



# Africa on the move... Seeds of Green Growth



A World Bank series highlighting successful environmental ideas that show promise for scaling-up in Africa

## HUMBO REFORESTATION PROJECT Delivering multiple benefits

### Context

Humbo is 420 km southwest of the Ethiopian capital Addis Ababa, with a population of 48,893. More than 85% of its residents live in poverty. Three decades ago, this area in the Great Rift Valley was covered with a dense jungle and was home to a variety of animal species. With variable rainfall, and environmental degradation, and severe food shortage in the 80s, the lush green forests, turned into a barren stretch with a few clumps of bushes. Trees had been cut down for buildings, firewood, charcoal and furniture, with little or no regulation. This mirrors the trend in Ethiopia, where over-exploitation of forest resources has left less than 3% of the country's native forests untouched. The deforestation around Humbo threatened groundwater reserves that provided 65,000 people with potable water. Agriculture productivity fell by 70%. Climate change was likely to compound Humbo's vulnerability to natural disasters and poverty.

*Reforestation projects can have important social, economic, and climate co-benefits.*

### Approach

**Institutional:** Seven forest cooperatives were legally established with locals, representatives from World Vision and the Ethiopian Forestry Department, to manage and reforest the land surrounding Humbo. Each cooperative elected its leader, the cooperative executive committees, credit sub-committee, and



forest management sub-committee. They received User Right certificates from the government, thereby providing the communities with security, incentive to protect the forest and a sense of ownership.

**Information:** The project uses a technique called Farmer-Managed Natural Regeneration (FMNR) which is a system of farm tree and forest regeneration that has been developed and refined for over 20 years in West Africa. In the Sahel, FMNR depends on the existence of living tree root material in the area to be re-vegetated. By selecting and pruning the best five stalks from the root material and removing unwanted stems, the remaining stems increase in size and value each year. Through FMNR and prudent stewardship, rural communities own their forests and forest products and see significant forest restoration over a relatively short period.



Humbo: February 2002

Photograph by World Vision



Humbo: March 2010

Photograph by World Vision

**Investment:** The Humbo Project is the first large-scale forestry Clean Development Mechanism (CDM) project in Africa to be registered with the United Nations Framework Convention on Climate Change (UNFCCC). The World Bank's BioCarbon Fund will purchase 165,000 tonnes worth of these credits and will provide an income stream of more than US\$700,000 to the local communities over a minimum of ten years. Further revenue will be available to the community from the sale of the remaining carbon credits not purchased by the World Bank, as well as from the sale of timber products from designated woodlots in the Project.

### **Results**

The regeneration project has resulted in an increased production of wood and tree products, such as honey and fruit, which contribute to household economies. Improved land management has also stimulated grass growth, providing fodder for livestock that can be cut and sold as an additional source of income, and the regeneration of the native forest is expected to provide an important habitat for many local species and reduce soil erosion and flooding.



More than 2,700 hectares of degraded land – land that was continually exploited for wood, charcoal and fodder extraction - has been restored and protected. The protected areas of forest now also act as a 'carbon sink', absorbing and storing greenhouse gases from the atmosphere to help mitigate climate change. Over the 30 year crediting period, the project will cut an estimated 880,000 metric tons of carbon dioxide from the atmosphere.

### **Lessons Learned**

**Co-benefits can be significant:** This project has shown that a CDM project that involves sale of carbon credits, can have some important social and economic co-benefits. While the community will benefit from the sale of carbon, the real benefit has come from poverty alleviation and restoration of biodiversity.

**Portfolio approach is key to harnessing co-benefits:** This project was not just about regenerating forests. Other elements like livelihood generation, education, better agricultural practices and catchment protection were integrated in the project. This helped in harnessing the full benefits from the project.

**Increasing incentives for people to manage forest resources:** User rights were provided to communities and they were made stakeholders in the process. As a result of this, the cooperative societies have started the work of area closure and protection of the vegetation from intruders and livestock damage. This showed that communities were empowered to move from passive victims of climate change to active agents that can act to change the situation.

**Showing quick results works:** The community has been very surprised and excited to see the quantity and speed with which vegetation now grows on the once rocky and barren slope through FMNR. This technique unearthed an 'underground' forest that the community did not know existed.

### **Scaling-up**

Africa hosts less than 2% of all registered CDM projects. Promotion of land-use and forestry projects in this region is key to changing the status quo and for the post-Kyoto climate regime to gain support from African countries that have forests as their main resources, for example, DRC. This project will encourage project developers to scale up land-use and forestry initiatives in Africa, allowing the region to benefit from opportunities of growing carbon markets while providing local communities with additional social, economic and environmental benefits.