empowering locally-led sustainable management of

# agriculture

introducing a replicable communitybased conservation solution to restore and protect wetlands, water supply, and other environmental conditions linked to farming



## our vision for impact

Starting with cotton farming in China, Rare seeks to catalyze and empower the world's small-scale farmers to adopt organic cultivation practices, which will:

- build natural resource management capacity
- boost environmental and social resilience to climate change
- improve livelihoods and economic security
- conserve critical habitats and biodiversity

### the urgency to act

Increasingly, China's economic growth and human development are creating unsustainable burdens on water resources, public health and important ecosystems sheltering biodiversity.



#### Clean, Fresh Water

China's biggest source of water pollution comes from agriculture. The country accounts for one-third of the world's annual fertilizer and pesticides usage (47 million tons), and rainfall sweeps 65% into rivers, lakes, and underground water supplies. Conventional cotton cultivation is one of the most damaging practices to the environment: 2.4% of the world's crop land is planted with cotton, and yet it accounts for 24% and 11% of the global sales of insecticide and pesticides respectively.<sup>1</sup>



#### **Biodiversity and Habitat**

Four of China's ten rarest species depend on rivers and wetlands for their survival, while others, like the finless porpoise, face steep declines and will soon be threatened with extinction. Today, there are just under 1,000 such porpoises left in the wild, with one dying every 72 hours.<sup>2</sup>



#### **Jobs**

Of the 200 million small-scale farmers in China, 20 million depend on cotton cultivation for their primary livelihood.

### how we work makes the difference

Rare inspires both local and national support for sustainable, organic farming practices by tapping into the economic, social and environmental benefits of organic agriculture. Rare leverages our proven community mobilization expertise and forms private sector partnerships that strengthen the economic and financial incentives for behavior change.

### where we work: china

Rare currently works with partners to implement its sustainable agriculture solution in China, one of the 12 mega-biodiverse countries in the world and the world's largest producer of cotton. A variety of technical and political factors combine to indicate the likelihood of success, namely the urgency/need, high demand for a solution (i.e., an invitation to partner), and a strong fit with how Rare works.

### origin of the solution

Rare's sustainable agriculture program evolved from an organic farming pilot project in China's Tian-e-Zhou (TEZ) Oxbow Nature Reserve, a wetland in the Yangtze basin in Hubei Province, adjacent to the Shishou Elk and Finless Porpoise Nature Reserves. On roughly 100 acres of land, the farmers planted corn, cotton and soybean, following organic farming methods and receiving training on organic cultivation.

# measuring impact

Rare uses a methodic and collaborative approach to gather data at its sites, creating a pool of scientifically significant data across nine indicators and the following three categories:

- · ecosystem health and biodiversity
- · economic and financial stability
- social well-being

Regular data monitoring and analysis enables rapid program assessment, ongoing learning, and adaptive management approaches that benefit local communities, partners and the broader scientific/conservation community.



At Rare, we believe that conservation's greatest challenges are the result of human behaviors – and, so too are the solutions. Unique as a global conservation organization, we use our expertise in behavioral science to empower community-led adoption of new sustainable behaviors and solutions that improve livelihoods and biodiversity.

For nearly 40 years, we have worked with partners to spark hundreds of community campaigns that have led to movements around the world. These campaigns have provided solutions to some of the most urgent global conservation threats of our time, like overfishing, deforestation, contaminated freshwater and unsustainable agricultural practices, all of which impact wildlife, habitat, food security, climate resilience and economic and social stability.





http://wwf.panda.org/about\_our\_earth/about\_freshwater/freshwater\_ problems/thirsty\_crops/cotton/

<sup>2.</sup> http://wwf.panda.org/wwf\_news/?208120/Yangtze-finless-porpoise-population-nosedives-to-1000