

EVER SLOW GREEN – Re-afforestation in Auroville, South India

transcript

TEXT INSERT 00:26 – 00:31

Auroville, Tamil Nadu, India

Dave 00:56 – 01:01

You cannot compare Auroville to any other forestry project in the world. It's absolutely unique.

Rishi 01:03 – 01:23

Wilderness is a very important concept. Deliberately setting aside pieces of the planet and let them express themselves unhindered by our activities. Auroville stands out in India because it has been able to protect its forests against all odds.

Patrick 01:26 – 01:52

The Auroville forest is the most advanced experiment of recreating a tropical forest, a jungle. The challenge of climate change and global warming and all this is actually that we don't have enough forests to balance the temperature and the carbon. This is the point actually of what we're doing here, and why it's useful for the entire planet, because we are pioneers in the recreation of tropical forest.

Paul 01:54 – 02:04

The point of Auroville is to be a point of inspiration. And Auroville still remains as a small example of what could be done. We're not a trend yet. We're still an exception.

Dave 02:06 – 02:25

Forestry in Auroville for me is very exciting. But it's also a little scary because finally you're feeling like, well, you're really getting somewhere and the pressure's never been so great. So there's this excitement – look at where we've reached – but there's also a real feeling of, sort of in the pit of your stomach – could we possibly lose all of this?

TITLE 02:28 – 02:43

EVER SLOW GREEN – Re-afforestation in Auroville, South India

Opening credits 02:48 – 03:06

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music by
Greg Davis
from "Curling Pond Woods (2004)"

additional music
Chloé Sanchez

maps and titles
Roeland Trauwaen

a film by
Christoph Pohl

Renu 03:24 – 04:08

I came to Auroville in the very beginning in 1968. I was four years old. I just loved it because everything was so full of promise and challenge and huge vistas. All of this was the hardest, reddest soil. And in the canyon it was all open, and windy, and barren. As small houses were being built, trees were being planted. That meant protecting them, watering them in the summer, chasing the cows and goats. Like 'Wow, we're part of something'. We weren't so expert. We were all just really experimenting.

Johnny 04:15 – 04:50

I came to Auroville in 1971, from Australia. I originally came here to see what had happened to my runaway wife and first child. There was a little clump here of banyan trees, which we lived sort of around. Looking west, there was a single tree, it was called a wowmaran, and it was a kilometer away, across a huge dry sandy bed. We used to get these incredibly hot dust wind storms. Our only onus in the beginning was to plant shade to deal with this hot sun.

Kanniyapan 04:51 – 05:25

In the beginning it was quiet hot and open ground, and was really difficult. A desert, not much green.

I'm Kanniyappan from Kuilapalayam. I was 12 years old, I dropped the primary school. I started working in Auroville in 1978, in Pitchandikulam.

I'm happy to work in the forest, planting trees. I dedicated my life to it. This is my vision.

TEXT INSERT #1a – 05:29 – 05:45

The experimental international township of Auroville in Tamil Nadu, India, began in 1968.

fade up

The purpose of Auroville is to realise human unity.

fade up

It has drawn people from all over India and the world.

It has now 2700 community members,
of which one third are Tamil.

TEXT INSERT #1b – 05:45 – 05:59

This future city is conceptualised as being surrounded by a greenbelt of farms and forests.

fade up

50 years later, Auroville has one of the longest running large-scale forest restoration works in the world.

fade up

This film is the story of Auroville's forests.

Johnny 06:00 – 06:23

In those days, there was a wealth of young Tamil men, really strong virile guys. We'd employ them as hole diggers. Those days, we thought in order to plant a tree you needed a meter by meter by meter deep hole. So we were digging these huge holes, massive amounts of compost, totally inappropriate trees, and spent the whole summer bucketing water on them to keep them alive.

Jaap 06:26 – 07:07

In the beginning, we basically planted anything we could lay our hands on.

I came to Auroville in 1971. I was an electrotechnical engineer.

I had never properly looked at a plant before I came to Auroville.

We had no clue what was what. A lot of totally unsuitable stuff, we planted, anything that was available, just to get some shade. Introduced then at some point the now-famous work tree. It was only in the course of time, that we became a bit more knowledgeable about the different tree species.

Joss 07:11 – 08:22

You can't do a PhD in common sense yet, and that's all we had.

