



Globally Important Agricultural Heritage Systems (GIAHS)

The Rice-Fish Culture System in China



Longxian is a traditional Rice-Fish Culture system (RFC) village, located in Qingtian County, Zhejiang Province, China. It spreads over 461 ha and has 60 ha of RFC that represent an ingenious agricultural rice-fish mutuality practiced by farmers over generations. Instead of using pesticides, herbicides, and fertilizers, fish eat plant hoppers and weeds while providing nutrient for rice. As they swim in the paddies, they soften the soil and bring oxygen in the water. As reciprocity, rice plants provide shades for fish.



However, RFC is facing threats which are the impact of rapid economic growth, urbanization and the so-called modern agricultural techniques. Longxian is a typical emigration village, where most of the labor force has moved abroad. Local statistics show that over 650 villagers are now working and living abroad. The main source of income for most residents is the remittance from those who emigrated. Since the revenue of farming is less than one tenth of that of non-farming jobs, the village has experienced a decline in the number of farmers, especially of the young labor.

Through the GIAHS Initiative rice fish practices in China have made a comeback and given hope to small farmers. Since its launch in 2005, an action plan and a supportive institutional framework has been developed for the county involving local, national and international beneficiaries and stakeholders. The local government of Qingtian has internalized the GIAHS concept and has taken steps forward to promote the conservation of their heritage.





Guided by FAO and the Ministry of Agriculture of PRC, the Center for Natural and Cultural Heritage (CNACH), Qingtian People's Government and Qingtian Bureau of Agriculture have made a notable effort to encourage local farmers to get involved in the conservation of Qingtian's RFC. To ensure a participative management with all the stakeholders, the following activities were conducted:

- 1. Establishment of local GIAHS protection office.** This special team formulated a protection plan with the support of CNACH in order to establish the most relevant way to conserve and develop RFC.
- 2. Capacity building.** The Qingtian Bureau of Agriculture monitors rice fish production and provides training to farmers to ensure that they meet the Product Standards for market compliance. A set of Rice Fish Production Techniques and Standards are available to farmers in Longzian and other villages suitable for RFC.
- 3. Development of GIAHS tourism.** Support from the local government to the Yujiale (i.e. places where you can "enjoy between farmers' families") has resulted in an income increase as they produced GIAHS-labeled dried fish and hosted tourists in the name of GIAHS.
- 4. Promotion of Rice-Fish Culture.** The county supported the construction of a rice-fish culture system museum. In order to raise awareness among the village, a series of promotional/information material related to RFC, such as DVD, wall calendars and brochures was distributed to local farmers.
- 5. Infrastructure construction.** The government of Qingtian County invested 34 million RMB (5.4 million USD) for infrastructure improvement such as rebuilding the road to Longxian, improvement of water supply and toilets, and protection of rural landscapes.
- 6. Academic research.** The County established a database to identify and protect the traditional fish species and initiated a project on how to prolong the period of rice and fish symbiosis.

Due to the GIAHS Initiative, the area of rice-fish in Longxian is becoming more economically stable. The fish price from paddy fields has risen from 16 yuan/kg to 30 yuan/kg, and the rice price from the rice-fish system is more than 60% higher than the one from the conventional paddy fields since 2005.

According to statistics, there were only 2,000 tourists visiting Longxuan Village in 2004, whereas in 2006, it turned to more than 10,000 tourists. In 2008, there were three major tourist reception sites in the village, which are all managed by the local people. These are respectively "LongYuan mountain villa" in the top of the mountain area, "Nongjiale" in the village center and "Yujiale" closed to the village entrance. At present, "LongYuan mountain villa" and "Yujiale" run very well, with a revenue of more than 200,000 RMB per year.

The number of tourists and revenue from tourism of Qingtian County

