

## Growing Cherry Dollars and Scaling Clean Rivers in Upper Tana, Kenya

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When coffee producing countries are mentioned in East Africa, Ethiopia and Uganda will come in mind. Kenya, on the other hand, is known for producing some of the finest high-altitude Arabica coffee in the world.

Ethiopia, for example, is a significant coffee producer with an annual yield of about 426,000 tonnes. The country has, however, faced constraints to increasing production like lack of capital and extension service support.

Kenya's highly demanded specialty arabica coffee potential remains underutilized and is positioned to intensify if it can capitalize on local demand, increase market to international buyers and work towards sustainable land management.

In the upper Tana River watershed, the Nairobi Water Fund is helping smallholder coffee farmers to adopt sustainable land management on their individual farms. More than 8,500 farmers affiliated to Rumukia Farmers Cooperative Society, have received Rainforest Alliance Certification (RAC) for their coffee — an internationally recognized accreditation awarded to farms, forests, and businesses that meet rigorous environmental and social standards.



*Photo: Gladys Wangechi on her coffee farm. ©Roshni Lodhia*

With RAC, farmers produce more, access premium coffee markets and at the same time support the Nairobi Water Fund's objectives of conserving the watershed through the implementation of soil and water conservation measures. It is a win-win scenario where farmers increase their crop production and improve water quality and quantity downstream. Democratic electoral process enables farmers to pick the most competent marketers for their produce.

Nyeri County Government has put in place plans to set up agro-processing factories that among others aim at processing coffee locally to obtain more value for the produce.

Many coffee producers in the country lack support services like capacity building and advice from extension programs that could greatly influence productivity. The Nairobi Water Fund works with Counties in Murang'a and Nyeri to provide extension services and farmer education.

Gladys Wangechi, a small-scale farmer in Mukurweini, Nyeri County, is working to optimize her operations by tending her coffee trees and practicing best agricultural management practices on her land with advice from award winning County Extensionist, Sabina Kiarie.

Prior to conserving her land through terracing and planting soil stabilizing crops, Gladys's coffee trees only produced 3 kg of cherry per tree. After the work, she can harvest 6-10 kg annually per tree.

“Coffee is gold, I have increased my production and am now able to reinvest my income to new initiatives like poultry and pig farming”.

Gladys has learned firsthand that a reduction in soil erosion leads to increased soil fertility and water retention, which in turn leads to higher production and increased revenues.

Gladys was awarded Kenya's top “Women in Agriculture” in 2017 as well as best farmer in Upper Tana watershed 2018, because of her smart approach to sustainable coffee farming.

A scientific study in the watershed led by The Nature Conservancy found that implementing soil and water conservation measures would increase coffee revenues in the watershed by an average of [US\\$ 264 per ha](#). This in turn provides secondary benefits such as enabling farmers to appreciate farming, diversify their crops and animal production thus increased income and improved livelihoods.

The Rainforest certification coupled with sustainable land management has led to increased coffee yields. According to the manager for Thunguri coffee factory, Ms. Kariuki, coffee production was doubled in the year 2017/2018 and she is looking forward to even higher yields in the coming years.



*Photo: A well-conserved coffee farm in Upper Tana watershed, © Nick Hall*

“Over the past two years, while we have been undergoing the process for RAC with the Water Fund, we’ve noticed a big improvement both in production and in quality of the coffee”, said Ms. Kariuki.

Agricultural and research institutions should not only work to breed new coffee varieties which are resistant to pests and diseases, but also provide farmers with apposite growing information and training.

Certification, on the other hand, gives farmers reasons to better conserve their lands and



*Photo: Coffee tasters enjoying a cup of coffee at Rumukia coffee dry mill © Roshni Lodhia*

install riparian buffers which in the end prevents soil erosion, keep soil nutrients on their lands and avoid sedimentation of water supply and hydropower infrastructures.

Farmers in the Upper Tana watershed now have better access to larger consumers markets in Europe and the US for their sustainable products.

If soil and water conservation methods were not prioritized in the coffee farms, probably most of the coffee would have been cut down to try new crops or animals. Moreover, we would be spending even more money to clean our water intakes and using more coagulants to purify drinking water.

If more agencies could support this work started by The Nature Conservancy in partnership with GEF, IFAD, Coca-Cola Foundation, Pentair, Frigoken, East Africa Breweries Ltd, CIAT and Nairobi Water Company, the impact can be great. Over 44,000 farmers are now enlisted for support with an ultimate target of 50,000 by 2022.