Protecting Natural Resources in CHIANG MAI

Chiang Mai province in northern Thailand is rich in natural resources. It is a top tourist destination, has several national parks, and is home to various ethnic groups who have lived off the land for years. It is also home to the Mae Sa-Kog Ma Man and Biosphere Reserve, designated in 1977 by UNESCO. The reserve boasts a wide variety of flora and fauna and several key watersheds that provide fresh water to local communities.

Main threats to the environment

- Intensive Agricultural Practices
- Forest Fires and Air Quality
- Forest Loss and Degradation
- Water Quality and Availability
The United States Agency for International Development Lowering Emissions in Asia’s Forests (USAID LEAF) program assists DNP, local governments and communities to better manage and protect the natural resources of the Mae Sa-Kog Ma Man and Biosphere Reserve.

USAID LEAF support has delivered results in three key areas:

- **Mae Sa-Kog Ma Management Plan**
- **Capacity Building**
- **Payment for Ecosystem Services (PES)**

**USAID LEAF** works side by side with our local partners and government counterparts to slow climate change by developing strategies to sustainably reduce greenhouse gas emissions from the forest and land use sector.

The Department of National Parks, Wildlife and Plant Conservation (DNP) protects, promotes and restores natural resources in Thailand. The department manages national parks by protecting forests and restoring degraded areas and raises community awareness to care for and monitor local natural resources.
Mae Sa-Kog Ma Management Plan

- Participatory planning process
- Multi-stakeholder involvement
- Awareness raising and training staff of government agencies, non-governmental organizations and community members

- Public consultations and workshops
- UNESCO designation is a source of pride for communities
- Potential for increased tourism and improved livelihoods

- Management plan accepted at community level first
- Subsequently endorsed by DNP at the provincial level
- National approval for budget and implementation is underway

Capacity Building

DNP, communities and civil society organizations better understand climate change and the importance of protecting and preserving the Mae Sa-Kog Ma reserve as a result of USAID LEAF technical support and training.

Established forest monitoring guidelines
- Biomass training
- Self-monitoring of forest use for hunting and gathering, firewood collection, conservation and other uses

Drafted local agreements on forest conservation
- Community level agreements and responsibility to ensure protection

Promoted collaboration within the Mae Sa Catchment
- Engaged local government, community leaders and private sector actors to preserve forests

Assisted DNP to conduct multi-stakeholder consultation meetings
- Produced new Mae Sa-Kog Ma zoning maps that meet UNESCO requirements
- Launched Mae Sa-Kog Ma Man and Biosphere Reserve Management Plan
- Supported development of Huay Tak Teak Management Plan, Lampang province
Payment for Ecosystem Services

A payment for ecosystem services (PES) scheme is a voluntary transaction in which a buyer pays for an environmental service from a provider. USAID LEAF assistance has resulted in one of the first PES mechanisms in Thailand.

Baan Pong Khrai community restores and manages a forest near Aura’s water source in the Mae Sa-Kog Ma Man and Biosphere Reserve

Ensuring the watershed is ecologically healthy, including properly forested, results in a conserved and enhanced ecosystem

Tipco/Aura pays the community for effective forest management ensuring their source of natural drinking water is preserved

Awareness Raising and Training

For years after its UNESCO designation, people were largely unaware of the critical importance of the Mae Sa-Kog Ma Man and Biosphere Reserve. USAID LEAF and its partners have increased awareness of the need to ensure the reserve is protected and provided training to communities, government and other organizations to promote a healthy environment from which all can benefit.

Fire Management

- Fires are regularly used for land clearing and have historically burned out of control
- Communities and forest managers are now using fire breaks, controlled burning, brush clearing and other simple methods to prevent destructive forest fires

Water Quality

- Communities rely on surface water for daily use and agriculture
- Youth now possess the skills needed to measure and monitor water quality

Forest Restoration

- Communities are taking ownership of specific forest areas around their lands
- Villagers are skilled in forest restoration, reforestation and biomass measurement
- Close cooperation with Forest Restoration Research Unit (FORRU), Faculty of Science, Chiang Mai University
USAID LEAF initiatives in Chiang Mai have resulted in

- Increased appreciation for the Mae Sa-Kog Ma Man and Biosphere Reserve and the critical role it plays in the lives of all those living in the area

- Renewed commitment of government, community-based organizations and the private sector to take a more active role in preserving and protecting the precious natural resources of the reserve

- Improved skills and innovative models such as payment for ecosystem services schemes that can be replicated in Chiang Mai and the rest of the country