

## AGRA Impact Series



### AGRA's Traditional African Vegetable Project in Western Kenya Yields Great Benefits for Sustainable Land Use

January 2021

**The depletion of forests and other protected lands in Africa can be controlled by an innovative approach to conservation that takes into account the needs of the people living around them.**

A vegetable-cultivation initiative by the Alliance for a Green Revolution in Africa (AGRA) and several other partners in Kenya's Western region showed how the farming communities around the Kakamega Forest could be encouraged to promote conservation efforts without compromising their livelihoods.

Western Kenya is the most densely populated region in the East African country, with some of its counties, like Vihiga, having a density of over 1,000 people per square kilometer against the national average of 66 persons per square kilometer. The high population growth rate and dwindling farm sizes has led to a decline in food production and an increase in poverty. As a result, local people have encroached into the Kakamega Forest to open up new farms and obtain timber, fuelwood and medicinal herbs for sale to supplement their incomes.

It is against this backdrop that AGRA and its partners developed a plan to reduce the overreliance on natural capital assets for households living next to the forest by providing alternatives for their sustenance.

In the strategy, the cultivation of traditional vegetables was presented as a suitable choice for a socio-economic turnaround. Traditional African Vegetables (TAVs) thrive well in the region and research confirmed that with proper marketing, they could



become profitable ventures for farmers in the region.

“Before the project, many people in the region depended on the forest for things like firewood and timber, which they would then sell to meet their basic needs. This was after farming on existing lands had become untenable due to wrong crop choice and/or unsuitable farming practices”, said AGRA’s Associate Program Officer, Dr. Abednego Kiwia, one of the researchers directly involved in the project.

For a start, three community-based seed systems were established to provide regular and affordable access to locally-adapted and high yielding varieties of major indigenous vegetables. The farmers were also trained on the best agronomic practices in addition to being connected to reliable markets through the establishment of 20 small and medium agricultural enterprises. This end-of-chain connection allowed them to reap maximum benefits from their produce.

The rewards were almost instantaneous, with the income of the average woman farmer from the sale of TAVs (including Ethiopian kale, African black night shade and cowpeas) increasing from US\$75 to US\$500 in three growing seasons.

Consequently, the farmers reported an improvement in their living standards including a strengthened ability to educate their children.

Following the impressive results, 500 smallholder farmers, mainly women, have now increased their land under indigenous vegetable cultivation from 0.05 hectares to 0.10 hectares per farmer, raising the average yields per farmer from 15 kg to 60 kg per season.

Additionally, and in relation to the improved household incomes, there is an observable reduction in the exploitation of the rainforest. An independent audit by PricewaterhouseCoopers (PwC) shows an increasing interest in participatory land management.

“There is growing evidence of landscape restoration for increased flow of agroecosystem services and the building of resilience to climate change,” said the 2020 PwC report.

By the time the TAVs project ends in 2022, together with other cropping strategies promoted by AGRA in the region, productivity will have been restored to over 10,000 hectares.

Such success is set to prepare the groundwork for effective policy measures that integrate food systems and land use management. This goal is to further diminish land degradation in the light of unabated population growth, extension of smallholder agriculture into marginal lands and the clearance of long-standing natural forests for tillage. This is at a time when 12 million Kenyans are making a living off degraded lands.

“Through incorporating farming communities, we are succeeding in slowly restoring agroecological landscapes for food production. Going forward, a vigorous community-based promotion of sustainable land management practices is envisaged to lead more farmers to adopting low-cost, yield-enhancing, and climate-resilient farming techniques,” said John Macharia, AGRA’s Kenya Country Manager.