AUROVILLE December 1992 Number Forty-Seven.

ith the monsoon rains pouring down, we've been poring over some important realities. For example, water covers three-quarters of the world's surface, but only 0.8% of that water is fresh water; and no one knows how much of that fraction is polluted. Again, only 30% of the world's population have a guaranteed supply of treated water — the rest rely upon sources that are uncertain or unsafe. Finally, 80% of all disease in the developing nations is water-related.

Auroville is not exempt from these realities. In spite of our afforestation and land work, the watertables are dropping here just as they are dropping in many other parts of the world.

In this single-sheet issue we remind ourselves that, whatever challenges we face, there is no solution without water.



"You Can't Manufacture Water!"

Mother, speaking about Auroville, on 23.6.65, said,

"The biggest difficulty is water, because there is no nearby river up there; but they are already trying to harness rivers; there is even a project to divert water from the Himalayas and bring it across the whole of India ([name] had made a plan and discussed it in Delhi; of course, they objected that it would be a little costly!). But anyway, without going into such grandiose things, something has to be done to bring water; that will be the biggest difficulty, that's what will take the longest time. As for the rest—light, power—it will be made on the spot in the industrial section—but you can't manufacture water!

The Americans have given serious thought to a way of using sea-water, because the earth no longer has enough drinking water for people (the water which they call 'fresh'...it's ironical); the amount of water is insufficient for people's use, so they have already started chemical experiments on a big scale to transform sea water and make it usable-obviously that would be the solution to the problem."

The situation in India

"Water is the driving force of all life", wrote Leonardo da Vinci. Transparent, sinuous, mutable, water infiltrates all aspects of life. Its cycle—by which it falls on the earth to be constantly recycled back into the atmosphere—is a miracle of self-regulating sustainability. As Pat Costner, author of We All Live Downstream (see AvT #15) put it, 'All the water on earth is basically one water. Essentially, every drop of water that was on earth initially is still on the earth'. Yet, if the total amount of water remains constant, man is destroying its purity, and its local availability is often a transient phenomenon. Great civilisations of the past have been made and unmade by the presence or depletion of this precious liquid.

And not only of the past... In many parts of India today, groundwater levels are dropping dramatically-by as much as three metres a year in parts of Tamil Nadu, according to the American Worldwatch Institute—and even in Pondicherry, blessed with some of the most favourable geology and purest water in India, water reserves have been depleted by over 80%. (See box on next page)

Auroville's approach

What is the situation in Auroville? Over the years, our approach has been to arrest the run-off of surface water through bunding, allowing it to be 'harvested' by trees and other vegetation and to percolate into our underground aquifers (water-bearing strata of rock or sand), while we sink wells into these aquifers to satisfy our irrigation and drinking needs. It seemed a rational and elegant solution. Our local annual rainfall—approximately 1225 mm—is above the Indian average, and the Central Ground Water Board of India (CGWB), after investigating our situation in 1984, concluded that 'the net resources (of groundwater) available in the Auroville area provides good scope for further groundwater development by dug-cum-borewells and shallow and deep tube wells'.

The problem

The stark truth, however, is that over the past decade the water levels in our aguifers have also been consistently falling-by as much as seven metres on the plateau for the shallow aquifer-and less and less water is available in our deeper wells. Our first aquifer, into which the majority of our wells are drilled, is in imminent danger of drying up-and once it dries up, the water-bearing sand will get compressed and the aquifer will be lost for good. And all this is happening in spite of us doing all the 'right' things, like bunding the land and planting over two million trees to help raise the watertable. What's gone wrong?

What is clear is that our two main aquifers are being over-exploited; the recharge is not equivalent to what is being taken out. But who is responsible? Theories abound. One points the finger at ourselves and our ever-increasing volume of extraction. In Auroville today, there are 118 wells, 33 of which employ electric submersible pumps. These pumps, each of which is capable of pumping out thousands of litres an hour, are responsible for over three-quarters of our daily total water extraction. Michael Mason, an Auroville treeplanter who works for the Auroville Greenwork Resource Centre, is making a study of our water situation and estimates that we are extracting up to 3 million cubic litres a day in the dry months from our aquifers, which translates into 0.635 million cubic metres a year. It sounds like a lot. But this is still well inside the CGWB estimate of 2.29 million cubic metres as being the total annual groundwater flow for the major aquifers in our area.

