

## **Foreword**

There is an increasingly urgent need to help farmers access techniques for both the efficient and sustainable management of crops and livestock. Natural resource depletion and environmental pollution associated with agriculture are accelerating and can no longer be brushed aside as the unavoidable by-products of economic development. On the contrary, long-term economic development of farming populations will depend on management practices, which are both sustainable and profitable. Sustainability surely starts with farmer learning, knowledge sharing and testing of alternative crop management options.

In the field of crop protection this proposition has not always been evident. The traditional approach has tended to prescribe chemical solutions to the presence of pests and diseases above arbitrary thresholds, rather than discuss with farmers ways of managing the problem under locally observed conditions. This prescriptive approach has reflected a broader top-down, linear model of agricultural research and development, which has dominated thinking since the 1950s. It has often led to inappropriate recommendations for specific conditions, uninformed use by farmers of modern technologies, and in some cases has accelerated the very problems it was supposed to overcome.

The Farmer Field School approach, developed in Southeast Asia by FAO for use in rice production, offers a powerful means to avoid these outcomes by focusing on farmers' needs, knowledge and capacity for learning. The field guides and the accompanying technical manual in this volume are the fruits of a careful, systematic adaptation of the rice farmer field school approach to the rather different conditions of growing sweetpotato in East and Central Java. An important element of this project has been the close cooperation between the International Potato Center and its participatory research network UPWARD with both the public and the non-governmental sectors in Indonesia. The Research Institute for Legume and Tuber Crops in East Java has contributed important technical backup to the field schools and Mitra Tani has been vital in supporting farmer groups in different communities in Central and East Java.

However, one of the most interesting aspects of the adaptive process has been the central role played by sweetpotato farmers themselves and the complementary roles of farmer knowledge and researcher knowledge in defining needs, developing research and training agendas and evaluating alternative technical options. It was this farmer-researcher teamwork which really led to the elaboration of a concept of integrated crop – rather than pest - management as the necessary framework for the sweetpotato farmer field schools. Farmers are concerned about seed availability, not just seed health, about the condition of the soil and its effect on the crop, not just the presence of insects or diseases on the growing plants. And crucially, they are concerned about the marketing of the crop and opportunities for adding value. Without addressing these other dimensions of crop management, effective control of pests and diseases may cease to be relevant for farmers.

This volume makes available field guides and a manual. The guides offer suggestions and options for field school content and the manual provides technical information on different aspects of the sweetpotato crop. The authors are strong proponents of “scaling up” the results of experiences with particular farmer communities to a broader set of users in Indonesia and beyond and this publication will certainly be enormously important in that process. They do not of course offer a cookbook. They offer tools, techniques and principles which can be creatively taken up by other farmer-researcher teams, applied to their own specific conditions resulting in more sustainable, more profitable sweetpotato agriculture.

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