroville Today: What is the origin of this initiative?

Cristo: It was a result of a work that we did some years ago on preparing the Greenbelt Master Plan with our expert planning consultants, David and Achava Stein. During that exercise it emerged that the water issue is a crucial one for both Auroville and the bioregion, and this can only be solved through collaborating with our neighbours. Then, very recently, the Bommaiyarpalayam Panchayat sent a letter to us in the TDC, requesting Auroville's help with their planning and development, and mentioning as an example the need for pure drinking water. So we decided to start collaborating with this village because they have a Panchayat President who is friendly and open to us working together. TDC has worked very hard on pushing this forward, particularly the local Aurovilians who work with us, Vinai, Padmanaban, Boobalan and Anand, as well as Paul Vincent. Recently we have signed a Memorandum of Understanding with the Panchayat setting out the areas in which we can cooperate in furtherance of our common interests and objectives [see box]. By the way, while there are three villages in this Panchayat, initially we will focus primarily on Bommaiyarpalayam.

Originally their idea was to create a society under the Society Act in which two or three Aurovilians would be members. However, we are very grateful to Mr Bala Baskar who pointed out drawbacks to this approach and suggested instead we should form a committee under the Panchayat Act. This is now being done. The Committee will be composed of representatives of the village youth association, sports association, women's association, farmers, businesspeople, fishermen, etc. It will also include two Aurovilians born in that village, who will be chosen by the villagers. They will be attending the Committee meeting

along with representatives of TDC.

Although we have made it clear there will be no financial assistance from Auroville, we will provide technical and planning support and we can help them access government schemes. There are many schemes under the Tamil Nadu and Central governments which provide grants for things like sanitation, water, roads etc. One such scheme is sanitation for family homes. In Auroville, we already have units with some experience in this field. Our task will consist in seeking technical assistance from these units, supporting access to funding from relevant government schemes, and once we have made this connection, we go back to the village and say here is a possible solution, but it is the villagers themselves who have to decide if they want to pursue this. We have emphasised that we are not in the business of philanthropy; the village also has to do its part.

Another possible area for future collaboration is that of organic food. I explained to the villagers that Auroville sources organic food from hundreds of miles away, so we would be a good market for organic produce if their farmers decided to grow it. We will put the Auroville Farm Group in contact with the local farmers to explore this option.

But, firstly, we need to know what the needs of the villagers are. To understand this, an urban planner specialized in village development will be employed. He will be stationed in the village for six months, during which time he will assess the present situation and look at development needs. We expect that within six months we will have all the information that we need and then we hope to come up with a village development plan.

If this is successful, we would like to extend the experiment to all the villages in our area. We hope that similar committees would be created in all these villages, that the planner would go to each village for six months and that, finally, perhaps, a village development council would be formed made up of representatives from all the village committees.

This work is crucial as an answer to three important questions. Firstly, how does the village want to develop? Secondly, where may the development needs of the village and of Auroville clash, and how can this be avoided? Thirdly, how can the village and Auroville develop together?

Why has it taken us 45 years to come up with this initiative?

This is not a new idea. The first ever meeting of all the Panchayat leaders was around 2000 when we were making the Auroville Master Plan. We saw the Secretary for Rural Development Tamil Nadu and at that time we were told the door was fully open for initiatives like this. However, it needed someone from our side to keep working on this, but this didn't happen because Auroville did not see it as a priority.

Today the situation is much more challenging. And this is why this Committee has been constituted in such a way that whoever is in charge of the regional development cell in the TDC will have to follow up this work.

A few years ago, a similar experiment was tried in another village. A Development Council comprising of villagers and Aurovilians was set up. However, it was a failure. Why do you think this new initiative will be more successful?

I spoke to some of the people involved in that earlier initiative, and they said it didn't work because it was the wrong model. Also personal interests came to the fore and there was a very complex scenario within the village itself.

I feel the latest initiative will work because, unlike the other experiment, here we are talking of linking government structure to government structure. The TDC is an organization under the Government of India, as is the village Panchayat. While the membership of the two bodies may

change, the organizations will continue to exist. So we are not dealing with individuals: it is two institutions which are in discussion. I think this means there is much more likelihood of success. In fact, we have already established a very good collaboration with the Panchayat. And the fact that our Secretary is very supportive is also a very good sign.

What are the next steps?