Another theory blames the proliferation of wells and powerful pumpsets springing up on surrounding village land, particularly on the coastal strip between Kalapet (six kilometres north of Auroville) and Pondicherry town. While Pondicherry State enforces a ban on drilling new wells six kilometres from the coastline, in Tamil Nadu the situation is lax, and generous finance and virtually free electricity for their pumps allows local farmers to grow profitable-and water-greedy-crops like paddy, sugar cane and coconuts. Michael has established that 740 acres in the area immediately surrounding Auroville are being irrigated from groundwater at present, and this acreage is growing rapidly.

Extracting water in a coastal zone involves additional dangers. Since many of the wells are drawing from the second aquifer-which is below sea level-over-extraction can result in the incursion of salt water into the aquifer, a process which is effectively irreversible. And once the salt water gets into the soil, it is ruined as agricultural land. In fact, between 100-110 wells along the coast between Kalapet and the southern tip of Pondicherry are already saline. These include a well in the Auroville beach community 'Simplicity', and wells close to the other Auroville beach communities of 'Eternity' and 'Sri Ma'. Mr Vasanth Kumar Reddy, a hydrogeologist and Additional Director of Agricultural Engineering for the Pondicherry Government, believes that the entire coastal strip between Kalapet and Pondicherry will be saline within ten years—unless present extraction policies are drastically reversed.

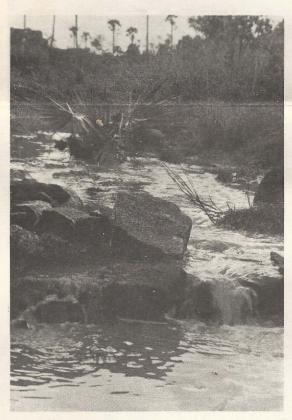
However, Vasanth points out that wells on the coastal belt are drawing on the abundant Cuddalore aquifer which flows up from the south, and that only deep wells in the Aspiration,

(continued on next page)

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Kuilapalayam and Auromodel area which also tap this aquifer are liable to be directly affected by over-extraction on the coast.

A third possibility that might account for our depleted water reserves is that the recharge of our aquifers has decreased over the past decade. Such a decrease could be due to climatic changes—less rain— to sealing of parts of the catchment area through building etc., or through increased extraction before the water reaches us. Actually, only two the ten monsoons in the 1980's were inadequate, but even during the last two good monsoons the water level in many of our wells hardly changed. Vasanth points out, however, that while rain falling on the pebble outcrops to the west of Auroville recharges our first aquifer quickly, it takes 15-20 years for rainwater falling on the Auroville plateau to percolate into our first aquifer—and 30-50 years to percolate into our second! Again, the catchment area for our first aquifer is on the west side of Auroville and should have benefitted from massive treeplanting and bunding at 'Aurobrindavan' and, later, 'Hermitage', and our second aquifer, which outcrops some distance away is not, according to Vasanth, being extensively tapped by others. Just to confuse the situation still further, Vasanth confirms that the only one of his many observation wells along the coast which is not showing a decline in water level is the one he specially sunk to the east of us to test the effect of Auroville's soil and water conservation programme.



Rain water overflowing an Auroville checkdam: controlling the run-off of monsoon downpours.

So where are we? Basically, utterly confused. In spite of studies made by an Aurovilian hydrogeologist in the early 1970's and the CGWB in 1984, we still know far too little about what is happening beneath our feet. Every time we drill a new well -particularly into the deeper aquifers-and insert a powerful pump, we are playing a kind of Russian roulette with our most precious natural resource. If we don't start our city planning here, with clarifying our water situation, we might as well forget about the rest...

