Fruits for the Future: Tapping unexplored market opportunities while safeguarding tropical fruit tree diversity.

What we already did:
Biodiversity International has been working since 2009 with 10 000 fruit-farming households through local cooperatives and women’s groups in 36 villages across India, Indonesia, Malaysia and Thailand. In these villages a wide range of fruit species and varieties are maintained in orchards and home gardens. These villages are located in diversity hotspots within the major fruit production belts, but also in remote areas where households still collect fruits from the forest. To document and conserve these rare and under-utilized fruit species and varieties, Biodiversity International conducted long-term research together with expert scientists from the research centres of India (ICAR), Indonesia (ICHORD), Malaysia (MARDI) and Thailand (Department of Agriculture).

Overview of sites and communities that we work with:

Protecting agricultural biodiversity:
Together with local NGOs, women’s groups and farmer cooperatives, we have successfully developed community-based on-farm and in situ conservation strategies for tropical fruit trees using a community-based management approach. This approach includes activities such as organising fruit diversity fairs, developing a fruit diversity catalogue, establishing nurseries and protecting diversity in hedge rows, heritage orchards or community forests. Having successfully tested this approach through a major initiative funded by the United Nations Environment Programme with the Global Environment Fund (UNEP/GEF), we would like now to expand the impact of this work also to other areas and in particular those diversity hotspots that are real troves of genetic diversity and indigenous knowledge.

Business opportunities:
This unique native diversity provides ample opportunity for income generation and market innovations. Several business opportunities have been identified.

Key spin-off 1: Eosta’s Tropical Wonders (125 000 USD)

Company: Eosta, largest importer of organic tropical fruit in the EU (www.eosta.com)

Product activities:
- Marketing of the best traditional Indian mango varieties as specialty fruit in a diversity box ‘tropical wonders’
- Assisting farmers and collectors to apply quality standards and market requirements
- Set up community conservation funds to channel Corporate Social Responsibility (CSR) budgets and premium prices to local community projects and conservation efforts

Broader focus:
- Strengthen and institutionalize rules and regulations related to the management of agricultural biodiversity in community forests, hedge rows and heritage orchards
- Develop a code of conduct and set out standards that include safeguarding regulations in existing organic or fair-trade labels like Nature&more from Eosta
Key spin-off 2: Kokum and Uppage from Western Ghats in India (55 000 USD)

Poor villagers located in the Western Ghats forests of Karnataka are unable to reap the full commercial benefits from their wide range of native fruit trees. "Partly due to a lack of processing and storage facilities," explains Dattatreya Hegde from Sulkani village, "but mostly due a lack of market information and poor collaborations. Most villagers that collect fruits from Kokum (Garcinia indica) and Uppage (Garcinia gymnigatta) are not aware that the fruit rinds they use for traditional medicine fetch a premium price in the pharmaceutical industry for anti-obesity products," explains the farm leader and grafting expert. "With our village we want to build simple, efficient wood-burning driers and sell our dried rinds directly to exporters through our Village Forest Council," says Dattatreya Hegde. "Before we were not allowed to compete for government tenders to harvest from trees in the forest and were forced to sell the rinds to a local broker at low prices. With the members of the Council, we agreed upon good harvesting practices to spare young trees in the forest and have set up a local nursery for the multiplication of saplings. Last year we were allowed to compete directly for the tender and won harvesting rights. What we still need is a direct link with exporters and assistance to explore alternative products that we can make from Kokum seeds like lip balm or herbal soap.”

Other promising spin-offs:
- Export of organic certified rambutan and mangosteen for high-end market in EU
- Fruit juice made from native rambutan varieties from Trang province, Thailand
- High quality oil from mango fruit stones in Indonesia and India
- Herbal soap and shampoo from rare Garcinia species in South Thailand
- Leaves of Garcinia species as a spice for popular curries in Thailand and Malaysia
- Registration and sales of excellent traditional mango varieties such as Pudang Urang (Indonesia), Dushari (India) and Himam Pasand (India) under Geographic Indication certification
- Sales of sun-dried fruit particles as ingredient for breakfast cereals
- Sweets from the peel and jam from the flesh of local pomelo varieties in Indonesia
- Agro-tourism and fruit diversity gardens in Malaysia, Indonesia and Thailand
- Traditional mango pickle from rare aromatic mango varieties for local markets in India

Linking farmers with markets (commercialization that support diversity maintenance and livelihood)