One of the next steps is to appoint the town planner. The first meeting of the Committee will take place in late April and from the Auroville side we are preparing a programme of presentations. There will be a presentation by the eco-service group on waste management. There will also be a presentation on water by the Centre for Scientific Research, which will highlight the dangers of the present situation.

We have already heard that the individual toilet scheme is definitely being taken up. The village is also interested in starting a small-scale industry in producing mud bricks, so we are preparing the documentation for this in consultation with the Auroville Earth Institute. These are exactly the kinds of collaboration we want to initiate. We are also discussing with the Tamil Nadu Electricity Board upgrading the present electrical substation which serves the area.

We will meet with all the Aurovilians born in that village. We will also send all the Auroville workers from that village a personal letter saying that this Committee exists and telling them that if they want to know more, or participate in any way, they can contact us or the Panchayat.

I am very excited by this initiative. Personally, I feel it is a huge responsibility. At the same time, I see it as a return to the original vision of Auroville, which is that of human unity. This is why it is crucial that we keep up the collaboration. We must not fail.

From an interview by Alan

'Water Without Waste' campaign meets Pondy promenaders

f you were offered an empty one litre plastic bottle for Rs 6 and asked to walk 200 meters to fill it with clean drinking water, would you choose this option over paying Rs 20 for a filled one litre bottle of water on the spot? This question was one that the 'Water Without Waste' campaign was trying to answer in its recent awareness campaign to draw attention to the massive amount of waste produced by bottling drinking water. Human behaviour and consciousness-raising were at the heart of the campaign, which launched online on March 22 and culminated in a three-day interactive art installation along the promenade in Pondicherry from March 29-31.

'Water Without Waste' was the latest campaign run by AmrutDhara ('amrut/amrit' meaning 'heavenly life giving drink' and 'dhara' a Hindi/Sanskrit word for 'flow'), founded by Minhaj Ameen (Aurovilian), Akshay Roongta and Sandeep Jaiswal, whose mission is to "start a movement which will bring behaviour change in people through awareness campaigns while providing a sustainable alternative to bottled water". The campaign launched on Facebook, where anyone could sign up to 'Take a Pledge' to carry their own bottle with them while travelling and not purchase bottled

water. Each day for one week, a lucky winner was randomly selected and a prize of a metallic water bottle was given.

At the end of that week, AmrutDhara volunteers took to the streets.

Three art installations, conceived and designed by Saketh Singh and his team at Play Design Studio at Aurelec, were erected on the Beach

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Road in Pondicherry. The abstract pieces represented the negative impacts of bottled water on air and on water. Hovering around the installations, volunteers attracted passers-by with a simple question: "Do you remember the time when you could refill water at common taps?" Most nodded yes, of course. But today, the volunteers continued, it is more common, and often most necessary, to purchase bottled water. Volunteers then asked further questions before launching into the detriments of bottled water, highlighting the environmen-



The Water Without Waste campaign on the Pondicherry promenade

tal consequences, the questionable quality of bottled water, and the unreasonable expense of water.

It was at this point that the volunteers offered people the choice of either purchasing bottled water or purchasing an empty bottle and then filling it filled with clean drinking water nearby. Most people seemed to choose the latter option.

Over the course of three days, the volunteer team interacted with dozens of passers-by, including school children, media people, hotel owners, and even the Lieutenant Governor of Pondicherry who was out on his evening walk. The response was overwhelmingly positive. One man from Pune took to the idea with passionate frustration. He and his wife and daughter were on a holiday in Pondicherry, and had had no other option but to purchase bottled water. "In just the past three days," he said, "we've purchased 30 bottles of water between us. It's unacceptable."

The team continually monitored the impact of the initiative. During the debrief at the end of the first day, they decided to promote higher quality water bottles that could be reused longer. People visiting the water stall on subsequent days could purchase their own, sturdy water bottle, and a sticker to put on it that declared, "I am a change agent!"

In the final debriefing, the team assessed that using street art, especially large-scale installations, to engage with people was extremely successful. Some of the most passionate engagements occurred during the installation process, which piqued curiosity. The repetition of three

art installations along the promenade also helped, as people were continuously confronted with the issue. The team also learned several lessons from the campaign. For instance, communication should be simplified, and text reduced in favour of more graphics and photographs.