First steps towards a solution

We need a rational and comprehensive water management policy for Auroville and the area. But before we can devise this, we need to know two things. Firstly, the direction of the flow of the underground water. Secondly, we need an exact contour map of

the different strata-impermeable and waterbearing—underlying not only Auroville but the total water catchment area. To achieve this, according to Vasanth, we need to drill about 30 observation wells (which would not be used for extraction) in the area to ascertain the flow and gain hydrogeological data. In addition, if we construct a small laboratory, we could check the water and get advance warning of salinisation. All this would be expensive. But what price do we put upon a sustainable water source?

Meanwhile, we don't have to twiddle our thumbs. Although we have controlled water run-off over the majority of the Auroville area, there are still large tracts of village, temple and government land (particularly the new Pondicherry University and Engineering College campuses) that require bunding; Government check-dams should be repaired and new ones constructed at appropriate points; and we can assist the villages in repairing and desilting their traditional water-catchment ponds (known as erys) which were once part of a wonderfullyplanned water-catchment and irrigation system in Tamil Nadu and neighbouring states.

Our emphasis in all this would remain upon catching the rain and allowing it to percolate into our aquifers. But Harald Kraft, a water expert from Berlin who visits Auroville regularly, proposed another approach (see Auroville Today No 38). Harald estimated that the total rainfall falling on the Auroville area over one year is more than sufficient for our needs. But he suggested

> directing this rainfall into reservoirs above ground, and then distributing it around the township for irrigation purposes. This way, he argued, we would only need to tap our first aquifer for drinking water. Some Aurovilians are sceptical about this idea. Michael points out, for example, that "we cannot divert all our rainfall for the use of man. The hydrological cycle of our watersheds requires adequate vegetation. The rain water has to flow through the landscape, permeating the soil, moving through trees and other living things and eventually recharging our aquifers. Only then can we expect a rise in the top aquifer and a healthy, hydrologically balanced watershed." In other words, our entire approach is based upon preventing surface water flow, whereas Harald's plan would involve directed water flow into large catchment tanks. Finally, the storing of large amounts of water in open reservoirs would result in large evaporation losses—as well as the unaesthetic aspect of dried up tanks in the middle of our township in the summer. Both Michael and Vasanth agree, in fact, that the best place to store our water is in the aquifers,

even though in this way others may also reap the benefits of our water conservation work. When we look at the micro-level of water management, however, Harald's ideas have more relevance. For example, a number of Aurovilians have already incorporated underground tanks to catch the run-off from their roofs in the design of their houses. Michael points out that run-off can also be absorbed in gardens and carefully sited percolation ponds planted with thick vegetation to increase infiltration.

What all this comes down to, in fact, is consciousness; the need to increase our awareness of how to use every drop of water wisely and well. This was underlined by a visiting Israeli water expert. He pointed out that in his country they calculate exactly the optimum amount of water any plant or crop needs, and then they deliver that in the most

AUROVILLE TODAY

Pondicherry; a reminder of what can happen

Pondicherry is situated over a thick bed of alluvial clay-ideal for holding large amounts of underground water. It also yields some of the purest water in India. However, the decision to go for massive industrialisation of the State, and the ability of farmers to purchase and run large pumps whenever there is current—Pondicherry now has the largest number of pumps per hectare in the whole of India—has resulted in huge amounts of water being drawn out of the Pondicherry aquifers. The result?

Over the past 15 years, water levels in both aquifers have declined by 6 metres in the east and up to 20 metres in the west of the State. In November, 1989, Pondicherry Agriculture Department confirmed that 'the groundwater is being exploited to the maximum in Pondicherry, and no major or medium water resources remain untapped'. In fact, 80% of Pondicherry's water reserves are now exhausted. Unless drastic action is taken, within 20 years Pondicherry will have used up all its groundwater reserves-and will have to depend on imported water. Will Auroville go the same way?

efficient way. If we are far from being able to do this at present in Auroville, we should at least understand that heavy watering of extensive lawns is indefensible in our present situation, and we should be actively seeking out the plants and crops that require the least water-and be mulching as a matter of course. More efficient irrigation systemslike drip irrigation and underground perforated pipe systems—should be seriously looked at, while we should ensure that our existing systems are leak-free and sealed from contamination. In addition, Auroville has hardly begun to utilise biological greywater recycling systems which, for a family of four people, can result in water savings of 5000 litres a week. The technology is here, it's cheap and it's simple. We just need the will to start using it.

