

New Agriculturist



Watersheds: a common destiny for survival

After more than 30 years of helping Kenyan women improve their lives and communities by growing trees on farmland, the Green Belt Movement (GBM) has learned a lot about how farmers can benefit each other. When it comes to water in particular, they have seen how the effects of tree planting - and cutting - can reach for hundreds of kilometres through rivers and underground flows. Recognising this, in the past year the organisation has completed a shift in how it maps out its activities, looking beneath political boundaries to work at the level of natural watersheds.

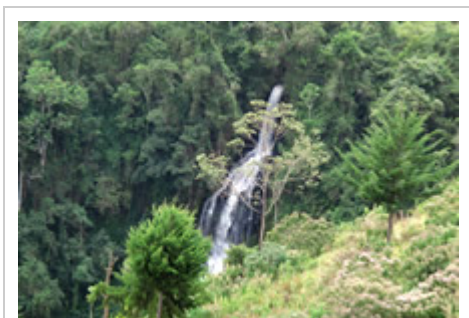


GBM helps Kenyan women improve their lives by growing trees on farmland
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The Green Belt Movement was founded in 1977 by Professor Wangari Maathai, whose efforts to develop communities through tree planting earned her the 2004 Nobel Prize for Environment. Until her passing in 2011, Professor Maathai brought countless small groups of women together and got them thinking about their collective environmental challenges. As an activist of incisive vision, she insisted that the organisation she created should always strive to see below surface level.

Constituencies of nature

"Professor Maathai was keen to see GBM demonstrate impact and evidence of its work, and she encouraged scientific approaches that would support this," says deputy executive director Edward Wageni. "For a long time our work has been around political boundaries, yet environmental work goes beyond geographical and political boundaries." GBM was focussing on individual constituencies, the 210 political divisions used by Kenya's government to select members of parliament. It was a convenient size for targeting activities, but the environmental issues didn't always line up.



Most of GBM's work is driven by grassroots groups around Kenya's 5 forested mountains
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"Most of GBM's work is driven by grassroots groups around the five water towers," Wageni says, referring to the handful of forest-covered mountains that catch rainfall and supply water to millions of Kenyans. "The watershed approach was seen as a better way to identify where we need to work to conserve watersheds so that they continue to provide ecosystem services to the communities adjacent to forests and rivers."

Simply put, a watershed is an area of land in which water drains to a common point. Wherever drops of rain fall in the watershed they will all eventually flow to the same stream, river or lake. But the quality, quantity and consistency of that flow is greatly affected by tree cover within the watershed. By considering the whole area as a community, organisations can promote action that benefits all who rely on the water within it, leaving nobody high and dry.

Refilling a water tower

One of Kenya's five 'water towers,' the Aberdares mountain range, has an importance that is felt 700 kilometres downstream. The Tana River, flowing out of the range, powers a hydroelectric plant that generates more than half of the country's electricity, and feeds the reservoirs of the capital city of Nairobi.

But the water retention capacity of the range's abundant forest cover has suffered due to farming and harvesting of forest products.

This is exactly the sort of ecological imbalance that GBM seeks to take on at the grassroots level, and GBM has been working around the Aberdares for years. More than 2,000 women from the area have established hundreds of nurseries which produce some 1.5 million native tree seedlings in a season. Planting these trees around the mountains has revitalised dozens of dried up springs, while providing the women with income, wood, fruit, and an education in ecosystem dynamics.

At a workshop last January, GBM's leaders themselves took the lesson to heart. They committed to abandoning constituency-level planning, instead looking at each watershed as a complete system. The Aberdares Rehabilitation Project will be a pilot for the new approach.

"Based on the success and learning from this we will replicate and scale up in the Aberdares and other watersheds," Wageni says. He doesn't, however, think this is something totally new: informally, GBM has been mindful of watersheds all along. "Stating that we are shifting to a watershed approach is actually a bit misleading. What we are doing is actually implementing the approach in a much more clear and compartmentalised way."

Creating communities of water

GBM's decision to make watershed thinking its guiding principle is recognition that this particular boundary is more than just a line on a map; it's a sort of natural community with a shared ecological destiny that all of its users should recognise. "The approach helps to reduce conflict in the sense that it enables communities to understand what their role is in enabling and supporting the sustainability of watersheds," says Wageni. "It also enables all stakeholders to be clear on where to focus their resources and action."

Professor Maathai had her own, characteristically direct, way of saying it: "If you destroy the forest then the river will stop flowing, the rains will become irregular, the crops will fail and you will die of hunger and starvation." But if you grow the forest, then the river, rains, and crops will flow forth.

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