Before survey results emerged, Min could already spot some trends in the overwhelmingly affirmative responses to the first three questions asked: 'Do you trust water coming from a large water container?'; 'Are you aware of issues around plastic waste and bottled water?'; and 'Would you use a service that provides you with clean drinking water?' "It's a good sign," says Min, "because if people feel that they can trust water from a water service, then that trust is something we can build on." Indeed, the results of the survey showed that such a water service has potential. While only 35% of respondents carry their own drinking water bottles, 90% are aware of plastic-related issues. Seventy-five percent of respondents said that they would value a service where they could fill up a bottle with clean drinking water.

Despite a few setbacks (the installations took longer to construct than anticipated, and one of the installations vanished on the second night), AmrutDhara organizers are celebrating a successful campaign that worked

toward their goal of awareness-building around the issue of bottled water. They hope to learn from this campaign and launch it in other cities across India.

Ing-Marie

Some quick facts on the gravity of the problem of bottled water

• Only 1 in 5 water bottles are recycled.

plastic bottle than it does to fill it.

- 90% of the cost of bottled water is for the bottle itself.
- Plastic water bottles, that take just three minutes to drink, take 400 to 1000 years to decompose.
- Drinking bottled water has the same impact on the environment as driving a bike for 3 kilometers.
- 22% of tested bottled water brands contained chemical contaminants at levels above strict health limits.
 Producing and delivering a litre of bottled water can
- emit hundreds of times more greenhouse gases than a litre of tap water.
 It requires three times the amount of water to produce a

source: AmrutDhara, www.amrutdhara.in, www.facebook.com/amrutdhara.in

Changing Aurovilians' behaviour

Last summer, Min Ameen and Akshay Poongta made a presentation to the Auroville community on the topic of 'Social marketing frameworks and its application to waste management in Auroville'. It aroused a lot of interest. But what are these frame works? And how are they relevant to Auroville? Min explains.

Auroville Today: What is social marketing?

Min: Today, marketing is a very sophisticated science, drawing on the latest developments in psychology to sell products and services. The term 'social marketing' was coined in the 1970s and its primary purpose is not commercial gain but to achieve a particular social good through effecting behaviour change. To achieve this, it uses many of the same approaches and techniques as are used for conventional marketing. Designer Dan Lockton summarized some of the main approaches as 'enabling the desired behaviour by making it easier than the alternatives; motivating the behaviour using education, incentives, and attitude change; and making alternatives to the desired behaviour more difficult or impossible'.

There are four different kinds of interventions we can use to change behaviour - 'hugs', 'smacks', 'nudges' and 'shoves'. Actually all of these are already applied in Auroville. For example, a 'hug' is when we praise somebody in News and Notes for doing something of positive value; a 'smack' is when, say, someone is banned from Auronet for contravening the guidelines; a 'shove' is when no disposable carry bags are available at the Pour Tous Distribution Centre; and the fact that most eateries and grocery shops in Auroville promote vegetarian food 'nudges' people to adopt new, more positive dietary routines.

One important thing to remember when applying these interventions is that they have to be adapted to the local situation: one size won't fit all. For example, regarding waste management in Auroville, where the consciousness of waste is quite advanced, the solutions we apply here are very different from the ones we would apply in, for example, Chennai.

You chose to focus initially on waste management in Auroville. Why?

Actually, originally we thought of taking up other areas, like healthcare and food. We know that our diet affects our health, and poor health can be a financial burden on the community. But when you look at our eateries, while some are already preparing very healthy food, they still don't quite make that connection. So the idea was to create an approach where, for example, we would make it more difficult for people to buy things like ice cream.

We also thought of mobility and finding ways to make our roads quieter and safer. Yet another idea was to use social marketing to get everybody to actively contribute in some way to Auroville, for at the moment we have a large number of people who are not



Min with a few waste barrels

engaged with the collective.

In the end we felt all these were too ambitious. We decided to focus on waste because already there's a lot of awareness about this in Auroville and a lot of us are already involved directly or indirectly in waste management.

Initially you did some research. What were the most important findings?

One of them was that Aurovilians' attitude to waste has primarily to do with aesthetics. They like pleasant environments and waste comes in the way, and that's why they are so strong on eliminating it. But we are not all very conscious about recycling, reprocessing and reusing and there is a tendency that if waste is out of sight, it is also out of mind. We don't think about it in a 'joined-up' way.

Our research also revealed that in terms of waste management there is a lot of variation between communities. The Creativity community, for example, has expended a lot of community energy on waste. They have a waste disposal system which is very advanced, and when the waste is taken out by the ammas, community members take turns to ensure that the waste is put in the right

In Certitude, the level of consciousness of waste is high, as is segregation at household level, but we found that the community collection place was a dumpsite. The waste was mixed, there were broken bottles littered around and dogs were pulling out garbage. When we told one of the long-term residents about this, he was amazed. He said he had never visited the collection site. He felt he had done his job by segregating waste in his house.

