

TIST EAST AFRICA: A COMMUNITY-LED TREE PLANTING PROJECT

Planting trees and transforming communities

TIST East Africa supports farmers in addressing poverty, land degradation, and climate change through planting trees. It aims to improve the lives of some of the poorest people in the world through capacity building, leadership development, information sharing and work towards gender equality. This is achieved through an innovative, community driven and led approach to tree planting and reforestation, ensuring that local farmers are the architects and managers of the project on the ground, which creates benefits for themselves and their families, for the land, and through climate change mitigation, for the planet.



million people in the region. This is worsened in areas where there are limited roads and infrastructure. In famine, it is difficult to deliver critical goods and services and when there is a surplus it is difficult to bring products to market. Through this project, farmers are provided with the tools to fight back and are working to restore over 46,994 hectares of land locally with conservation farming and tree planting and address climate change globally.

Climate change mitigation

Trees are a powerful natural ally for addressing climate change, storing large amounts of carbon and thereby reducing the carbon concentration in the atmosphere. For instance, the trees planted by TIST East Africa will reduce global emissions by 6.1 million tonnes of carbon dioxide by 2021 – equivalent to taking 1,281,404 cars off the road for a year. Additionally, forests reduce the temperature of the air by evaporating water through their leaves, and reduce the soil temperature by shading the ground. By properly valuing and paying for the services the trees provide, climate finance in the form of carbon credits is channelled into the local economy: the farmers receive 70% of the profits from that revenue stream, alongside pre-payments allocated per living tree. Trees also provide benefits that go far beyond this payment - shelter, shade, sustenance, fertilizer, medicine, and erosion verified as providing an audited value between \$7-8 per tree planted.

Project area and its threats

Within the community elders' memory, much of the land local farmers use was forested. As populations increased, the farmers cut trees to take advantage of the rich forest soil for farming, as well as source firewood. The sun and wind baked and eroded the rich topsoil, leaving poor quality subsoil, infertile, low-quality agricultural land, and a dearth of forest resources. Farmers are fighting on the frontlines of climate change and as subsistence farmers they are particularly vulnerable to changes in weather patterns.

Cyclical famine is common. In 2011 - 2012, the worst drought in 60 years created a famine impacting over 9

Project impacts

Here are some of the target to 2021 project impacts for the TIST East Africa community tree planting Project.



CLIMATE:

6.1 million tonnes of CO₂ sequestered through planting over 18.8 million trees



ECOSYSTEMS:

46,994 hectares of land restored including 206 hectares of Riparian areas restored



LIVELIHOODS:

110 new jobs created directly working for the implementing organisation, TIST



INCLUSIVITY:

50% of leadership is women, 41% of participants are women



SUSTAINABLE ENTERPRISE:

Over 87,000 farmers receiving high quality vocational training. Over 65,000 farmers will receive training on HIV/AIDS, malaria, typhoid, sanitation, clean drinking water and hygiene topics. 50,000 people at the household level provided with access to improved cookstoves



FAIR ECONOMIC RETURN:

Over \$300 million of verified economic benefits to communities at the base of world economy



SUSTAINABLE COMMODITIES:

As much as 400-600% increases in crop yields through training in improved agricultural practices

Working with communities

The project is built on engagement of and leadership by the local communities, and the majority of work is done by local people. Small groups, cluster meetings, newsletters, seminars and shared values promote cohesion and innovation and help share information across geographical, cultural, and social barriers.

Working with grassroots organisations strengthens them by allowing them to share in the project's successes. Having women in leadership roles promotes more inclusive ideas of justice. Entering into understandable and mutually beneficial contracts is often a new experience for participants, and increases their comfort in navigating a sometimes-daunting part of civil society. Verified results prove the institutions that make up the project are effective, accountable and inclusive.

BEST PRACTICES

A key strength is the creation and dissemination of best practices. These are developed by participants from individual small groups up to the Leadership Council and range from specific habits that have been proven in a small area to things that the project relies upon to operate. Many are countercultural but create an environment that sanctions female and rotating leadership, manages an accurate quantification process, or destigmatises HIV.

HEALTH AND EDUCATION

More than three-quarters of participating farmers receive health education with most adding that their children were healthier and better educated on health issues. The project's training programme includes a ten-part HIV/AIDS segment, with further education provided at cluster meetings and through multilingual and



Copyright: Lynn Johnson

locally produced newsletters on malaria, typhoid, tuberculosis, nutrition, sanitation, clean drinking water, and hygiene topics.

Additionally, applied and vocational education is offered and accessible to all regardless of age, gender, or social status. This promotes lifelong learning and democratizes access to information. The revenue from participation is often to pay for school fees and uniforms.

INCLUSIVITY

Barriers to participation, patriarchy, ageism and other discriminatory practices are systemically mitigated in the project communities. For example, 50% of leadership and 41% of participants are women.

