Good Practices of In Situ Conservation of Tropical Fruit Tree Species Diversity: Linking Conservation and Local Livelihoods

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ABSTRACT
Tropical fruit trees are valuable resources for the livelihoods of rural and urban poor throughout tropical Asia. The region is a center of diversity for many of these species, and farmers are key actors in maintaining and adapting this diversity. Over the years they have developed a range of production and management practices along with formal research and private institutions to conserve and use fruit tree species sustainably. Scaling up these good practices requires an effort of building new research and partnerships. This paper describes a methodology for identifying and mapping good practices as well as platforms used by farmers from the world and presents examples of case studies to illustrate the methods in the context of tropical fruit tree species in Asia.

Keywords: good practice, in situ on-farm conservation, tropical fruit species, wild species and their wild relatives, sustainable livelihoods

INTRODUCTION
Tropical Asian countries are the center of origin and diversity of large numbers of staple crops cultivated by their wild relatives. Traditionally, these tropical trees are cultivated in a variety of production systems such as in natural forests, protected forests, buffer zones, home gardens, semi-commercial and commercial orchards. They are managed by fruit tree species, whether cultivated or wild, generally in a natural environment in which it is cultivated or selected naturally to satisfy the particular needs of its grower and users. Such as color, flavor, and taste. Wild and cultivated tropical fruit tree diversity is the product of evolutionary processes in situ as well as on-farm conservation activities. This paper describes a methodology for identifying and tracking good practices as well as platforms used by farmers from the world and presents examples of case studies to illustrate the methods.

CONCEPT AND DEFINITION
A good practice describes a system, organization, or process that maintains, enhances, and creates crop genetic diversity and ensures its availability for improved livelihoods (IPGRI, 2003). Good practices are the process, a technique, or institutional arrangement or a combination of any of them. Under the framework of sustainable livelihoods, good practice works when a set of practices are assembled under certain conditions. These farmer practices are a valuable component of good practice which is practical, cost-effective, sustainable, and have the potential for scaling up to wider areas, with institutional and socio-cultural contexts.

METHODLOGY
- Literature review
- Good practices workshop
- List of good practices
- Description of good practices and assessed context
- Evaluation, learning and upscaling

CONTEXT
Tropical fruit tree genetic resources are found to be traditionally managed in two broad situations:

1. Conserving species existing with natural forest or protected areas, accessible by basic services and support systems including markets, and
2. On-farm/home garden, communities engaged in intensive agricultural practices in flat agricultural landscapes, highly connected to markets very good physical infrastructure such as power, road, communication and others.

CASE STUDIES
Case 1. Consolidating community role in conservation and sustainable use of agrobiiodiversity

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<td>Village, training, exchange visits</td>
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Case 2. Production and management of tropical fruit tree genetic resources (TFTGR)

- On-farm: Reforestation
- Urban market: "Value chain concept"

CONCLUSION
There is a clear need to identify and implement interventions that contribute to increasing and enhancing the benefits that poor farmers and their communities received from the maintenance and use of tropical fruit heritage in terms of reducing rural poverty. An important approach is to build the capacity of communities to identify and apply the relevant good practices in their local contexts.

REFERENCE