

## CHINA

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### Description of Activity:

Southwestern China mountainous and upland areas are of great ecological and cultural complexity, and home to a large number of ethnic minority groups. They are also among the poorest areas in China. Increasing programs on poverty alleviation and infrastructure are implemented to push

economic development in the region. At the same time, protection of the rich and fragile ecosystems receives a lot of attention. Rapid changes in farming practices in these areas are now subject to individual farming household's decision under the Household Responsibility System and expanding influences of market. Many farmers successfully take these opportunities and innovate or adapt their farming systems and techniques to the new social landscapes.

Over past four years, China Cluster in Yunnan Province has worked closely with farmers in Daka and Baka villages, respectively of the Hani and Jinuo minority groups around the State Nature Reserve in Xishuangbanna Prefecture, and Baihualing village in a valley draining to the Nu Jiang (Salween) river from the Gaoligongshan State Nature Reserve, Baoshan Prefecture. Both Nature Reserves are of national and global significance. PLEC was to promote the positive innovations of farming and utilization of natural resources that have improved local livelihoods without damaging rich biodiversity, and to develop these villages as model demonstration sites for wide replication. Major initiatives on experiment and demonstration include agroforestry, homegarden, fuelwood plantation, community forest management, butterfly farming, plantation of rare and valuable timber species, and cooking stove improvement.

Since 1998, there have been several significant outcomes and achievements:

- 1) China Cluster has gradually moved its interest from general issues of population growth and resource management to specific issues of biodiversity conservation, and biodiversity was further divided into natural biodiversity and agricultural biodiversity.
- 2) The agrobiodiversity assessment in demonstration sites was conducted at both landscape and household levels. Major research findings, including methodologies were published in two special issues of *Acta Botanica Yunnanica* on agrobiodiversity assessment and conservation.
- 3) The traditional extension by outside technicians has been replaced by expert farmers' demonstration of local innovations. By 2001, a total of 27 expert farmers with their best practices in three villages are recognized by scientists and other farmers. From 1998 to 2001, 10 expert farmers demonstrated their successful management practices to over 1000 farmers in Baihualing village alone.
- 4) Scientists and technicians has gradually reduced their roles in experimental and demonstration activities from being organizers to being facilitators while farmers, especially the Gaoligongshan Farmers' Association for Biodiversity Conservation has taken an increasing roles in promoting conservation farming and forest management. The Association has 115 members, and its activities were reported in many medias such as China Central TV, and Japan NHK. Members of the Association said they had a sense of recognition and felt more responsible for developing and promoting conservation farming practices.
- 5) Junior researchers and students have become the key research force of the Cluster. Six PLEC postgraduates published 8 academic papers. They are fully trained to carry on the PLEC-type of research in future.

The three outcomes from 3) to 5) are essential to sustain PLEC ideas by farmers themselves and younger researchers. Recently, a national workshop on conservation of agrobiodiversity was organized in Kunming to introduce PLEC successful approaches to other provinces in southwestern China. There was a strong interest in developing an expanded follow-up project concerning agrobiodiversity conservation in three provinces of Yunnan, Guizhou and Guangxi.