



Hope in a Changing Climate

Ethiopia's re-vegetation

John D Liu

Ethiopia, perhaps more than any other country, has come to symbolise the vulnerability of humankind to environmental catastrophe.

This is a country whose problems have been increased by war and civil conflict.

And now human induced climate change is predicted to make matters worse.

As on the Loess Plateau centuries of farming practices have stripped the land of natural vegetation.

The dry gullies bear the scars of FLASH floods.

John D Liu

These gullies are evidence of the enormous power of run off during the rainy season. Without vegetation cover on the hillsides when the rains come the water doesn't soak into the ground but flows away in a flood. Then it's not available for agriculture during the rest of the year, this leads to drought and famously for Ethiopia, famine.

But just as I've witnessed in China there is hope that the situation here can be reversed.

In just six years Professor Legesse Nagash and local villagers have transformed a severely eroded terrain by planting indigenous trees and plants.

Almost miraculously a clear flowing stream has emerged, where once there was a muddy trickle.

John D Liu

How is it that it's possible for you to get the stream to flow throughout the year?

Professor Legesse Nagash

It is because of the vegetation cover which has been regenerating on this mountain. This water is maintaining the landscape because as soon as rain falls, on the canopy on this vegetation that rain then infiltrated gradually into the ground ending up with this steady flow of this river.

Water is life. Without water nobody can do anything.

Im amazed as short as 5 years, 6 years you get clean water like this provided you work hard for restoring this degraded landscape.

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About a thousand kilometres further North in the village of Abraha Atsebaha, another near miraculous phenomenon is occurring.

Farmers are finding water at the bottom of their wells, despite the poor rains this year.

The famine of 1984, struck the people of this valley very hard. Many migrated, many died. Now the people are returning.

The village chairman Gabre Giday remembers well how life used to be.

Gabre Giday
Village Chairman – Abraha Atsebaha

Ten years ago I'd say even five years ago I'll tell you what the situation was, it was absolutely terrible. The sun, the drought, the wind, it was all dry like the desert. There was a refugee programme for our village. So we had a choice, leave the valley or do something.

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With government support, they applied the same principles as the Chinese. Setting land aside for natural vegetation to return. In the ravens they built small dams which are now fed by underground springs. And like Professor Legesse's stream rain that fell weeks ago now slowly seeps through the sub soil replenishing the supply of water.

Gabre Giday
Village Chairman – Abraha Atsebaha

The eroded land has become fertile; it's changed for the better.

In the drought our fruit trees, dried up. Now they're coming back, and we grow even more varieties.

These are the real benefits we've seen.

We have food security and our children can go to school – our lives have improved.

We no longer need to beg the government for aid thanks to these changes we have made.

Even wild animals who'd disappeared are returning, even the leopards.

John D Liu

These villagers are now better able to withstand the impact of climate change. With International assistance, their achievement could be repeated across the country. The benefits, as Professor Legesse points out would spread far beyond Ethiopia borders.

Professor Legesse Nagash

The most important issue for Africa, and I consider this Africans very first burning issue is restoration. No matter what we do, we might be good at rocket science, but the environment and restoring this huge vast landscape, our degraded landscape is critical for Africa. Particularly for Africa, particularly for Ethiopia. You know, half of Ethiopia is mountain. And this mountain system is degraded and this degradation of this huge landscape huge mountain chain of Ethiopia is critical not only for Ethiopia but also for the entire region. Consider Egypt; look at the Sudan, where 86% percent of the Nile flows to these countries. How can you support life in Egypt, with out restoring Ethiopia's mountains?
So this is regional, national, and international