On a larger scale, more drastic interventions include Vasanth's suggestion to drill artificial recharge wells at selected places to within 10-15 metres of the first aquifer, allowing the remaining strata to filter the water adequately. This would allow rainwater to percolate into the aquifer within 3-5 years rather than 15-20 years, and it would increase the proportion of rainwater reaching the aquifer by up to 20%. However, such recharge wells could not be dug until we have a thorough understanding of our hydrogeology. Another approach, used at present in Israel, is to seal the first aquifer at the point it discharges into the sea. This, however, depends upon the thickness and accessibility of the water bearing strata where it enters the sea and, once again, it smacks of a crude 'allopathic' intervention in a natural, holistic process. A final technical solution, referred to by Mother, is the desalination of sea-water. A small experiment was made in an Auroville beach community many years ago, but at the moment the cost of desalinating sea-water and pumping it around Auroville would be

What can be done at the larger bioregional and national levels? For Vasanth points out that in the matter of water (as in so much else) we are inextricably linked to the situation in Pondicherry and our district of Tamil Nadu. At present there is no legislation in India as a whole to control the use of groundwater. However, Pondicherry State's ban on drilling new wells 6 kilometres from the coast needs to be rigorously enforced and perhaps extended to Tamil Nadu-even though that would create big problems for us in Auroville and be unpopular with local dry land farmers who want to begin irrigating their fields. Dramatically raising the tariff for agricultural electricity would be another way of controlling extraction, but the farmers' lobby is politically so powerful that any move in this direction at present would be political suicide. Instead, Vasanth is concentrating upon weaning the local farmers away from mono crop paddy or sugarcane towards a more diversified pattern of farming, including drought-resistant crops like pulses, and horticulture and fish-farming. The problem is that water-intensive crops like sugarcane and paddy are extremely profitable, and the infrastructure for produce like fruit-ie. food-processing facilities-does not yet really exist. "Auroville could take the lead in this", he points out. "If you provide such facilities, you would be helping the bioregion as a whole to recover from the overexploitation of its natural resources."

The prognosis

So what are the chances of reversing the present overexploitation of our regional water resources? After 18 years of working for one of the best state governments in India, Vasanth is pessimistic. The key to what went wrong, as he sees it, is symbolised in the history of the erys system. For many years, the system worked well. Why? Because the former French Government in Pondicherry allowed the beneficiaries of the system—the various villages in the state-to manage and repair the erys themselves; the Government merely pledged itself to raise matching grants to help in the upkeep of the system. However, when control over the erys was taken away from the people by the state, the central bureaucracy was unable or unwilling to maintain the upkeep of the reservoirs and sluices, and the system fell largely into disrepair -and at one time, this was one of the wonders of ancient India!

Are there any lessons for Auroville here? Auroville at present has a very decentralised water set up, in which individual communities or households are responsible for the supply and storage of the water they require; only a few communities like Auromodel, Certitude and Samasti have larger integrated systems. The advantage of decentralisation is that—like the ancient erys system—it gives people a sense of control over their situation. The disadvantage is that it perpetuates a situation where everybody is drilling wells as close as possible to their residences, without taking account of whether the geology beneath their feet is favourable or not, and whether they are adversely affecting others' supply. Perhaps the ideal would be to drill only at those points in the Auroville area where the water is most plentiful, to pipe it to large reservoirs serving a number of communities, and then to allow the communities to allocate the supply as they think best-all in the context o rigorous water conservation programme. In other words, a balance between centralisation and decentralisation. Or, to put it another way, it requires the growth of a water consciousness which can think global and act local. But not only do we not own all the land necessary to implement such a scheme. It's not at all certain that we have that consciousness...

Mother saw it clearly. "The greatest difficulty is the water... that will take the most time". Perhaps, by one of those paradoxes typical of the Auroville experience, water, which has symbolised our separatedness over the years as we have clung to 'our' well, 'our pump' etc.—will finally be the means of bringing us together. But time is running out...

