PROJECTS: KENYA

INCREASED YIELDS FOR SMALL SCALE FARMERS THROUGH ECOLOGICAL CULTIVATION METHODS

Project

The Push-Pull method (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. A new, experimental element in the training is the use of participatory short videos that the farmers make under guidance, in order to disseminate the methods widely and to reach farmers with little or no formal education.

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 livelihoods for small-scale farmers.

Development Goal

Alleviation of poverty and improvement of livelihoods for the rural communities 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 2011:
100’000 USD

Project coordinator:
Dr. Zeyaur Khan, Entomologist and Head of Plant Health Division at *icipe*

Program responsibility:
Verena Albertin, Biovision

Understandable information materials in the form of comics and handbooks are handed out to farmer field school participants.

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

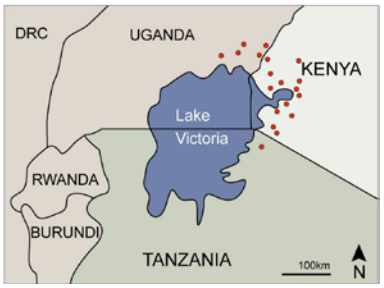
Beneficiaries

Around 4,000 small scale farming families profit directly from information on ecological methods and can thus improve their maize yields and additional food supply for their animals, thereby also improving milk yield. A further 8,000 profit indirectly from improved information on ecological cultivation methods.

Push-Pull research centre and demonstration plots in Mbita.

Achieved so far

Further development of the **Push-Pull approach** for the control of the stem borer and weeds to improve the yields of **maize, sorghum and millet cultures.** Understandable **information material** on the Push-Pull method and complete Push-Pull „**Starter Packs**“ with desmodium seeds were distributed to 5,000 people in training sessions.



Project area and farmer field schools around Lake Victoria.

Goals

1. **Dissemination of the Push-Pull method** through training sessions at farmers' schools, production of educational videos and targeted information dissemination via various channels.
2. **Establishment and strengthening of the relationship** between farmers' groups and government institutions, desmodium seed producers and other goal-related organisations
3. **Applied research** in order to find solutions in the Push-Pull approach for challenges arising (e.g. finding robust native varieties of napier grass that are resistant to new diseases).

Partner Organisations

International insect research institute *icipe* 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; Kenya Agricultural Productivity Programme (KAPP)

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