I came to Pondicherry in 1969, at the end of that year, came out to Auroville. I had no background in the life sciences, but having grown up in Tasmania, one's awareness of wildness was very deep.

We could see that around here, a few hundred years ago, there were forests. The awareness that you can work with the energies of nature.

Realising it wasn't an ordinary afforestation project.

As we saw the sea turn red for 20 kms up the coast, like the blood of Auroville, and the canyons getting deeper, we said, well, hang on, are we going to build a city, if the foundations are being washed away? That's when that bunding started. We realised we shouldn't be planting trees unless we control the water.

David 08:24 – 09:26

When the rain comes, it should land there and it should stay there. It shouldn't run like it did years before, and created the canyons. There should be zero run-off.

I started planting trees in 1978, because this place needed trees very much.

My name is David. I was born in Brooklyn. I came to Auroville in 1976.

I loved being in Auroville. It was an eye opener. More than an eye, it changed my life forever, I believe.

We had a different name – counterculture. A hippie is considered somebody that's not clean, doesn't work and parties all the time. Something like that. I wasn't like that at all. I worked all the time. I enjoyed working all the time.

Shona 09:30 – 10:17

Michael came hitchhiking to India when he was 20. And the first time he returned to England was six years later, with me, as a baby. He definitely was an authentic British hippie.

He also assisted a lot of the local neighbouring Indian farmers to do bunding on their land. Even though they weren't so preoccupied about water conservation and keeping the water from flowing off their land, he would actually go and do bunding for them. And because he was so concerned about the land, he crossed a lot of barriers.

Diego 10:26 – 10:56

We are on a plateau – Auroville, the highest point is about 50 meters above sea level, and then it slopes down to the ocean, it slopes down to all directions. In the heavy downpours, the soil could not absorb all this moisture anymore, it floats on top and eventually rushes off. You simply had to do, we call it contour bunding. That's preventing the water to flow further down. We had in no time, no more erosion.

Renu 10:57 – 11:11

The most exciting thing about the bunding work is, it's one of the main efforts that Auroville has done that was spontaneously then taken up by all the villagers, because they actually saw, "Oh, I'm not losing all my top soil." And it really made a big difference.

Elumalai 11:12 – 11:29

40 years before, very good rain, that is, we see the water washing all the mud, topsoil. Then all the water moving to the rivers, like that. Then is the monsoon time, is making the bund, and digging the holes and planting.

Johnny 11:52 – 12:27

There was already quite a big environmental awareness in the world in the late 60s. Those days you were made to feel that you were part of the problem but to be suddenly offered here an opportunity to be part of the solution, you know, like to not constantly draining the world's resources and destroying the atmosphere sort of thing. Forestry was a very young science. The word ecology had only just been coined.

We were sort of refugees from hippiedom, really. It was like an island of oddballs surrounded by a culture that couldn't comprehend who or what we were, really.

Diego 12:28 – 13:54

They were all hippies! We had of course also the more straight people, the French, coming from Paris who looked sort of slick, you know. They didn't quite associate with us in the greenbelt.

Most of us, we didn't have a degree in land restoration, forestation. It was all self-styled. We learned it as we did it.

I'm Diego from Switzerland, and I joined Auroville in '81.

We needed water and in the beginning we only had a borewell with a handpump. Especially in the greenbelt, we didn't want to be connected to the grid. So we started to build windmills, Cretan sailcloth windmill. It looked like stone age technology. They helped to establish the forest in Auroville. I would climb my windmill every day. Open sails, rolling... it was like sailing, you were like on the mast of a big old ship, you know. So it was actually adventurous in a way, especially when a storm came up and you had to go up there and close the sails, you know. Ten years later about, the metal windmill, built in Auroville, that windmill then took over. There's about 20 of them in Auroville, and they still work, you know. The windmill has one advantage: You're pumping water little by little, you don't overcharge the water table.

Patrick 13:57 – 14:12

When Auroville started, it was a man-made desert from the colonial times, the native forests had been entirely cut down. It was extinct. It was cut down by the colonials for the exploitation of the sandalwood and the ebony.

Glenn 14:15 – 14:34

There aren't any textbook techniques on how to turn a desert plateau in this part of South India to a lush tropical dry evergreen forest. There is no hand book. We've had to develop that, because of the soil types, the run-off, the monsoon system is so different in any complex ecology. There's no right way to do it.

