

# Training & Technology Transfer: Agriculture Technical Transfer through Farmer Field Schools

ACDI/VOCA's training and technology transfer activities employ a participatory approach to ensure that participants learn best practices that are not only useful but teachable, so that effects of training programs might be multiplied.

By Ross Jaax

**A**CDI/VOCA is a leader in improving opportunities for smallholder farmers to succeed in the global economy. Through its projects, ACDI/VOCA has assisted smallholders to form farmer cooperatives, access affordable financing, establish better market linkages, and receive technology and training. ACDI/VOCA uses the most innovative approaches to assist smallholders to overcome their challenges and create more opportunities.

In the area of training and technology transfer, ACDI/VOCA has applied an innovative approach called Farmer Field Schools (FFS) to help smallholder cocoa farmers around the world overcome their many production problems. Smallholders on plots of only 1 to 5 hectares produce an estimated 90 percent of the world's cocoa. They are vital to the world cocoa trade, yet because they tend to be remote, widely dispersed and poorly educated, they present enormous challenges as far as the effective transfer of technology and innovative production practices. For any technology to be widely adopted by smallholders, it must be acceptable to them and it must meet their needs. Therefore, a high degree of participation by the smallholders in the technology transfer process is necessary—farmers themselves must prioritize their needs and understand how the recommended technology or practice solves their problems.

## The Participatory Approach

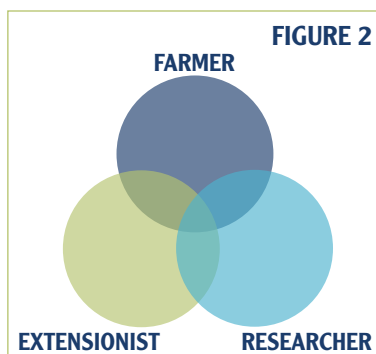
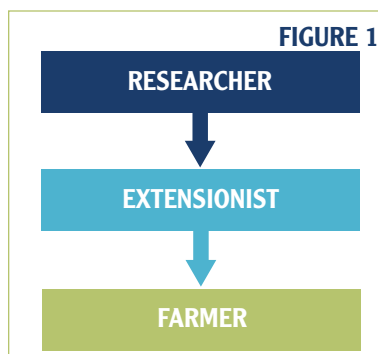
In the past, there was too often emphasis on a top-down technology transfer model (Figure 1). Using this approach, researchers



ACDI/VOCA's Farmer Field School Program moves training from the classroom to farmers' fields to maximize practical applicability.

developed technologies on research stations, and extensionists delivered the product to farmers as packets of technology for farmers to adopt in their entirety. Despite the vast amount and usefulness of published research findings, very low adoption has been seen on farms, and this was especially the case with cocoa.

Since the 1970s the top-down model has been increasingly discarded, and more participatory models have been developed. These models seek to integrate farmer input at all levels of technology development and transfer (Figure 2).



## Farmer Field Schools: Transferring Technology through Participation

The Farmer Field School (FFS) approach is a widely practiced participatory model that integrates farmers into the technology transfer process. FFS was first developed in Indonesia as a method to train farmers in controlling the brown plant hopper, which was ravaging Java's rice paddies. The approach, designed to overcome

the difficulty of training small-scale rice farmers on the complex and novel concept of integrated pest management, was so successful that it not only controlled the outbreak but also reduced overall pesticide use as well.

The key to the success of the FFS approach is that it gives farmers the opportunity to not only observe the effects of new technologies on smallholder plots, but also to discover the problems and solutions themselves. In so doing, participants gain skills in training techniques and deepen their understanding of the technical material as well. FFS emphasizes real-time demonstrations in the field with farmer participation rather than lectures citing abstract figures and graphs. Practical application is more consistent with the adult learning skills of smallholder farmers, and it is a method farmers are likely to use themselves in training other farmers.

FFS usually take place in the fields of participating farmers. It's a school without walls where farmers are not lectured to from



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books of knowledge; rather, they are given the practical observation and critical thinking skills so that they can use their years of experience to better read the book called their farm.

ACIDI/VOCA has adapted the FFS approach to transfer technology and better growing practices to approximately 100,000 smallholder cocoa farmer worldwide. Topics range from integrated management of the cocoa pod borer in Indonesia, to disease management in Ecuador and the introduction of improved cocoa production techniques in the Philippines and Vietnam. For most farmers, the

technology and skills they learn through the cocoa FFS meet the most pressing needs they have in producing their cocoa and thus sustaining their livelihoods. And all farmers report that the FFS approach is a welcome departure from the former common, top-down method that did not seek their input and therefore did not adequately address their needs.



### Staff Spotlight: Ross Jaax in Vietnam

Ross Jaax currently serves as ACIDI/VOCA's country representative and chief of party in Vietnam. He holds a bachelor's degree from Northwestern University and a master's degree in agriculture economics from the University of Minnesota. He has worked in the field of international agricultural development for over 13 years, eight of which he has spent working overseas. Having begun at ACIDI/VOCA in 1994, for the last six years he has been the team leader for ACIDI/VOCA on agricultural development projects in Indonesia and Vietnam.