

## PROJECTS: KENYA

# DISSEMINATION OF PUSH-PULL CULTIVATION METHODS AMONG SMALL-SCALE FARMER FAMILIES TO CONTROL THE STEM BORER AND STRIGA WEED IN MAIZE FIELDS



### Project

The Push-Pull method ([www.push-pull.net](http://www.push-pull.net)) is an integrated, environmentally friendly technique that improves soil fertility and increases maize yield. The Push-Pull tactic combines two important components: Firstly, egg-laying stem borer moths are repelled from the crop by the smell of **desmodium**, which is planted in between maize plants („Push“). Napier grass (*Pennisetum purpureum*) is planted around the circumference of the field which attracts the moths out of the maize crop („Pull“). In this way, maize yield is improved without the use of synthetic fertilisers or pesticides. Napier grass and desmodium plants are also welcome as a **healthy additional fodder for livestock**. This project, supported by Biovision, aims to make access to this environmentally friendly approach easier for small-scale farmers. The Push-Pull farming method is taught in numerous **farmer field schools** in the region around Lake Victoria. Understandable **information materials** in the form of comics and handbooks are handed out to participants. Additionally, complete starter packs are distributed, containing instructions and the necessary seeds.

### Relevance

Most small-scale farmers have the use of less than 0.8 hectares of land, on which they cultivate maize and other crops. Yet sufficient production of the most important staple food; maize, is a huge challenge for many farmers: there is a lack of soil fertility, weeds and pests such as the stem borer are prolific. Because of these difficulties there can be up to a 60% loss of maize crops. Biovision supports this project to disseminate the integrated Push-Pull method, which can enable maize yields to be increased in an environmentally friendly way. This will improve the food security and living conditions for small-scale farmers.

### Development Goal

Alleviation of poverty and improvement of living conditions for the rural population in the Lake Victoria area through dissemination and application of ecologically friendly farming methods.

**Project number:**  
BV PH-01

**Project active since:**  
May 2006

**Project duration:**  
until May 2011

**Budget for 2010:**  
80'000 USD

**Project coordinator:**  
Zeyaur Khan, Entomologist and  
Head of Plant Health Department  
at *icipe*

**Program responsibility:**  
Verena Albertin



*Thanks to the Push-Pull method maize and cereal yields can be improved without using chemical inputs.*



*Food security and livelihoods of the small-scale farmer families are improved as increasing yields result in a more stable basic income.*

## Beneficiaries

20'000 men and women farmers receive information on the Push-Pull method and apply it in their own fields. Through this the food supply is improved for around 50,000 households in the Lake Victoria region. Fewer crop losses and higher yields lead to better income for the families of small-scale farmers.

## Goals

1. Development of new innovative Push-Pull technologies for stemborer and striga control and to improve soil fertility in maize, sorghum and millet.
2. Dissemination of **information material** such as posters, brochures and instructions on the Push-Pull method to over 5,000 farmers.
3. Establishment of a **knowledge dissemination** infrastructure using various channels, improvement of the Push-Pull website ([www.push-pull.org](http://www.push-pull.org)), and link-up with the Infonet platform ([www.infonet-biovision.org](http://www.infonet-biovision.org)), publication of articles on Push-Pull in the farmer newspaper "The Organic Farmer" ([www.organicfarmermagazine.org](http://www.organicfarmermagazine.org)).

Distribution of complete Push-Pull „**Starter packs**“ containing desmodium seeds and instructions to 5,000 farmers.

## Partner Organisations

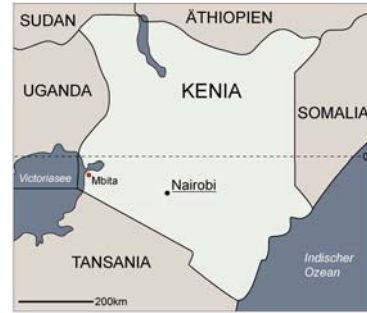
International insect research institute *icipe* [www.icipe.org](http://www.icipe.org);  
National Advisory Program for Agriculture and Animal Husbandry NALEP; Integrated Soil Productivity Initiative through Research and Education (INSPIRE), Heifer Project International [www.heifer.org](http://www.heifer.org); Kenya Agricultural Productivity Programme (KAPP)

## Sustainability

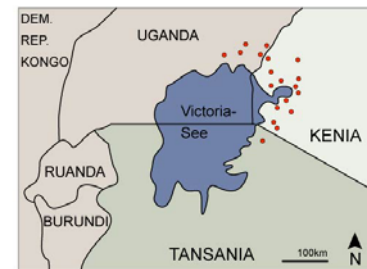
Sustainability calls for a holistic vision: healthy people, animals and plants in a healthy environment. (4x Health, 4-H Strategy). Every project supported by Biovision effects considerable improvements in at least one of the four health areas. The key to effectively replicating the success of the project is the availability of specific information on the methods applied and the results achieved. With this approach and its ‚helix of effects‘, living conditions are improved and the poverty of the people is gradually overcome while the environment is protected.



## A future for all, naturally



*Push-Pull research centre and demonstration plots in Mbita.*



*Project area and farmer field schools around Lake Victoria.*

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