What interventions did you recommend regarding waste management in Auroville?

One is that in our community, Maitreye, we try not to allow the ammas

to throw the waste in the community bins. When you take out your own waste, two things happen. Firstly, because of your level of education, you tend to put it in the right bin. Secondly, when you look at some of the your waste you may think, 'Why did I buy this?'

Another thing that came out very clearly from our research was that while there are many sustainable and aesthetic features in the new communities and apartment blocks that recently came up the provision made for waste management was inadequate when our survey was done. This is shocking. It doesn't cost much to allocate a covered space and buy some barrels; it's just a matter of thinking about it. So we recommend that a waste area with barrels should be a mandatory aspect of the design of every community, something which has to be incorporated to get planning permission. However, so far our planners are still reflecting on this.

Another 'nudge' intervention is to try to get people to wash and dry plastic waste before putting it in the bin. The reasoning behind this is that when plastic waste is used for food, if the plastic is not cleaned well the food starts to rot very quickly and it becomes very unpleasant for the Ecoservice people to handle. Consequently, most of this waste goes straight to the landfill rather than being recycled. So we printed out 'wash and dry' labels and distributed them at PTDC and in different communities.

We also gave information at PTDC about the packaging of products which would go straight to the landfill. We made little signs which were put below the 'guilty' items to indicate this, but this didn't work because the products are moved around so much on the shelves that the staff couldn't keep up with changing the position of the signs.

We also employed 'nudges' at PTDC. For example, we reshelved some of the products based on their packaging. Certain biscuit packaging is difficult to

recycle because it is multi-layer wrapping, so we put these biscuits on the bottom shelf, while at eye level we put products which use less packaging, are made in Auroville and are healthier. Our next task is to talk to those Aurovilians who are packaging tea and coffee with wasteful aluminium foil. We want them to put their products in more eco-friendly bags. They may lose a little bit of fragrance but if they are packed in smaller quantities, they will be consumed very quickly and there will be little loss.

We also worked with Sadhana Forest to make it into a zero-waste community. We designed a system where you can only bring your waste at a certain time to the community waste manager at the waste hut. Here

you empty your bin onto a table in front of the recycling hut coordinator and you go through the waste items with him/her in terms of what you have been consum-

We also considered using this 'smack' on Auroville as a whole. PhD student Rajamani collected waste data by community, we know how many bags of waste are collected from each community and how many of these are not segregated, so every month in the News and Notes we could 'name and shame' some of the worst communities. If people are too sensitive about shaming people, we could at least 'hug' the best communities by naming them and explaining why they are doing so well. Then others can copy them.

The next level would be to weigh the waste and then calculate the per capita waste in Auroville.

Have you done any research to determine if these interventions are having any effect?

It is very difficult to determine, but I think we need to work harder to get information on this.

There is no doubt that, unlike conventional marketing people, your intention is to promote the wider good of the community through these interventions. But some people would say this approach is essentially manipulation and, therefore, unethical. How do you respond to this?

I think this is naïve. We are all being manipulated all the time. Every time we go to a supermarket in Pondicherry or look at a billboard on the ECR or watch an advertisement on TV, we are being manipulated. More positively, we do it ourselves when we design our schools, for example, to promote certain kinds of interactions.

But some Aurovilians would reply we are here for consciousness development. Therefore, we should be making decisions from the point of view of a higher consciousness.

I absolutely agree. But I see all the interventions I have mentioned as being little props to build that consciousness.

But are we not again talking about a group making top-down decisions for the rest of Auroville?

This is a very difficult one. We have chosen to collaborate or 'conspire with' those Aurovilians who are people of action, who feel very strongly about something and are trying to manifest the Charter in their own way. We may not always agree with them completely, but we want to support their efforts because we see that they are trying to do something for the good of the larger

In terms of deciding which interventions to make, what is your reference

One standpoint, of course, is the Auroville Charter, but this is rather vague. However, if you look at a place like PTDC the reference point is very clear. They want it to be a place where people get essential things; it is not a shop where you buy consumeristic products. So when we make an intervention there we take that as a given. The Ecoservice's main thrust is not to burden the rest of the world with our waste. The moment we are putting our waste in a landfill we are running against this value, so the whole objective of Ecoservice is to avoid throwing anything into a landfill. All our interventions there are intended to support this.