Alan, based partly on conversations with Michael Mason and Vasanth Kumar Reddy.

still recall my first water-saving experiences in Auroville. I had just moved to 'Success', a small two-woman community next to 'Forecomers'. The first thing my neighbour told me was that I could only wash my hair once a week, and that I had to take a bucket shower next to a papaya tree. That was quite a change for someone coming from a big city in The Netherlands. We had a windmill pumping our water, which meant NO WIND NO WATER. When there was no wind I had to turn the windmill by hand, standing on a platform about 30 feet

Every Drop Counts

above the ground. This way I learned, the hard way, to conserve water.

Do you ever think about the fact that maybe one day the water which 'just' comes out of your tap when you open it will not come? That clean drinking water is not endless?

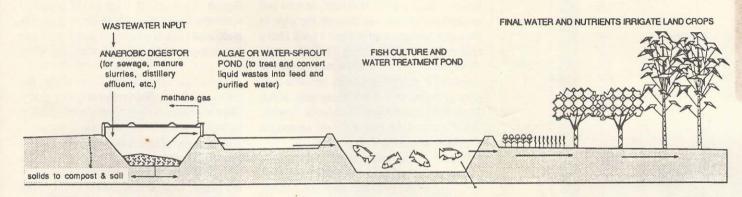
When you live in India you read quite often about water scarcity in big cities, where water has to be brought in with lorries and trains. Local governments spend crores (tens of millions) of rupees on drought relief measures—digging more and more borewells in rural areas. But they are not aware of the fact that endless drilling of wells can cause salt water intrusion into the ground water as is already happening near here and in other coastal areas of South Tamil Nadu.

So one day, when I came across an article in a German magazine on waste water treat-

ment through plants, I felt that this might be a way to save precious water by treating all the waste water at Center Guest House and recycling it. The guest house can house 24 people and the amount of water used per person, including kitchen and laundry water, adds up to approximately 5000 litres a day. After some experimenting and adjustments, this system operates successfully—between 70 and 80 litres of water are harvested daily for use in the garden.

Another system which is being used in Auroville is the 'lagooning system' (drawing). In contrast to the first system, which consists of containers with soil and semi-aquatic plants whose roots purify the water, the 'lagoons' are tanks with aquatic plants, which are used for purification. The advantage of this system is that much more water can be recycled for irrigation purposes. Also the aquatic plants, which have to be harvested on a weekly basis, are a very good source of nutrients for plants.

Tineke



A Portrait

"When I was 22 years old, I was totally fed up with life in Italy and I wanted something else. At work, I felt like a screw in a huge machine. Even though I was also racing motorbikes, after five years of this I'd had enough; there was too much money involved, and I was in hospital too often! I'd been living a very ordinary life, but one or two things happened that made me change. One day, I and some friends 'invaded' an old, deserted house-we wanted to make it a cultural centre for youth. I think it was during the three months we occupied it that the community thing started in me. Another time, talking to somebody, I had a sudden flash that made me realise that an inner life

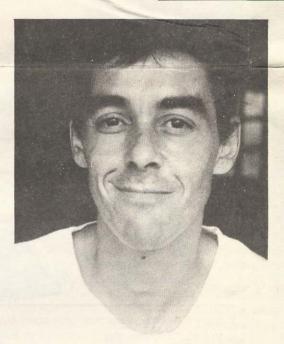
For me it was obvious. If I wanted to develop this inner life, India was the only place to go. I arrived in 1979—and immediately got a shock. I'd expected mystical encounters with great gurus on mountains, but there was only caste, pollution, noise. For a few months, I fell in with the hippies and freaks and felt totally lost. But then I broke away and came to Pondicherry where I met an old friend of mine. He told me about Auroville, one day we came and walked around, I started reading the books—and that was it.