Rotational leadership, a practice of regularly changing roles, operates at all group levels, and gives every person a

chance to lead. In particular, groups such as women and youth report that their experience with leadership, which they might otherwise be barred from due to engrained social norms, often encourages them to take more active roles in their community, church, or other civic enterprises.

The project benefits are not determined by land ownership; tree planting can be done by women, the contract can be held by and paid out to women, and it can be transferred through inheritance. Women receive approximately 92% of the economic benefits that men receive in the project area, far better than the pay gap in the western and developing worlds.

AFFORESTATION PROJECTS

Afforestation is the process of planting large numbers of trees on land that has few or no trees. The TIST programme is not confined to a specific area. Farmers participate from their own farmsteads. TIST grows virally, through word of mouth. As farmers see neighbours benefiting, they turn their farms into TIST areas too.

Whereas other projects prevent carbon emissions, TIST trees pull CO₂ out of the atmosphere. Farmers are reforesting degraded land by planting new trees. The project's baseline is zero, and every tree planted is additional. Rather than relying on projections of potential deforestation, TIST knows that all the carbon stored in trees has been sequestered because of the program.

TIST trees create new habitats for a range of biodiversity. Land that has turned into desert is restored, allowing a wide range of animals to return. TIST farmers are reclaiming entire landscapes.



Copyright: Lynn Johnson

Supporting sustainable livelihoods

Improving degraded land, increasing crop yields, and providing additional revenue streams increases the income of some of the world's poorest farmers, and also directly and indirectly promotes regional and national economic growth. Verified economic benefits to farmers are in excess of \$100,000,000 (over \$1,500 per farmer to date), and directly benefit members of the poorest quartile of local communities in the project area.

Many of the issues addressed by the project have serious economic implications. HIV/AIDS and land degradation problems have wide reaching economic impacts. By improving health and environmental concerns, people's economic potential is also improved. Improved soil is a multi-generational and sustainable benefit.

FARMING

TIST East Africa helps to create more efficient production patterns by facilitating land fertility improvements such as conservation farming, composting practices, and the restoration of degraded land. The project already works with over 76,000 farmers and is currently growing at 10% per year using funding from carbon credit sales.

Using conservation farming, farmers are almost always able to double their crop yields in the first year and increase yields by as much as 400-600% in subsequent years. Farmers also benefit from planting fruit and nut trees that improve their food security and trees for fodder that improve farmers' ability to raise animals. The planting of trees restores degraded land, improving the long-term outlook for the farmers.

CONSERVATION FARMING

Conservation farming does not damage the environment, is inexpensive to maintain, is fair to the people working the land, uses appropriate technologies and allows farmers to increase crop yields.

Avoiding chemical fertilizers and pesticides while increasing production makes the farms more sustainable. Agroforestry helps successful tree and crop planting, in particular using diverse indigenous species, and species that do not use too much water.



Copyright: Lynn Johnson

Protecting biodiversity

Planting trees directly increases biodiversity while also providing the conditions for secondary and tertiary benefits. The project's activities directly contribute to sustainably managed forests, both by increasing tree growth and serving as buffers to protected lands. This growth not only restores degraded land but also allows for the return of various forms of life. Practices such as agroforestry, apiculture, and conservation farming help these dynamics.

The individual tracts of reforested land create biodiversity corridors linking protected areas. As they reforest on the borders and between protected areas, farmers create physical buffers that protect against encroachment and also mitigate threats. Farmers who traditionally ventured into national parks and forests for firewood and forest products are now able to create them on their own land.

The parks that farmers' lands border are biodiversity hotspots, home to many charismatic animals such as African bush elephant, East African lion, Kenyan cheetah, eastern black rhino, and East African wild dog. Over 250 species of birds live in the area. On individual farms, trees provide habitat for birds and insects.

Conservation farming also results in greater ecosystem resilience through

less drought, fewer floods, improved soil quality and erosion, decreased soil degradation, and improved groundwater and local biodiversity.

Project implementing partner

The International Small Group Tree Planting Program (TIST), our partner on the ground, was founded to support farmers in addressing poverty, land degradation, and climate change. Over the past decade, TIST has grown and today there are 16 million live trees planted as the result of participants' work in Kenya, Uganda, Tanzania and India. This work not only sequesters carbon resulting in climate finance benefit sharing but also farmers receive fruit, fodder, fuel, windbreak, leadership development, HIV/AIDS education, general health information, clean stove construction, and social network creation.

This project is not part of the Althelia Climate Fund 1 portfolio.

External standards

The TIST project is validated by the Verified Carbon Standard (VCS project ID 594, 595, 596, 597, 737, 899, 996) and the Climate, Community, and Biodiversity Standard (CCB) to the Gold level for both biodiversity and climate change adaptation.



The TIST project advances many Sustainable Development Goals