

From the grass roots to the corridors of power

Scaling up efforts for conservation and reforestation in Senegal

Background

In 2006, environmentalist Haidar El Ali visited the coastal village of Tobor in the Casamance area of southern Senegal, on a field visit for environmental NGO Oceanium. Once covered in lush mangrove forest, the landscape around Tobor resembled a desert, completely bereft of vegetation.

As well as losing out on the timber, firewood and fish habitat that the mangroves provided, the community was also struggling to grow food crops, because erosion from forest loss had caused the salt content in their rice fields to rise.

This was a common story for villages in the region. Between 1980 and 2005, approximately 54,000 hectares of Senegal's coastal forests disappeared; as of 2005, around 115,000 hectares remained, most of this in Casamance. As a result, around 40% of all cultivable land in the area was suffering from salinization, which made villagers' food supplies and livelihoods more precarious.



According to El Ali, three main factors were to blame for the forests' loss. One was the cycle of droughts that afflicted Senegal between 1970 and 1980, and the ongoing impacts of a changing climate, which weakened and damaged the forests. Secondly, during Senegal's production boom between 1980 and 1990, many new roads were built without consideration of the impacts on local ecosystems. In many places, the circulation of water was cut off, which led to the reduction of the flow of the water that carries the oxygen, regulates temperature and nourishes the mangrove during the high and low tides. Thirdly, local communities were continually harvesting trees for timber and firewood, and were not replanting to replace those that had been chopped down. The land the mangrove forests sit on is owned by the Government and managed by

communities, but without resources to reforest, or knowledge about how and why to do so, neither party had been able to stop the mangroves' decline.

In Tobor at the time, the mangroves had completely disappeared. El Ali and his team worked first to educate the villagers on the importance of mangrove restoration in order to recover their rice fields and build fish stocks. However, there were no seeds available locally for replantation. El Ali describes how, "armed with patience," he and his team travelled about 100km to Essamssam village, and asked the villagers there to collect seeds for them. They obliged, collecting around 65,000 seeds for Tobor's villagers, who then raised and planted them; El Ali worked with the village chief to monitor progress and ensure that they grew.

Scaling up

Two months later, the team returned and began similar projects in fifteen other villages around Tobor, where they had already educated the villagers on the need to urgently restore the mangroves in order to regain the productivity of their rice fields. "Most of the time, the villagers do not trust people from the NGOs," says El Ali. But because he lives locally and speaks to them in their own language, they have come to consider him "one of their own", he says. Clearly, his own leadership and vision for bringing the work to scale had a major impact, too. In 2007, community members worked with Oceanium to plant 700,000 Avicennia and Rhizophora mangrove cuttings in the area. A network of coodinators, located in every village involved in the reforestation effort, ensured seeds were accessible to villagers wanting to plant.

As the project grew, it gathered increasing attention, including from the private sector. In 2008, the Yves Rocher Foundation approached El Ali, hoping to fund the planting of five million mangroves to offset their cosmetics company's carbon emissions. He employed 158 villagers to help with the task, and together they successfully planted six million!

In 2009, Danone, a French multinational food company that was also looking to offset its carbon emissions, supported the planting of 30 million mangroves in 323 villages across the region. Danone then opened its carbon investment fund to other companies and renamed it "Livelihood Funds." By 2017, the project had generated nearly 142,000 independently verified carbon credits. As the trees mature, more credits will be gained: a projected 1.5 million over the three-decade lifespan of the program.

Outcomes on the ground are heartening. As a result of the reforestation work, 100% of the rice fields in the region have been restored from salinization, and fish stocks have been boosted by up to 18,000 tons a year. Around 300,000 people across 350 communities have participated in the reforestation efforts so far — most of them women, who benefit particularly from the economic boost that involvement in the project provides.

So far, 15,000 hectares have been replanted under the program, and the work continues: it's the largest mangrove replanting effort in the world.



Next steps

Following his success in scaling up Oceanium's work, El Ali joined the Senegalese government in 2012, in order to create change at even wider levels. He served first as Minister for the Environment, and then as Minister of Fisheries. In these roles, he took a number of steps to bring sustainability into the national political imaginary. He revised the forestry code, and pushed to ban single-use plastic bags, a move which was adopted into law by the National Assembly in 2015. El Ali also took on leadership of the county's Green Party, and has played a major role in bringing the concept of ecology to the political stage in West Africa; the current Senegalese president now speaks out on environmental issues, and policymakers have improved awareness

and understanding of sustainable natural resource management.

El Ali says that in order to scale the work further, there is a need to develop successful models to share knowledge and resources right across Africa. He cites the example of the seed collection network in West Africa, which holds cacao seeds from Cote d'Ivoire, avocado from Guinea Conakry, and oil palm from Senegal, among others. "We need more communication and awareness about these kinds of models," he says. "But most of all, we need more action. The problem with environmental work today is there is not enough action."



Story was developed by Esther Mwangi (CIFOR) and Monica Evans Photos by Oceanium

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