Jaap 14:36 – 14:50 (TEXT INSERT TDEF 14:40 – 14:49)

At some point we discovered that there was a local forest type, known as Tropical Dry Evergreen Forest, and we started surveying whatever is left of that forest in the coastal belt of Tamil Nadu.

Glenn 14:52 – 15:05

When we started the quite complex research of the TDEF forest and all that entailed, the trips, the botany and the identification of plants, it did correspond to a few people coming with that trained knowledge.

Johnny 15:06 – 15:32

Because when Paul turned up he said, "Oh, yeah, right, you know, you guys are doing the right thing, but you're planting the wrong things, you know. You really got to understand what degrees of shade things require." So, we weren't at all scientific. He was definitely an inspiration to work with.

We had seven huge Banyans and then one died. And when a tree that size dies you feel like you've definitely done the wrong thing, you know. "Oh shit, that huge Banyan tree, ah", you know, and he said "Look man, trees die", you know.

Paul 15:39 – 16:35

When I came in 1991, my first impressions of the forests were that they were quite vulnerable, and that they needed diversity. I was very quickly involved with the native species and this idea of trying to bring those into the Auroville forests.

I had studied forestry and ecology, one of my passions.

The thing that drew me to Auroville really was the trees and the forest.

And the opportunity to work in a tropical forest, because that was also part of my childhood dream.

And I thought, perhaps, that I would gain experience and then move on and get a job somewhere else. But in actual fact I ended up staying because Auroville provided me with the opportunities that I wanted.

I was sort of searching for something...

Around the 90s, people became very much concerned with the indigenous species. It was the early stages of their work, so I could very easily join in with them.

Jaap 16:36 – 16:53

We went on weekly trips. We started bringing back plant material and reintroducing all those species into our forests. We surveyed the total of 120 places, and through that we got a pretty good knowledge of what constitutes the Tropical Dry Evergreen Forest.

Paul 16:54 – 17:25

It was this super hot day in the middle of the summer, and we were walking through this thorny thicket, and we came across this luxuriant green plant. It was just so amazing that this plant, in the middle of summer, could be evergreen, in such

arduous conditions. For me that was the moment that I really understood the extraordinary strength of the species of the Tropical Dry Evergreen Forest. And then you really start to understand what the forest in this area would have been like three, four hundred years ago.

Jaap 17:27 - 17:44 (MAP INSERT #1 – 17:30 – 17:40)

It's sort of an obscure forest type. It's basically restricted to the coastal belt from the south of Andhra Pradesh down to the tip of Tamil Nadu in the south. It took us many years before we became aware of that. Whatever pockets are left of it, are under a lot of pressure.

TEXT INSERT #2a – 17:45 – 17:57

The tropical dry evergreen forest - also known as the East Deccan dry evergreen forest - is a rare forest type.

fade up

Most other tropical dry climate vegetation loses its leaves during the dry season. Evergreens retain their foliage throughout the year.

TEXT INSERT #2b – 17:57 – 18:04

Over the last three centuries 95% of the original TDEF forest cover has been cleared by intensive human use such as grazing, timber cutting and development.

Patrick 18:10 – 18:39

They surveyed the entire coast of Tamil Nadu to bring back the native species. This is actually an extraordinary work that probably has never been done before us, you know. Such a focused and complete survey. It's an essential work in the reforestation programme, you know. They found only some little pieces, little patches here and there, around temples, like temple groves.

Johnny 18:41 – 19:00

Not so far from here, in Puttupet, is a little temple forest. Around temples, they didn't cut the indigenous forests. They had sacred groves, really. Puttupet is the nearest one to here and it's about, I think originally about 50 acres, it might be down to about 30 now. That's where we got a lot of our original seeds.

Elumalai 19:03 – 20:14

Paul is going to Puttupet, I also, both we stay there, full moon walking, take to the tent, then collecting mainly some seeds. Puttupet is the more than 1000 years old temple. Also old local forest, in the middle of the temple. 500 years old, 700 years old, some trees is there.

I'm coming to the Auroville, 12 years old, then I would start the forest work. I'm a tall guy, very strong, people thinking I be 17, 18 years old but actually I'm 12 years old. Paul and me is living to the Fertile. Every day coming, morning time, so many holes digging, so many trees planting. 35 years before, only planting timber trees, like Eucalyptus, and work trees, and Vengai, teak trees. After Paul, we'll start planting all the different local forest trees.

Walter 20:20 – 20:59

We came here in '78.

