## Foreword

The success or failure of agroforestry and forestry systems depends on the quality of their components, and trees are clearly a fundamental component. At ICRAF we see that the 'future of trees is on farms', but what will that future hold if farmers do not have access to high quality seed and seedlings? The opportunity for significant economic development will be missed. We believe, therefore, that developing and implementing farm- and community-based systems for the production of good tree seed and seedlings is one of our highest priorities.

In this book, Kevyn Wightman has synthesized a wealth of information about nursery practices, and added her own formidable experience and insights to offer very useful guidelines for managers of community and project nurseries. The author focuses on quality – this depends on attention to details about the seed source, physical characteristics of seedlings, proper substrates, and regulation of water, light and nutrients. The manual includes not only what to do, but also why to do it – this encourages the nursery manager to look for understanding and not simply accept recipes.

Nursery managers and others will find this a valuable reference. We also hope that readers will have useful comments and ideas for a second edition. So, please send us your suggestions and experiences of tree nurseries. In particular, have you tried the methods suggested in this book? What other methods and information would you like to see in the next edition? We look forward to hearing from you.

John C. Weber Programme for the Domestication of Agroforestry Trees ICRAF Latin America

## Introduction

This book is written for community and project nursery managers, drawing on experience from several Latin American countries. We believe that its contents are useful beyond the Latin American region, hence this English version. A Spanish version is planned, too.

In this book we emphasize the importance of seedling quality. We concentrate on good nursery practices that produce quality seedlings. Quality seedlings in the nursery are fundamental to quality trees in the field. We depend on trees for our livelihoods and for a healthy environment. Your trees are important!

Unfortunately, many *poor nursery practices* have become common. Millions of poor quality seedlings are produced every year, seedlings that are not worth the effort to plant or maintain. Poor quality trees discourage people from planting trees and reduce the productive potential of the land.

We have not spelled out the A-Z of how to run a nursery. Nursery logistics vary depending on many environmental, social and economic factors. However, some fundamentals are the same for all nurseries: seed source quality, seedling physical quality, substrate quality, water, light and nutrient regulation. We strongly encourage wise pesticide use, suggest natural pesticide recipes, recommend monitoring the plants at the planting site, and offer guidelines on experimentation.

Throughout this manual, we stress the 'why' as much as the 'how'. Critically questioning and considering why something is done is one of the first *good nursery practices*. Observing, experimenting, and seeking the consultation of others is crucial to improving seedling quality. The quality of your work is important!

A sign outside a nursery in Peru proclaims: El que siembra un arbol, siembra una esperanza.\* (One who plants a tree, plants a hope.)

We would add, One who plants a quality tree, plants a better future.

<sup>\*</sup>Written by Lucy Larcom (1826-1893), U. S. Poet, 'Plant a Tree'.