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Advancing Nature-Based Solutions in China – Water Funds in Hangzhou, Zhejiang Province

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Water Funds are a nature-based solution with growing relevance around the world, thanks in large part to the leadership of The Nature Conservancy. Water Funds are “organizations that design and enhance financial and governance mechanisms which unite public, private and civil society stakeholders around a common goal to contribute to water security through nature-based solutions and sustainable watershed management.” ([TNC Water Funds Toolbox](#))

Since 2014, The Nature Conservancy (TNC) has been working in Hangzhou, China, with Qingshan village to carry out small water source protection projects using the water fund model. The village’s nearby water source, Longwu Reservoir, was built in 1981. It provides drinking water for approximately 4,000 villagers in Qingshan village and surrounding villages. However, the nitrogen and phosphorus levels have been rising and the water quality has been declining since the 1980s due to overuse of fertilizer and pesticides for bamboo plantations in the upstream catchment area.

TNC worked with Wangxiang Trust and Alibaba Foundation to launch the first water fund in China in 2015, the Shanshui Water Fund. It was the first Trust in China with a public welfare purpose for small source water protection. The Shanshui Water Fund supports the Longwu Reservoir Protection Project in Qingshan village directly by establishing a market-oriented, diversified and sustainable ecological compensation mechanism as well as by building a nature education center and attracting eco-tourism. With an initial investment of \$50,000 from the Alibaba Foundation, the water fund earns its ongoing funding from the sale of organic bamboo shoots, eco-tourism, and educational activities. After 6 years, Shanshui Water Fund has not only improved the water quality of the Longwu reservoir, but notably increased the income of local residents participating in the project. In addition, Qingshan village has become a well-known eco-village, attracting tourists from Hangzhou, as well as those from further afield in Shanghai and Beijing.

The Shanshui Water Fund is governed by a multi-stakeholder advisory board, which includes TNC, farmers’ representatives and a food company. Farmers can enter a five-year contract for the fund to manage their forestland via a property right trust. Wanxiang Trust serves as the legal trustee and the main management body of the water fund. TNC serves as an advisor for trust execution and helps with the design of the watershed conservation model as well as forestland management planning, conservation impacts assessment and coordinator of public resources. 43 households in Qingshan Village have signed the contract since 2015, covering 70% of the forestland near the watershed catchment area (around 82 acres). The contract forbids the use of fertilizers and herbicides in this area and farmers can receive compensations in return.

To expand the water fund model to a larger scale, as well as to protect Hangzhou's most important water source—Qiandao Lake, Wanxiang Trust, supported by TNC and with an initial \$1.6 million fund from Alibaba Foundation and Minsheng Life Foundation, established the second trust on December 31, 2017. It attempts to improve the management of more than 165 acres of agriculture near Qiandao Lake sub-watersheds, which eventually will supply water to 10 million people in Hangzhou.

As the water fund model spreads to different contexts around the world, highlighting its relevance to communities facing water supply and quality impacts in the face of climate change in China and elsewhere can illustrate how funding and stakeholder engagement mechanisms can be adapted and scaled up the world over.

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