This was all empty. It was only one tree in the middle of nowhere. It is still there, a *Phoenix sylvestris*. We started planting and then it always increased.

In the beginning, we had a very big nursery here. And then we started the herbarium in '94. The collection is about 15000 taxations, but it will be about 3500 different species. In Belgium, if you know ten species by name, you know almost everything. Here if you know 100, you know only a part of it. It's much richer.

Johnny 21:02 – 21:28

Because forest trees don't naturally germinate in the full sun, they germinate in the shade. You need shade to proliferate a forest. And so you have to have a, what they call a pioneering species, you know. We didn't know all this, but this is what so happened inadvertently. So we planted lots of *Acacias*, these work trees, and they're Australian and very drought resistant. They're very fast and they create shade very fast. The work tree only has a 15-20 year life cycle.

Glenn 21:30 – 21:54

This whole natural flow that it took and it went through this whole sporadic planting of all sorts of species, but slowly we had this pioneer canopy emerging, which people call the Auroville forest. As a forester I call it pioneer canopy, but for most people living in Auroville, that's the amazing Auroville forest. And it was that process and that creation of the right environment to then introduce the TDEF.

Glenn 22:14 – 22:23

We've introduced half a million TDEF species in the Auroville forest areas and they're flourishing, they're surviving the cyclones, they are starting to regenerate.

Dave 22:33 – 23:28

My name is Dave. I came to Auroville in the end of 2001.

What really stands out for me, in terms of forest experiences, was the impact of the cyclone. The Coromandel Coast is very prone to cyclonic activity, and it's likely to get much worse with climate change. One year, there was a particularly big cyclone. And then you saw the pioneer species, that we're very grateful for, but they're only here for a moment in geological time scales, they broke and they snapped off and they fell over... and yeah, it was carnage for them. The advantage of the indigenous species is they are quite cyclone resistant. So some of them, you could see them bending down to the ground and bouncing right back, so this is what resilience really is.

Paul 23:30 – 23:42

When you walk through the different forests and you see the TDEF coming up, in some areas they're coming up very nicely, and you see that there is an emerging forest, but it's still a very young forest. Those trees are going to reach maturity in 150 years, or something like that.

Dave 23:46 – 24:25

I think that Auroville really is unique, I guess you could say a divine soup of genetic material both on the human level as well as on the forest level. Without the genetic material that we keep alive here in Auroville, probably there'll be no trace of some of those species in the future, except here. Not only do we have a good number of

individuals in any one set of species, but they're able to cross-fertilise and increase the strength of their genetic material. And they're well protected, so you could say, we're a seed bank for this very special coastal ecosystem in South India.

Paul 24:27 – 24:52

That's what the forest really is, it's like this beautiful jewel that's... the fragments are scattered. We only found certain sets of species in each different remnant. And all the species have been brought here from those different places, and now they're starting to re-form that extraordinary forest. It was only when we put the jigsaw back together did we see the beauty of what the Tropical Dry Evergreen Forest is. It has an extraordinary future to inspire people.

Elumali 24:55 – 25:09

You go up on the Matrimandir top, you see all the Auroville, full looking the trees. Before is the open the land, now is a very big forest, in Auroville, is very successful.

TEXT INSERT #3 – 25:10 – 25:16

The total area of Auroville's forests is about 1200 acres.

MAP INSERT #2 – 25:19 – 26:09

Renu 25:27 – 25:38

Auroville is not a contiguous piece of land, Auroville is a patchwork of land that was bought as and when it could be bought.

The idea of the greenbelt was to be the farming and green lungs of the city.

Diego 25:39 – 25:58

We call it the greenbelt, because we have in the centre of Auroville the Banyan with the Matrimandir, and then around that is supposed to be the town area, and in a circle, around it is the greenbelt. But, you know, Auroville doesn't hold all the land, so only certain amount of land is Auroville land which was reforested.

Johnny 25:59 – 26:27

The original plan was that Auroville would continuously buy the land till we own the whole greenbelt, that was the plan. But it faltered. For many reasons, part of it had to do with... we got our priorities wrong, at many different stages. Buying the land wasn't a high priority when we had the money to do it and the land was cheap, and so we missed that opportunity... And then the land prices escalated and so... Now we're in a position where what was once a flowing tap is now a dripping tap.

Renu 26:28 – 26:34

With all of this work that we've done, we've actually cut ourselves out of the market, now we can barely afford it.

