

Agroforests as an alternative to pure plantations for the domestication and commercialization of NTFPs

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Abstract

NTFP exploitation has recently emerged as a promising alternative to timber extraction in natural forest management. The domestication and the commercialization of these NTFPs tend to emerge as an alternative strategy to their extraction from natural forests.

Incorporating NTFPs in production systems is not a new practice in the tropics. Various forms of agroforestry associations have developed around NTFPs and form the very basis of a suite of indigenous agricultural practices. This agroforestry path to domestication is not commonly considered, in spite of an increasing amount of academic interest in indigenous forest-like plantation models. Furthermore, it is only in recent years that agroforestry research is considering the prospects of these indigenous systems for forest species. To date, nothing in terms of species improvement, for instance, has been done towards the integration of NTFPs into a multistrata or multispecies system, although these are important considerations that need to be taken into account.

In Southeast Asia, and particularly in Indonesia, complex agroforestry systems for the management of forest resources have been developed for centuries by local people ranging from the production of locally consumed fruits to highly valuable industrial products, such as resins and latexes. This agroforest pathway is presented here as an elaborate process of total transfer, of both selected forest resources and a true forest structure from the sphere of 'nature' to that of 'agriculture'. This process can thus be analysed as a particular domestication strategy, which could integrate conventional species domestication techniques—selection, reproduction and plantation practices—to an original form of ecosystem 'domestication'. Prospects for further developing this agroforest strategy for the domestication of forest species, particularly NTFPs, are then discussed.

The social, economic and institutional implications of such an integration of NTFP resources to agricultural development are also analysed, based on various examples of agroforest development and focusing on the efficiency of this 'appropriation' strategy by smallholder farmers, for the acquisition of forest riches.

Introduction

Domestication of forest species for purposes of commercial cultivation seems to have bright prospects. Forestry definitively needs to find an answer to the exhaustion of wild resources while at the same time rationalizing the production of marketable NTFPs. There is great demand for new crops and new markets. Sustainable development has to mitigate the effects of deforestation by increasing the planting of trees on cleared lands, and tropical farmers have to find substitutes for the natural resources lost through deforestation.

However, domestication is neither a fast nor an easy process. It took centuries of farmers' work to develop a range of food crop varieties and decades of scientific research to create