But then my ticket was expiring, and I had to go back to Italy. It was like a line had been drawn through my old life-I couldn't begin it again. But in Auroville, I'd met a group of Swiss people, and when I went to see them in Geneva, they were setting up an Auroville International centre there. So for two years ten of us lived in this big apartment, trying to live there what others were living in Auroville. I learned screen-printing, and how to operate a photo lab. Finally, we ran out of money. I sold my motorcycle, and had exactly enough money for a one-way ticket to India. Then my father retired and gave all of us brothers some money. It was exactly enough to pay the newcomers contribution for one year in Auroville! It seemed like a sign...

I came back in 1981 and got a place in Aspiration. But after a few months, I and some friends got a chance to start 'Slancio'. And suddenly everything started happening, chuck, chuck, chuck. I started to play the flute, we (Gopal, Olivier, Taddy) began playing as a group, and then a full lorry of sound equipment arrives as a gift to Auroville! Unbelievable! Then my friend came, and through her I got a saxophone and really started playing.

At Her Disposal

Stefano is a painter, a musian, and an eco-service man recycling Auroville's garbage. As he puts it: "All my life I've wanted to put together extremes, and now here is the ultimate—putting together garbage and art!



Stefano

For years, before coming to Auroville, I'd had the need to express myself artistically—and it never came together. Now, within a few weeks, something had started. For a long time after, when playing the saxophone, I was only interested in the sound and in personal expression—I didn't want any classical training. If you feel music inside you, it's real, it's you, and you have to find a way for it to come through you. And, as I follow what comes through me, it's my way into life and into myself.

However, in those days it wasn't all music. In the mornings I was running 'Lumiere', the silk-screen unit. It felt like a good balance—half time working for the community, and half time trying to develop myself through music and theatre.

After five years, I went for a one month holiday to Singapore—and ended up spending almost two and a half years in America with my girlfriend. It was tough—I couldn't forget about Auroville—but it was good because I lived one experience fully, and I

realised it wasn't for me. In 1987, I returned—and that also was very hard. I had to get accepted again, to find my feet, and the atmosphere was very heavy with this French fanaticism. It felt like Auroville was on the edge of toppling over into disaster, that everybody felt the danger, but nobody knew what to do. In fact, I feel at moments it's still like that today. But I never regretted coming back. Auroville is my whole life, the only thing that interests me.

Anyway, I got back on my feet, I got a house, a job—with the Financial Service—and started playing again. But now we began playing with professional musicians, doing film music (for 'Croc Boy' with Nadaka) and concerts all over the place. Then Vincent went to France, and left me all his painting stuff. So I also started to paint.

After two years of this, I felt something had to change. I realised the Financial Service was not the place where I really needed to put my energy, and I decided to give myself a chance to really explore my egotistical side. So for 1-2 years I just painted and played music very intensively. I was reading books on art, on the Renaissance and on Impressionism, it was getting into summertime, and I was reading about Van Gogh. I was identified with him, and felt as if I was living in Arles. Every day, I was faced by a new blank canvas. I didn't want to copy, I wanted to find my own thing. It's like fire, or something vibrating inside you, and you have to find something out there which will make it vibrate more, or more completely. In the end, life has to be spiritualised, but music, painting and art in general, if you live them fully, will give you indications that will take

After two years of this, I felt weird. I felt totally isolated, as if I was living in a cave in the Himalayas—and I also felt guilty that I was not doing anything for the community. I needed to go out and bring in a new energy.

So, within a few days, I made a big action. I decided to teach music in Transition school, to teach sports every day, to take on responsibility for the maintenance of the Sports Ground and to do more work for Aurodam, my community. Then somebody mentioned that there was an idea to start up this eco-service to recycle Auroville's waste. I thought, all my life I've wanted to put together extremes, and now here is the ultimate—putting together garbage and art!

So I did some research and found that almost all of Auroville's waste can be sold in Pondicherry and recycled. I didn't want to ask Auroville for money, so I took a risk and told the man who I employed to collect the waste from our communities that I wouldn't pay him. It worked. Then I told him he should pay Auroville to take away the waste. It worked again. So now he makes a living, the Aurovilians have their waste taken away and recycled, and the community gets some income. Today about 60 communities have special barrels into which they put their waste, and this man comes round regularly and empties them. And it's still growing. In fact, I get more praise for my garbage disposal now than for my music!