TEXT INSERT #4a – 26:34 – 26:41

Auroville's land is community-owned and belongs to the Auroville Foundation, an autonomous body under the Ministry of Human Resource Development, Government of India.

TEXT INSERT #4b – 26:41 – 26:55

Bought from local villagers,
the land was formerly dry and seasonally cultivated.
Following Auroville's afforestation and water management efforts,
the land and its surroundings now support perennial orchards and farms.

fade up

Today the land is a prime target for commercial property developers.

TEXT INSERT #4c – 26:55 – 27:04

The Auroville Forest is actually a patchwork of smaller forests
interspersed with community settlements, villages,
privately-owned cashew orchards and
other property development.

Glenn 27:11 – 27:25 (MAP INSERT #3 – 27:10 – 27:27)

The Forest Group manages land in the city and in the greenbelt.
There is 44 places of varying different sizes, the smallest is four acres going up to
about 100 acres.

Jaap 27:28 - 27:48 (MAP INSERT #4 – 27:28 – 27:48)

There's areas of a couple of hundred acres of continuous green cover. A lot of the
other plantations are fairly isolated. The increased development in and around
Auroville makes it more and more impossible to have continuous stretches of forest,
that prevent us from having this greenbelt.

Glenn 27:56 – 28:12

There's an umbrella called the Forest Group and it is a complex group, 44 people
that are struggling to maintain land for Auroville. We are an active group in Auroville,
and probably one of the longest standing groups in Auroville, that have kept a certain
form and a certain style.

Kanniyappan 28:13 – 28:26

When I was maybe 20 years old, first meeting I went. Which species introduce,
where to do the bunding, where can find the seed. The sharing, that's the Forest
Group.

Dave 28:27 – 28:49

The Forest Group is a representative group of anybody who stewards or takes care
of forests in Auroville. It does meet once a month, and any issues which come up
amongst the members is discussed then. Participation tends to be very high and
there's no hierarchy in the group.

Glenn 28:55 – 29:05

There is land encroachment issues, there is finance issues, there is inter-relationship
issues between Aurovilians and there has to be arbitrations. There is all these
elements.

Dave 29:08 – 29:48

Somebody once said the Forest Group is made up of madmen - and -women - and
poets, and I'd say that's quite apt. Living in the forest a little bit removed from other

people allows the space for them to indulge in their own eccentricity, I think. If I look at the Forest Group that's as close to – in Auroville speak - divine anarchy as you can get. There's a lot of diversity, and some attempt at unity at the same time. We have some rough idea, I think, of what the forests in this area looked like, and everybody interprets that differently.

Paul 29:51 – 30:13

Someone asked me once if there was a, you know, forest policy for Auroville. And I said, "There is no forest policy." It's really about each individual who stewards a piece of land, looking after that land in the way that they see best, you know. And I think that's one of the strengths of the Auroville forests, that it's de-centralised, that it's not a single forestry entity that decides what happens in the forests.

Jana 30:15 – 30:36

We talk about what we're going to do to help our dream come alive, and together we have more strength and our dreams can, I think, become more powerful and become true.

We need to keep it safe and we need to put our energy into putting it together as a deep, dense, dark forest.

Glenn 30:42 – 31:21

I'm Glenn, I came to Auroville early '90s. By living in the place I'm living now, Anusuya, I gained a connection with certain people that drew me to that work. We can't in ourselves look after that fully so we employ local labour and watchmen, and this is part of the socio-economic exchange we have with the villages, which is very important if you're trying to protect the forest also, because these people are what give this a connection to outside of Auroville, but this costs money obviously.

Diego 31:24 – 31:48

We in the forest who look after the land, we get a regular budget, although it covers about half of the expense you have. The other part you have to generate yourself, with wood sales, for instance, fire wood, timber we can sell... We don't do clear cuts, we take out dead wood and sell. So you have to do the work on the land.

Glenn 31:49 – 32:12

Foresters are generating some kind of income. Even though it all goes back into the place, we still allocate 10 per cent of that fund to a common pot for the Forest Group, to ensure that we do have some funds for planting each monsoon.

This passion to create and protect and develop this forest has been maintained and for me it's successful only because of that.

Patrick 32:21 – 33:22

I'm Patrick from Revelation Forest and I came to Auroville in 1984, after having had an experience of living in a community in southern France. And there I discovered Sri Aurobindo and the Mother, so I read a lot of their books. Then I came to Auroville to see and I stayed.

