

Farmers are Full of Beans

The common bean (*Phaseolus vulgaris* L.) is a major source of protein and calories in the diet of poor people in eastern, central and southern Africa. Grown largely for subsistence, and mainly by women, the leaves are used as a vegetable and the beans are eaten fresh or dried, while the haulm (stems and pod shells) is fed to livestock. Some 40% of the total production in Africa is marketed at an annual value of US\$ 452 million. Insect pests and diseases are a major constraint to bean productivity causing annual losses of 430,000 tonnes in eastern and southern Africa alone. Previously, pest management technologies have been developed but their adoption has been limited to pilot sites.

In this CPP-funded project (R7965), CIAT is in partnership with national agricultural research and extension services and locally active NGOs (World Vision, Adventist Development and Relief Agency, Concern Universal and Community Mobilisation Against Desertification) in Tanzania, Malawi and Kenya. The project aims to empower farmers through enhancing their capacity to understand pest problems and encouraging them to seek pest management options. Participatory evaluations of traditional technologies, e.g. pesticides made from plant extracts, have restored farmers' faith and confidence in their indigenous knowledge which until recently they perceived as being backward and something to be ashamed of.

An important outcome of the project is the enhancement of social capital in the form of farmer groups who will discuss issues of major importance to the community. Group numbers



A farmer explaining IPM technology during a farmer conference



On-farm participatory monitoring and evaluation of bean IPM technologies

have increased from less than 20 to over 100. Group membership, half of whom are women, is driven by a keenness to learn by doing and sharing information. These groups have enthusiastically engaged in group-to-group visits resulting in farmer-to-farmer spread of knowledge beyond that planned in project activities. During the project, extension staff have developed a better understanding of the operation and needs of different types of farmers and farmer groups.

Group demonstrations, participatory monitoring and evaluation, formal and informal group training, drama, songs, poems, leaflets, posters, radio and TV programmes were all used to disseminate knowledge. Village information centres (VICs), small community libraries stocking extension and other reading materials, were established in response to farmers' demands for easy access to information within their communities. Government and political leaders participated in project activities and are supportive of project initiatives. In western Kenya, for example, a VIC was partly furnished by the Ministries of Health and Education, interested in using the centre for HIV/AIDS awareness and adult literacy campaign activities.

A few farmer groups established seed multiplication plots for pest-tolerant and high-yielding bean varieties. Activities are not restricted to beans: vegetable pest management, potato and banana production, livestock keeping, soil conservation and fertility management have also been addressed (although external to the project). In the short period of this project, the participatory approach used has empowered bean farmers and could be a useful model to replicate in other CPP schemes.

R7965: Promotion of integrated pest management strategies of major insect pests of *Phaseolus* beans in hillsides systems in eastern and southern Africa

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