Sometimes I feel like I'm burning myself out—that I'm doing too much and I'm too much into action. But it's very important to me to live a life where my ideals are fulfilled. And I have many different ideals—to feel totally individualistic, to be useful to the community, to be social, to be alone—and I like putting these things together in an intense, compact way. If perfection means just perfection in matter, then the guys who make Ferraris must be supramentalised! But for me perfection is something else. It's becoming more and more integral in and through all my different activities.

And Auroville gave me this chance. It's not so easy any more—Auroville is much more bureaucratic and square now than when I first came, and people have to work for maintenance and so on —but still, if you really want to get into something, this is a place where you can go find someone or some materials and just get on with it. If you ask me how I'd like Auroville to be, it would be something that grows spontaneously, anarchically, not something totally organised and removed from nature, with 20 storey buildings. In wanting to be functional and productive, we shouldn't lose the other side—which is experimentation."

Interview by Alan on 14.11.92

this monsoon issue: The water situation in Auroville; A portrait of Stefano

Slightly Shipwrecked

We are all slightly shipwrecked these days. We bale out at one end and in comes the water at the other. Or we want water, we need water, and it does not come. Except from the sky. In bucketfuls. No, something larger. Barrels. Tanks. "Is your tank full? Is your tank empty? Who shut off the tank?"

On the one hand, water is such a precious commodity in Auroville that it is obsessively measured, stored, saved and doled out carefully. On the other hand, it is coming into my house (I have a palm leaf roof) in new and unexpected places, not through the pipe in the toilet, where I need it. Over a book I have carclessly left on the table. Through a hole ("Do you have a leak? How many places in your roof leak?")-an almost invisible hole right over my bed. Everything gets damp. Everything stays damp. Bedsheets. Towels. What is that smell? Eau de monsoon. Everyone's wearing it these days.

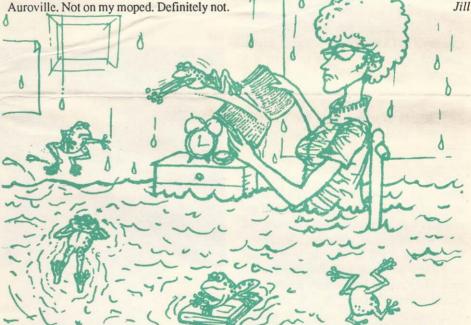
But we do not suffer alone. All the little creatures are looking for a dry place. They are taking refuge from the storm in my house. Ants (the little red ones, the big black ones), cockroaches (both crawling and flying), praying mantises, beetles-not to mention scorpions and snakes.

But getting back to my toilet... no, I can't get back to my toilet. It hasn't worked in two weeks. Two meters of pipe have broken and I have had to go to Pondy to locate the proper store, and then figure out some way of transporting the aforementioned pipe back to Then, what to do? Hire a van. The van is booked until ...? Meanwhile I become a connoisseur of commodes. I have begun to visit friends according to a whole new, internal, rhythm. "Excuse me, can I use your toilet?" And the hole outside my house becomes a trench in which the remaining pipe lies sullen, submerged in 10 cms of water, which mixes with the red soil, which turns to red mud. A well-known chemical reaction which has its own peculiar sound. Or sounds. Squish. Squit. Oops. This is the sound of someone losing their chappals in a muddy puddle of glop. If you try to pull free, it can become quite a little tug-of-war. Hop, glop, glup.

There are other sounds. At night, the chorus of frogs. No, I am not going crazy. They really are saying, "Pretty pretty, bishop bishop, repeat, repeat, come see, come see." It is some sort of secret message which I have been chosen to receive. I'm grateful. After all, it could be worse. They could be inside my house. Well, actually, some of them are, especially in the toilet. They cling to the walls, or sit quietly, unobtrusively, in the corner, like anxious students who have forgotten to do their homework. "I hope she doesn't see me. I hope she doesn't call on me. I hope..."

Ah, yes. The toilet.

Now, is that pipe four centimetres or six centimetres in diameter?



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