We divide the forest into two types of management criteria: Preserved forest and managed forest. The idea of a sanctuary it's a preserved forest. In Revelation the sanctuary is a zone where the animals came back, because it was very quiet and very well protected.

The idea of a preserve is to let nature thrive by itself. It's also the recognition that it's the human species that is the problem in the ecosystem, and so we have to restrict ourselves to go in certain forests.

TEXT INSERT #5 – 33:29 – 33:38

About 15% of Auroville's forests are strictly kept as sanctuaries.

fade up

Others host an extensive network of public walking and cycle paths.

Jana 33:50 – 34:45

I came to Auroville in 1996. Since I was a child in Los Angeles, I have been almost obsessed with insects. I studied entomology. I think I didn't realise it, but I was searching around for a place where I could freely study the insects.

It was the moment I stepped foot into it, I was at home. The whole idea of Auroville – human unity... cause it's not just human unity, it's the unity of the planet really, including insects.

Unfortunately, even our oldest forests here are all man-made forests, so even now, they're weak in some ways, you know, and the insects do show us that, they're an indicator. The older the forest gets, the more it can support, and the stronger the whole population of wildlife, including insects, can be.

Shona 35:36 – 36:26

My name is Shona. I grew up in Auroville. I was born in Samriddhi, where I currently work. I take care of a piece of Samriddhi Forest, which my father started 38 years ago. I've been doing it the last 8 years, since he passed away.

I remember as a child that the monsoon was longer. Now I experience it as a couple of really good rains for a few weeks, nothing like when I was a child and it would really rain and rain and rain for months. Going swimming in the local kulams, water bodies, was one of our favourite past times in the monsoon. So yeah, monsoon is fun, summers are hot.

Diego 36:28 – 36:47

The North-East monsoon, that's where we get most of our rain: October, November, December. 80% of the annual rainfall falls in these three months. We get it really hot in April, May, it can go up to almost 40.

Renu 36:49 – 37:03

When I come back from Pondicherry, and I turn into Auroville, it's like "Wow", you can really feel, even though it's not such a giant forest, suddenly the air would cool. And then it's a whole different atmosphere, because it's just forest.

Natasha 37:09 – 39:01

My name is Natasha and I've been a part of Evergreen Forest for the last 15 years. Every day in the forest is like a little piece of the puzzle that comes together slowly. I often take down little notes and write a diary about my experiences. And when I piece it together it kind of sounds a bit like this:

At our entrance by the horses, the ground is covered in white flowers. And every time I pass, I take a deep breath to take in the scent of this little patch of heaven that has fallen upon us. Millington hortensis, known to most of us here in Auroville as Transformation. She blooms just after the rain. When I find an opening I just stand

there with my arms wide stretched and take in the scent, which seems just enough. Petricor is another one of those scents that stirs something in us all. Everyone knows it as that earthly scent produced when rain falls on dry soil. It's the root of the word that fascinated me. Icor... is the liquid that flows in the veins of the gods. I just find that really fascinating! The liquid that flows in the veins of the gods! Here everything is connected, and separation does not exist. The growth of the trees in itself are an explosion, an impulse to awaken to the sacred nature of the earth. These are just little examples of how in the forest it is evident, that there is something that is trying to break through to us.

Jana 39:18 – 39:38

For those of us who have dedicated our lives to forest management, we have to just keep planting, and take the areas that are there, and make them rich and dense. This year we planted 1000 trees. The kids actually helped me plant.

Kanniyappan 39:40 – 40:02

Yeah, I'm enjoying it. Early morning, and walk and see, then I decide where to plant more. This year I planted 2000. Hundreds of thousand I planted in 30-40 years time. I'm not working for money or something, planting, enjoying the job, that's my attitude.

David 40:04 – 40:19

Digging pits is one of the most important parts of tree planting. And to do the right thing at the right time. You don't make holes in the hot season, you make holes when it gets wet, and you make as soon as possible.

Johnny 40:22 – 40:56

What we do now, I have a post hole digger, you know, like it's a cylindrical hole digger, I carry this on my back into the forest, after you've had at least a month of substantial rains, I screw a half meter hole in the ground, I lift out a column of earth, I just put topsoil in, I put a handful of compost. On the top of that, I plant a cylindrical seedling, and the roots grow down into that hole, and that's, I would say, that's 85% effective now. Whereas what we were doing originally, was about 10% effective, you know, and enormously, extravagantly wasteful of resources.

