

Saving the Island in the Sky: Malawi Residents Protect Trees in the Mulanje Mountain Region

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After years of cutting down trees for firewood, thousands of residents living at the foot of Mulanje Mountain in Malawi are placing their hope in a mini-hydro system to power their district and save the vital forests in the region.

Biziweki Makupe, 34, is a smallholder tea farmer and shopkeeper from Nkuta, a village just at the bottom of Mulanje Mountain, in Southern [Malawi](#). At his shop, he has always had trouble to market soft drinks: with no power he couldn't keep them cold.

Recently, a new mini hydro-power plant is changing his business. But not only for him.

Mulanje is one of Southern Africa's critical [ecological hotspots](#). The large rocky mountain—whose highest peak towers at 3,000 metres— is commonly referred to as an 'Island in the Sky'.

On foggy days, the mountain is enclosed in a smoke-like haze from which the top bursts, which has earned it its name.

As a tourist blogger [vividly described](#), "to visualise the plateau below the peaks, consider simply a world of streams and forests and unique species where people, instead of sniffing the flowers, smell the unique and unmistakable smell of the trees."

Despite being officially protected since 1927, severe deforestation and degradation is still taking place and has led to the sharp decline of species like the Mulanje Cedar tree and the Mulanje chameleon, species that cannot be found anywhere else in the world.

[According to UNESCO](#), the Mulanje Cedar (*Widdringtonia whyteii*), Malawi's national tree, is a key species found in the mountain high cloud forests and is listed as critically endangered on the IUCN Red List. Its timber is highly prized for a variety of specialist purposes; however, illegal unsustainable harvesting has led to diminishing forest cover.

Although large swathes of the forest reserve are now bare due to human activity, a local charity's initiative is using a hydro-power initiative as one way empowering the community to desist from cutting down trees in the forest. So far, it is bearing fruits.

Cold drinks, clean shaves and growing trees

For Makupe and his neighbours, the newly gained access to electricity has meant a qualitative change. The mini hydro-electrical power plant installed at the base of the mountain by a local charity, Mulanje Mountain Conservation Trust (MMCT), is helping him to keep the drinks cold among other benefits.

"I am seeing more customers now after buying a refrigerator. Apart from closing later because of the extended lights, I also run a barbershop which has increased my revenue base. My life, and that of my family has improved," he said.

The mini-grid infrastructure which generates about 220 Kilowatts was funded by international donor agencies. Revenue from electricity sales contributes to the cost of operation and maintenance. Customers are connected to the grid via pre-payment meters. “We have power because of the mountain. Other villages in the district don’t have this opportunity,” said Makupe.

The \$3-million project has also brought people like Makupe to understand the key role of the mountain, and interest to plant more trees has developed in the community.

Diness Sauka, 23, who dropped out of primary school, didn’t see the benefit of the mountain until recently. Although he has never hiked the massif, he recently got hired as a barber and he is now able to support his marriage from the wages.

“At first I used to travel a long distance to find jobs, but now I am employed right here in the village. My life has changed now,” he said, bubbling with a smile. While he used to be involved in logging for a livelihood, his wages are now enough to support him. He no longer sees a need to cut down trees.

Sauka makes around \$30 dollars per month, which is enough to buy essential supplies for his family. His salary is [roughly equivalent](#) to that of some informal salespeople in larger townships.

Self-made power

“People were really excited because, at first, they would need to travel long distances, sometimes getting up as early as 2:00 am to access maize mills. Now, a mill nearby, the hospital and primary schools are being powered by the dam,” said Bertha Salima who heads the community committee managing the electricity.

Arnold Kadziponye, the project coordinator for the Mulanje Renewable Energy Agency (MUREA), which financed and supported the project, said that even students from the primary school are now performing better and the number of pupils has risen dramatically.

“Deforestation was very alarming because most people depended on firewood and producing charcoal from the trees in the mountain,” he said. Although the project started in 2008, the community only got connected in 2014.

Bring back the trees

But prosperity comes at a price. Kadziponye added that the population has grown in the country and the area. The energy demand has risen accordingly, and trees are being extensively cut down as a result.

“Most of the formerly forested area is now bare. Other people are coming up the mountain to cultivate and build gardens to sustain their livelihoods,” he added.

To tackle that challenge, and as part of the climate change mitigation efforts, the Mulanje Mountain Conservation Trust, a charity under which the energy agency operates is now engaged in afforestation activities to replace the depleted trees along with the community.

“We have youth clubs trusted with taking care of the mountain. Planting a tree is one thing, making it survive is another. As of last year, the survival rate was over 85 per cent. That is encouraging because previously it was 35 to 50 per cent,” Kadziponye said.

The increased survival rate can be attributed to the community understanding the importance of the forest with the coming of the mini-hydro electrical project. A visit to the area showed transmissions lines across the villages with a large number of houses

connected to the electricity. Various small businesses which depend on electricity have also sprung up.

By using clean energy, says Kadziponye, the people now appreciate why it is important to conserve the forest as the electricity largely depends on the availability of water in the mountain. And the tree-covered mountain facilitates rainfall which also enables them to grow their crops, including tea. Locations close to Mulanje receive more rainfall, and more regularly, than other areas further from it.

As part of the initiative, the organization distributed 300,000 seedlings, which were planted up the mountain—the source of the river where water is tapped from—to ensure the water flow is conserved.

“Unless we have water, we cannot talk about electricity, and people have this message at the back of their minds. They have taken up the responsibility to make sure that there is water flowing in the river all year round. And chiefs around the area have teamed up to ensure the watershed is well protected. We are supporting them with tree seedlings,” he added.

Not everything was wine and roses, though. The charity faced challenges to convince the people of the need to embrace the tree planting project as part of the electricity project. At first, there was low turnout during the tree planting exercises. Being the first independent power producer in the country, there was skepticism about its effectiveness, as people are accustomed to the country’s main hydropower producer.

This mentality has shifted over the years, with a significant number (fourteen per cent) of those connected to the mini-grid using the power for cooking. It’s expected that the number will rise with more awareness and financial support through loans.

A long summer in Mulanje Mountain

The initiative, however, is far from being perfect. During the hot season experienced between October and April, when water levels are lower, the community has to ration the electricity. And while the organization would like to connect over 5,000 households, the current capacity is able to support half that population.

“Going forward we want to be self-sustainable because we were donor-dependent and we used most of the resources to create the mini-grids. At the moment we are looking for more funders to reach more customers and break even. There is greater demand for electricity and with resources available; we can reach out even to 10,000 customers.”, said Kadziponye.

The residents agree that the power needs to be increased and would like to see a cut in blackouts which sometimes take some hours. Edwin Mapira, 39, who owns one maize mill which is serving over 5 villages, said he would like to add more mills once the power generated in the area increases. Still, he’s proud of his region’s surge.

“This area used to be neglected because of its location, away from offices and roads, but we’ve witnessed a complete transformation as we’re now self-reliant with the coming of electricity. Other communities in this district envy us when they see how we are progressing,” he added.

Source: <https://www.ecosystemmarketplace.com/articles/saving-the-island-in-the-sky-malawi-residents-protect-trees-in-the-mulanje-mountain-region/>