Simple but effective

low-input domestication strategies for large-scale deployment of improved agroforestry species

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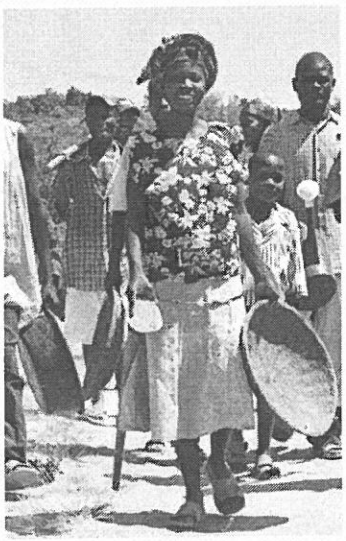
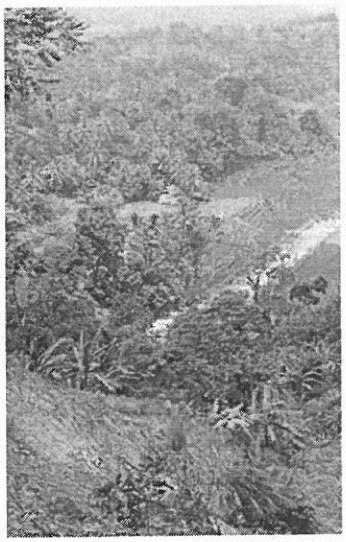
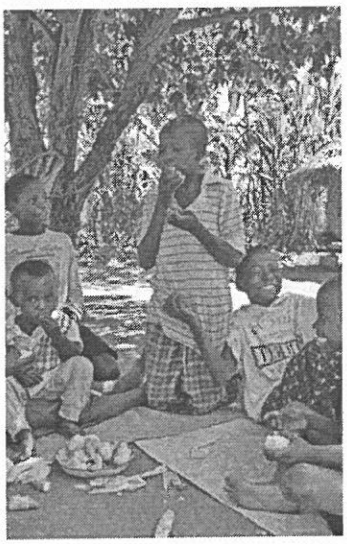

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to fuelwood-fueled stoves; the solar-dried root crop chips were tested for their length of storage life and as alternative food; and a food vine (yam) was tested for its productivity when grown alongside trees, thus not requiring clearing of a wooded area. These alternatives proved to be feasible.

Simple but effective: low-input domestication strategies for large-scale deployment of improved agroforestry species

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Preferred session ***B8. Participatory tree domestication (PTD) for land rehabilitation***

Abstract Throughout the tropics, farmers have integrated many tree species within their farming systems. Many of these farmland species are grown from undomesticated varieties, whereas traditional tree breeding approaches are challenged by the large number of important species, lack of financial support, large environmental heterogeneity between planting sites and the common lack of input supply systems that ensure deployment of best plant material. Also, the expected impact of climate change challenges the traditional breeding approaches. Based on experiences from Asia, Africa and Latin America, we argue that tree genetic potential can be released to the benefit of rural people by properly matching species and seed sources to planting sites, and by brining the species into a domestication process. Examples are presented for species grown for fodder, edible fruits, oils, medicine, farmland timber – or combinations of these uses and we discuss what we can learn from these past/present programmes. We argue that improved tree growth, product quality and ecological adaptation can be achieved by supporting identification and use of the best seed sources and robust, effective (but unsophisticated) improvement activities that do not rely overly on continuous input of external resources. We suggest a new seed source classification system suitable for agroforestry species in a farmland. We put special emphasis on the Breeding Seed Orchard (BSO) and argue that the concept is suitable to meet some of the challenges for domestication of tropical agroforestry species mentioned above. We also discuss experience with deployment of improved clones through grafting and compare this approach with seed-based approaches for different specific contexts. Finally, we discuss two key challenges of institutional nature: how can we ensure that the improved varieties get into the hands of the farmers?; and how can financial sustainability and cash flow be maintained ensuring the domestication programmes continue to develop?

Enhancing smallholder timber practices around Meru, Kenya

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Preferred session ***B8. Participatory tree domestication (PTD) for land rehabilitation***

Abstract Smallholder timber farming offer farmers a unique pathway to complement efforts to stabilize household incomes and even accumulate capital in the longer term. In this context, tree and agricultural crop cultivation are not mutually exclusive activities in meeting household