Glenn 40:59 – 41:08

We're not doing just tree planting here, we're doing a full profile of forest planting. Trees, shrubs, woody species, creepers, etc., lianas.

Jaap 41:10 – 41:30

In total we must have introduced between 500 and 1000 different species in the Auroville forests.

I have also a nursery that requires a lot of input. We raise somewhere between 5 and 10 thousand seedlings a year or so, that get distributed to different places in Auroville.

Glenn 41:34 – 42:05

None of us really considers this our job. We work full time at it for probably decades, but we do this because we're so passionate about it. Just to see all these seedlings going out of the nurseries, and to see them all flowing out and getting in the ground, it's a very enriching experience.

We have all the development work, the planting, the contour bunding and maintenance of the forest, invasive species management. We have paths, cycle paths, walking paths through the forest.

Dave 42:06 – 42:15

The Auroville forest live in debt, I think. They rely on people's goodwill to provide what money or energy they have.

Jaap 42:18 – 42:38

Well, it keeps me fit and the forest definitely can use some more input still. It's not a finished job, so I'm motivated enough to keep going.

There's the removal of dead wood. Unfortunately we are not in a situation where we can leave everything as it falls down.

Glenn 42:41 – 42:51

Which means a lot of physical work, a lot of chain-sawing of dead Acacia auriculiformis, the work tree, because that's acceptable as a short-term tree, it's not a long-term tree.

Shona 43:04 – 43:25

Auroville, I believe, has only become such a success in the re-afforestation attempt because of the keeping out of the cattle and the goats, which are fierce grazers. So there was a very thorough fencing method applied and therefore trees were able to get above grazing height.

Rishi 43:28 – 43:36

Unless you have a very good fence, you turn your back, and "bam!", cows and goats will be in. Indispensable.

Rishi 43:44 – 44:29

I was born in Auroville in 1984 to a French mother and American father.

I studied human geography in France, sustainable development.

Specifically forestry I became interested when I was doing my university studies and then I came back. But the love for nature - that goes back to my very early childhood.

One of my really early memories was drawing fictitious maps of the world, and delineating on the globe vast areas that would be wilderness. Human beings would leave those places wild. I love trees and I love being in their company. I want to surround myself by these beings.

Patrick 44:34 – 45:15

Most of the reforestation projects in India, they are not followed, so in the end goats and cows and local people they eat and chop and cut everything, and most of the projects I've seen, ten years later, there was maybe 10% of the trees left, you know. So what we did in Auroville, it was an international group that brainstormed the forest thing, you know, so there's a large diversity of thinking, and understanding and knowledge. There was a lot of different ways that that forest has been planted in the different parts of Auroville.

Johnny 45:16 – 45:39

I mean one interesting comparison really is to walk through Auroville and see, for instance, an Englishman's idea of a forest, and an American's idea of a forest, and a German's idea of a forest. An Australian forest is a jungle, you know. An English forest is a park... A German forest or a Dutch forest is, everything is in lines, you know, like it's a plantation! So... And they all exist in Auroville in different interpretations.

Patrick 45:43 – 46:13

Tropical forests, they have an ability to fix much, much more carbon that was previously understood. To change the climate in an effective manner, you need something much, much bigger than what we've done here, you know. We don't have really a forest, we have only little woods. We have the embryo of a green movement to reforest the tropics, you know. We have to make this knowledge available to the planet.

Joss 46:17 – 46:49

It's wonderful to have an empty canvas, a palate of the imagination. To find a bit of this blue-green planet that's all empty that needs being loved.

We know that we don't plant trees - we plant insects, and birds, and microorganisms, and fungus, that's what we plant.

The work done here on creating, on restoration ecology has influenced a lot of people.

Joss 47:06 – 47:11

The problem is, some people want to put a six-lane highway through where we're standing.

Dave 47:13 - 47:24 (MAP INSERT #5 – 47:13 – 47:21)

That would be a tragedy. I mean, there's no way that the forest could recover from that kind of impact.

Development pressure on Auroville right now is huge.

Paul 47:30 – 48:22 (GRAPHIC INSERT 47:38 – 47:43)

Auroville is miniscule, I mean it's so valuable as a source of inspiration, and yet it's so vulnerable to this extraordinary energy of development.

