



# Agroforestry Around ASEAN

Trees in Multi-Use Landscapes Project-TULSEA

### Thailand

Mount Doi Inthanon national Park's natural teak stocks have been logged to exhaustion and opium revenues vanished after it was outlawed but other environmental services are still important, such as watershed functions, biodiversity and scenic beauty that can attract tourism, along with carbon stocks. The government also wants to rapidly expand Thailand's protected area system to ensure ecological connectivity between all upland portions of river basin watersheds in the upper north region.

The approach in this case was to seek development of a market-based mechanism to mediate relationships between the community-based service providers and the service buyers (tourists). Appropriate supporting and co-investment roles could then be identified for the park. This would include initial infrastructure and human resource investments, as well as monitoring and assessment of the real impacts of the mechanisms on both the environmental services provided by the park and the livelihoods of people employed. Given the bureaucratic and political context of Thailand, a more market-based approach that requires a minimum level of reliance on state processes appears to be the most promising and innovative option available.

## Lantapan, the Philippines

Downstream stakeholders in the Manupali watershed were concerned about the reducing quantity, quality and regularity of water flow from the Lantapan area. There was, however, no common understanding of the main causes of the problem.

Aftertraining by the TULSEA project staff, the Bukidnon Environment and Natural Resource Office used our methods in two municipalities in Tugasan sub-watershed of Manuplai watershed, to address the problem.

Rather than the suspected culprits – upstream degraded land caused by poor farmers – the researchers found that the problems were cause by water extraction by banana plantations, both legal and illegal.

Using this information, the local government began reward schemes for



Agroforestry activity, West Kalimantan -Indonesia, 2009.

farmers who adopted and practiced sustainable farming systems and triggered an investment forum for watershed management.

When the local government drove the process, existing inefficiencies became noticed and the government's limited funds were used more efficiently. The Lantapan case shows that providing comprehensive, optimal and balanced information based on TULSEA research methods can lead to effective action.

# The Dak Nong Story

The Highland Plateau is a major 'hot

spot' for converting forest to agriculture in Vietnam. On average, from 1990 to now, forest was lost at a rate of 15,000 ha per year. As a result, forest cover declined from 75 percent in 1985 to 60 percent in 2009. The annual rate of deforestation in the Highland Plateau was the highest of all regions, accounting for 46.3 percet of the forest area lost in the whole country. It is understandable why the Highland Plateau was selected by the Ministry of Rural Developoment and Agriculture to be the focus of REDD+ pilot activities. The rapid increase of population, together with unsustainable land use in this area has lead to rapid degradation and deforesta-





tion.

The REALU (Reducing Emissions from All Land Uses)approach applied in DakNong ha shown that the main drivers of deforestation in the area are expansion of industrial perennial crops as well as shifting cultivation. From a stakeholder consultation, the underlying causes of the drivers of deforestation were identified as poor land management and planning, acceleration immigration from other parts of the country and the financial profitability of land conversion. Further analysis highlighted weak land use planning where the land use does not compare to the actual land use. The greatest difference can be seen in the loss of protected natural forest: in the period 2006-2008 more than 50,000 ha of this type of forest was converted to other land uses whereas it should have been kept protected according to land use plans. The analysis shows that some landuse conversions are too profitable to stop, for example, natural production and protection forest to rubber, though even the relatively low carbon price of today (US\$ 5), could decrease the majority of deforestation and degradation.

#### Smallholder Teak, Indonesia

Teak production and furniture manufacture is a major industry in Java, involving about 1.5 million households. Although teak has a high value, smallholders are not benefiting from its production as they should. The reasons for this include poor silvicultural techniques, limited market knowledge and restrictive timber regulation policies. Together with our partners, we conducted farmer demonstration trials; published manuals and guidelines for

improved practices (developed with key stakeholders); investigated financing schemes for smallholders; built market awareness among farmers and local development agencies and published policy briefs and associated policy dialogue related to the regulatory framework.

# Tree Nurseries

## Philippines

The current organization of the public and private sector nurseries was not providing farmers with seedlings of appropriate quality in an equitable manner. With this project, we are improving the economic efficiency and policy environment of the Philippines' tree nursery sector, utilizing a policy-assessment model to identify appropriate intervention points for the nursery sector at both the local and national levels.

#### Vietnam

Three sites have been selected for the study, representing different agro-ecological zones, in northwest, central uplands and central coastal Vietnam. These areas were selected owing to their high rate of poverty, active involvement in the Government of Vietnam's national tree-planting program and the significant role trees are already playing poverty reduction and landscape rehabilitation. Existing operators in each site have been interviewed to identify their technical and business capacity, infrastructure, production processes, entrepreneurship, quality of germplasm, quality of planting material and use of germplasm. Based on this information, all stakeholders will be advised of the best methods to improve the quality of Vietnam's tree nurseries.

#### Hutan Desa in Indonesia

Success in forest protection and reducing emissions requires conflict resolution. The village forest or Hutan Desa regulation by the Indonesian Forestry Ministery details how to reconcile forest management targets and livelihood interests of forest-edge villages within the framework of a permanent forest es-

Lubuk Beringin in Bungo district, Jambi province, Sumatra was the first village in the country to secure such an agreement. Stakes and social capital that bridge local, district and national levels for the Hutan Desa agreement aims to help in reducing transaction costs for wider application as part of any emissions reduction scheme, identifying locally appropriate mitigation action, as part of the national strategies and examining co-investment for local, national and global benefits.

Source: World Agroforestry Center Southeast Asia Program