

Tree plantations and depletion of water resources

Local people's testimonies
from around the world

In every case where large scale fast-growth tree monocultures are established water resources either diminish substantially or disappear entirely.



This is due to various factors, but mainly to the high water intake of fast-growth tree species (e.g. eucalyptus, pines, acacia, gmelina).

In order to grow, trees need to take the soil nutrients from the ground up to their leaves, where photosynthesis takes place.



The vehicle used to take nutrients to the leaves is water.

The faster they grow, the more nutrients they need, which means they need to use more water.



As a result of this intense “pumping” local water is affected: the water table descends, springs disappear and wells, wetlands, streams and even rivers dry up.

Whenever local peoples react against plantations claiming that they have depleted their water resources, the industry's favourite response is to say that there is no "scientific evidence" to prove that.



Such response is simply untrue. Whenever scientific research has been carried out –e.g. in the case of South Africa- the results show that plantations do impact on water.

The testimonies included in this presentation provide more than sufficient evidence about the direct relationship between plantation expansion and depletion of water resources.



**The testimonies were selected from 12 countries
all around the world**



**Brazil, Cambodia, Colombia, Chile, Ecuador, India, Spain,
South Africa, Swaziland, Thailand, Uruguay and Vietnam**



The people providing these testimonies are very knowledgeable about their environment.

They have witnessed –and suffered- the disappearance of their water resources resulting from plantations.





For us, these are the true experts from whom we can learn.



Chile



“Now there is no water in the summer, not even for the animals. Everything has dried up: swamps, 'nalcas' [native plant]...now there are just pine trees, they have killed everything else.” José Toro Huenulao, Tricauco Mapuche community, Ercilla.

“Pine and eucalyptus plantations have dried up the water. Here there were springs with water, but with the plantation they have finally dried up. In the wintertime there is a little water, but when summer comes they dry up completely, there is not a drop of water. It is because there are many plantations. That is why the water is drying up in all the communities in the sector of Lumako.” Sergio Cayupe, Mapuche community, Lumako.





“They have filled the place with eucalyptus and pine trees, that is why there is no water. Sometimes we do not even have water to drink. Before there was a lot of water and there were many medicinal plants, there was everything.”
Francisca Tromulef Cayulef, Mapuche community, Lumako.



“Monoculture pine and eucalyptus plantations cause ponds and streams to dry up making it hard for people to live there.” Juan Collonao, Antonio Ñirripil, Mapuche community.



India



“Before the plantations came up, the entire village of Lamahata had fairly good agriculture. There’s hardly any farming now -the lands have completely dried up! The plantations have eaten away all the water in the grounds, and all the nutrients...”.

Pasang Dukpa, of 9th mile Lamahata Forest Village, Darjeeling, India.

“Now everything is gone and wherever you look, there are just these Teak trees, miles after miles. And the worst thing is that the water has vanished from the forest...the streams are dry and so is the soil.” Mrs. Sukimaya Tamang, Village Lohagarh, Lower Kurseong Foothills, Darjeeling, India.



“After a few years the worst effects of the plantations started to be felt. The agricultural fields became infertile day by day, the entire area is like a desert now as the teak plants make the surrounding area dry”. Manmati Rai, Kataria Forest Village, Lower Kurseong Foothills, Darjeeling, India.



“The worst effect of the plantations is that it destroyed the natural water sources of the area... the crisis is felt more during the prolonged summer...one has to travel for miles or climb down and up the hills to get water from the nearest river.” Deu Kumar Chhetri, villager, 8th Mile Peshok Road Forest village, Darjeeling, India.

“When I was young, The streams inside the forest had water throughout the year and various edibles were found in the forests...now there is nothing but the plantation trees! The streams remain mostly dry because the trees suck up all water.”

Suba Tamang, 6th Mile Forest village, Darjeeling, India.



“You call this a forest? I don’t. Hardly anything grows here any more. Two of our best rice varieties were lost for ever because of this monster trees that drink all the water in the soil. And how can rice be grown without water?” Ram Gopal Tamang, Bamonpokhri Forest Village, Lower Kurseong Foothills, Darjeeling, India.



South Africa



“I remember when we got here in 1996, the stream close to our garden was running perennially because the eucalyptus trees were not here. This piece of land from here to the road up there was grassland. The company quickly planted it to trees. Since then, water has become scarcer. The stream is drying up. The land, which we had to drain because it was swampy, has become very dry.



We used to dig very small wells to water the reclaimed land. Now we have to dig deeper and we get the water from far away. Water for drinking has also equally become scarce. We also have to fetch water for our cattle, chickens and goats, besides the water for domestic consumption.” Mrs Ziqubu, Sabokwe, KwaZulu-Natal Province, South Africa.



Colombia



“After Smurfit bought the land and planted pine and eucalyptus trees, soon we started feeling the shortage of water. Pine and eucalyptus trees do not generate water. When they cut down the pine trees, the water started coming back.” Andelfo Bernati, Department of el Valle, Colombia.



“At the source of the Medellín River [Caldas Municipality] eucalyptus were planted 35 years ago. When I was a boy I used to bathe there. Now the river is just a trickle of water and there are no butterflies, or birds or anything in the area.” An inhabitant of Antioquia, Municipality of Caldas, Colombia.



“The vast monoculture tree plantations have gradually substituted our rich native vegetation...decimating biological diversity...and drying up our water sources.”
Nestor Ocampo. Risaralda and Quindio Regions, Colombia.



Vietnam



“Water has been running there all my life. But now, the stream is dried out! About ten years ago the stream started to dry up, during some periods of the dry season. The last few years the stream does not have water during the whole dry season.” Farmer from Yen Lap district, Phu Tho Province, Vietnam.