It's a four-lane highway which is about 60 meters wide, because it's four lanes plus two service roads, a high-speed bypass for Pondicherry, which will bring with it a lot of ribbon development, so you can count another 60 meters each side of the road probably as development, so you're looking at a 180 - 200m wide strip of development that would run on the edge of the Auroville greenbelt and probably encroach. Plus you have the noise, plus you have the pollution, plus you have all the other stuff. It's like looking up at a huge shadowy monster. And Auroville in that sense is a very little, fragile environment that is attempting to offer an alternative, and if the road comes, I think it will threaten Auroville's chance to be an incubator.

Jana 48:27 – 48:39

Well, I think we've all had a good cry out about it, out here in the forest.

Because definitely if it does come to pass, it will take out some of our oldest, richest forests, at least parts of them.

David 48:41 – 48:49

Roads are the greatest threat to the environment. You got a road there, and then the trucks come in and cut down the trees and take them away.

Kanniyappan 48:50 – 49:03

I hope that road is not coming to Auroville, I'm praying for.
It affects everything, there's pollution, the animals, everybody affect the highway.

Jana 49:05 – 49:24

We are trying to stop the development of this highway. We can't stop development always. As long as there's humans and the population is growing, there will be development. They plough down 20 trees we plant 40 trees. We have to keep our hope going, we have to keep protecting the forests that we have.

TEXT INSERT #6 – 49:26 – 49:38

The highway proposal appears to have been halted,
although no official notice has been given (as of October 2019).

fade up

There are no guarantees that Auroville's forests will not
be subjected to renewed highway proposals
or other development initiatives.

Kanniyappan 49:42 – 50:09

Auroville, how to say, something unique, special, because Auroville's more
understand of the afforestation work. That's why the people from outside and in
India, all forest officers are coming to learn from Auroville. Instead of sacred grove,
an Auroville sacred forest. Maybe sometime the people can give the name, after
hundred years. A few hundred years, a really good dense forest.

Glenn 50:12 – 50:42

Yes, it's amazing, all these places that people have created, but it's also this
experience of working with people of all sorts of diversities, and that's what really
makes this experience so rich. One of the key factors of this is the passion. You can
employ a team of people on a piece of land and say you've got to create a forest, but
it doesn't have the same impact if you've got people that are passionate to create
something for the community and to create something for India, and also as a good
example of eco-restoration.

Patrick 50:44 – 51:42

We should go towards organising our forest into a school system, and document
more our forest, you know, and try to attract young people here. I've been teaching
young people and some of these young people they did some reforestation
programme, and they planted more trees than me, you know.

It's a very good laboratory to learn, to observe.

The main thing we can do for the global climate change and global warming is to
replant forests. It is the most efficient thing we can do, this and stopping pollution,
you know. But it's basically the forest that is able to decompose, degrade pollution,
you know, particularly the carbon and balance the temperature. And ultimately it's
the evergreen who are the most efficient to do that, the most efficient to percolate
water, to prevent evaporation and to capture the infrared.

Paul 51:45 – 52:27

It takes a long time to get results when you plant trees, because they grow slowly. When you look at a lot of other afforestation projects, they are short-term, they're projects that have a three-year financing structure, they have no people that are going to be invested really in the results, and you don't have the longevity that Auroville has. And Auroville is very much a collaborative effort. And we're not scientists, we're enthusiasts.

The Auroville forests, there is an incredible diversity, there's many species now that are regenerating with the forests. But I think if we want to hasten the journey towards a beautiful evergreen forest, then there is a lot of work that needs to be done.

Jana 52:33 – 53:07

It's good for us as humans to understand the importance of planting a tree, you know. Setting aside land that's strictly for a dense, deep forest is really an important element to the whole area, it's important for our future water, for our future oxygen, and for our future understanding of ways that we're going to be having to change our planet. Forestry is just very important right now to our planet.

Rishi 53:13 – 53:44

The forests depend on the people living in and around them, and their consciousness, so hopefully people will appreciate the true value of tree cover. The life span of some of these evergreen species are several centuries, the Ebony, the Mimosa. If there's not a major climatic change and suddenly there's 15 years of drought, or a nuclear war, or a highway that cuts right through everything, yeah, in 100 years, Auroville will be magnificent – a jewel of the country!

TEXT INSERT #7 + CREDITS 53:56 – 55:58