What is your next project in Auroville?

We are looking at changing behaviour regarding sanitary pads. Nappies and sanitary pads are a very large component of our waste. We don't realize that they are medical waste, so they cannot be recycled but must be incinerated. However, it has to be incinerated at a high temperature and these facilities are not always locally available in India. Consequently, all this waste goes to landfill and, if it is not lined, it can pollute the soil and water table. So if we can change behaviour to cut down on this waste, like getting people to use reusable pads like those produced by Ecofemme, we can make an important difference. This is more than a local issue, it is also a national one, a global one, and Auroville could be taking the lead here.

From an interview by Alan

PASSING

For more information about the work and other initiatives taken by this team, which is promoting sustainable development through transdisciplinary research and action, visit earthandus.org

June Maher

une Maher, founder of the Auroville Association and Auroville International USA, passed away on Friday April 25th in the Watsonville, Ca. hospital. "June's name," writes Anie Nunnally, "conjures up memories of her strength, courage, compassion, loyalty, dedication, reliability, humour and laughter, her joie de vivre, but most of all, a heart full of love. June was 'Mother Auroville' for the many people who stepped through her portals in Aptos, Ca. seeking comfort and rest from their long and weary journeys from India. She fed them, housed them and embraced them all as though they were her own children."

Anie recounts that June began her work for Auroville through a meeting with Dietra (Claire Worden) who lived in Santa Cruz but moved to Auroville in 1969. On a visit to Santa Cruz in 1971, she organized a group of people and June was charged with its development. June eventually went to India in 1971 and had darshan of the Mother. She inquired of Her as to how to develop the organization. Mother told her "No recruiting, but money may be obtained". The Auroville Association was then established, initially functioning out of June's home. This later developed into Auroville International USA.

June was completely dedicated to Auroville. That found expression through her work for the Foundation for World Education and Auroville International USA, often in trying to secure funds for Auroville. "Whenever there was a chance to do something for Auroville, June would be there," writes Anie. "And June never discussed people in a negative manner. She focused on the good in everyone and truly lived by the aphorism of the Mother "The least said about others, even if it be in praise of them, the better".

June's health deteriorated after heart surgery in 2005. But even though confined to her living room, her legs constantly wrapped in pressure bandages, being hauled from one doctor's appointment to another, her spirit was unwavering. Andrea van de Loo writes that June would often chuckle: 'I am just here in my sacred cave,' and laugh at her condition. "She had surrendered to her children's desire that she follow 'doctor's orders', which she did most conscientiously. For June never wanted anyone to worry about her, because her spirit was with the Divine Mother and she had complete faith."

Andrea also recounts how she had accompanied June to a 'soul level' astrology reading by Mark Borax, who told her that 'she was midwifing the future, that her role was to bring on the new earth.' Anie agrees. "June always talked about the "Golden Ship" and



somehow I feel that Ship was waiting for her as she left a lifetime of service and moved on to another realm of the Inner Journey,"

June's body was cremated at Santa Cruz on April 30th. In Auroville, her friends gathered around the Banyan Tree a day later to be with her in thought.

Aqua Salis

ecently, long-term Aurovilian Lisbeth presented an exhibition of her photos in Pitanga, her second exhibition in Auroville (the first had been in collaboration with Ribhu, her son). The title of the exhibition was 'Aqua Salis' and it featured the oceans, seas and shores of Micronesia, the Pacific, Atlantic, Mediterranean, as well as the local Bay of Bengal. There were also portraits of young Aurovilians.

As she put it in her exhibition introduction, "I am passionate about leaving solid ground, that topmost layer of the Earth's skin, and looking back to the shore with all its frantic human activity. I enjoy experiencing the wideness of an open ocean, the solitude of a lagoon, or discovering its treasures beneath the surface. Pondering the luminous quality of the sun sparkling on the wavesthe bronze day-glow or pastel sunsets - or discovering a seascape in a lampshade gives me a feeling of timelessness...I am drawn to

the edges of land and sea, to the every-changing fragile coastlines and, sadly, the human interventions that are changing them beyond recovery."

The exhibition was much appreciated. Whether it is the fine grain of a sand-dune, or the intricate patterns of waves upon a beach, or the faces of Micronesians, or young mangrove trees growing in a World War Two wreck, Lisbeth's sensitive camera eye illuminates the detail and invites us to contemplate it.



















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