“We use the well as our drinking water supply. It is 18 metres deep, but there is only 60 centimetres of water in it now. In the rainy season it is a little more. When the plantation was not here and the forest was still wild, over four metres of water was in the well and the water level was more constant. In 1993, the well was completely empty.”
Farmer from Yen Lap district, Phu Tho Province, Vietnam.



Spain



“On this farm there were irrigated crops and livestock, but once the eucalyptus were planted in the hills, the water diminished and we weren’t able to keep working there.”

Constancio Romero, Aroche Town, Andalucía, Spain.

“Now I find myself alone surrounded by ‘calyptus’. It is very sad that an individual that has animals finds himself without water because of ‘calyptus’.” Domingo Catalino, Andalucía, Spain.



“With the eucalyptus everything is devastated: no grass, no animals, no nothing. There is a lot of land in the lower part of Tariquejo which has been left without water.” Domingo Gómez, Villa Nueva de los Castillejos, Spain.



Brazil



“Before, the land was good. Now, it’s been destroyed by the eucalyptus plantation. The river has no more water and the land is all dried out.”

Benilda, Tupinikim woman, Caieiras Velha village, Brazil



“It was Aracruz that shut down the river, because it planted eucalyptus trees and took away the water, ... and that’s when the river dried up. Before it had a strong current, and now, where is it?” Francisca, Tupinikim woman, Irajá village, Brazil.



“And then there’s the lack of water, right? Over there, a lot of people, the elders say that because of the eucalyptus plantations, the rivers are drying up, right? We went through a time, a long time, practically four months, with no water at all. We had to get water from other places to survive, to drink. And now that it has rained, the rivers got a bit fuller over there, but now water is running short again. A lot of people say it’s because of the eucalyptus, you know?” Ângela, Tupinikim woman, Irajá village, Brazil.



Cambodia



“We established a small farm in 1998 and we were able to live off the land, growing fruit and vegetables. Until this year we never experienced water shortages because we had a spring running below our land that provided us clear water all year.



The forest has been cleared and our farm is now surrounded by the plantation operations, the spring had dried up." One elderly couple from Kech Kang area, Ansar Chambok village, Cambodia.



Swaziland



Some people, born in the area before plantations arrived, can remember waterfalls and deep streams that no longer exist. Such is the case of Mrs Zwane, who says “I noticed that rivers in the timber growing areas have dried up over the years. I can remember places where people could swim when I was a child, that are now dry”. Duduzile Zwane, Ekuthuleni Village, Swaziland.



“I started to farm this land in the 1970s and there was plenty of water then. In the mid-1980s, the Usutu Pulp Company started planting the hills next to my farm with pine plantations. I was forced to stop farming when the streams on my farm dried up.



Several years ago, Sappi cleared the plantations and the streams started to recover, proving that the natural flow of water in the streams had been severely depleted due to the planting of pine trees.” Farmer Peter George, Swaziland.



Ecuador



Before the pine plantations, life was very different. “There used to be little springs but everything is gone. Even in the big rivers the water level has dropped, and some of them have dried up.” Woman from a local community, Highlands region, Ecuador.

“In Cocha Colorada the water reappeared after the pine trees had been harvested but the springs only started to flow again a year after the trees were cut down.” Local woman, Cocha Colorada, Ecuador.



“For the last two years almost everything has dried up. Now there is only water in the streams that are outside the plantations. Before the rivers were full of water and there were different kinds of fish to catch, but that’s over now.”
Woman from Pitzara River region, Ecuador.



“Now we don’t have water and the rivers have dried up. We don’t have gardens anymore, we can’t grow onions or anything at all. The summer is really hard, the plants and animals die, the freshwater springs have all dried up. ”

Woman from Simiátug, Ecuador.



Thailand



“When the plantations were first established, the water table dropped and streams in the area dried up. There were actually fights about water, because there was water scarcity at that time.” Niprapar Riancharoen, Ban Paak Kok village, Thailand.



“When the company came and started planting eucalyptus near the rice fields, the water began to dry up and people found they couldn't grow rice. One by one they began to sell their land and leave. They went to work as hired labour in other areas or with the company.” Suwan Kaewchan, Laemkowchan village, Thailand.



Uruguay



“The river Garzon is practically dry at its source. There are many eucalyptus plantations in the area and there has been no continuous drought to justify the lack of water. Before, we used to cross with water up to the middle of the wheel, but now it is almost dry. I have another stream that cuts across my land and I don’t have any problem, but it comes from neighbouring land where there are no plantations.”
Luis Decuadra, Rocha, Uruguay.



“The forestry companies have killed our settlement and our water resources and wells are disappearing. Streams that had never dried up today have no water in them and this has nothing to do with the drought.”

Farmer from Baltasar Brum settlement, Paysandú, Uruguay.



“I’ve lived here my whole life, and we never had any problems with water until they established all these plantations about eight years ago. Now we depend on the local government to bring us water. They come every two weeks, and if they take longer we have to call them because there’s no water here at all.” Farmer from Cerro Alegre, Soriano, Uruguay.



All these testimonies provide more than sufficient evidence about the fact that large-scale fast-growth tree monocultures deplete water resources.

However, it must be stressed that the testimonies included in this presentation are but a small selection of the countless cases reported in those and other countries on the impacts of fast-wood plantations on water.



Whenever a large-scale fast-growth tree plantation is established in any country having the necessary conditions for ensuring the trees' fast-growth, the result is always the same: the disappearance of water.

To pretend to deny this –as plantation companies and their supporters still do- is like trying to hide the sun with a finger. Mission impossible.

**Based on their painful experience, the true experts
-local people living in the vicinity of plantations-
have spoken the truth.**

