

## NBS Good Practices from Chinese government

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### Abandoned shrimp pond reforestation and sustainable development

#### 1. Background

Since the 1980s, shrimp farming has emerged in tropical and subtropical regions of Asia and South America. The construction of shrimp ponds has resulted in significant loss of coastal wetlands such as mangroves, seagrass beds and coastal marshes, resulting in ecosystem degradation, reduced biodiversity and many social problems. Since when, the construction of shrimp ponds has caused the disappearance of 1.4 million hectares of mangroves worldwide. Driven by economic interests, high-density farming leads to frequent illnesses, and shrimp ponds are often abandoned after a few years of use. Rehabilitating abandoned shrimp ponds, while recovering the structure and function of ecosystems, absorbing carbon dioxide, improving the livelihoods of local residents and practitioners, is related to the sustainable development of coastal areas.

More than 50% area of a shrimp pond is suggested to be restored to mangroves or coastal marshes, some waters will be reserved. Crabs, shellfish, worms, etc. will be cultured under the forest, fish and shrimp will be cultured in the waters, making the shrimp ponds gradually restored to semi-natural ecosystems. The system will absorb greenhouse gases, and continuously produces ecological products, discharges eggs and larvae to the sea simultaneously. The system can be also used as an ecotourism destination.

#### 2. The implementation time

Since 2010s in China

#### 3. The implementation stage

Currently in a small-scale demonstration phase.

#### 4. Stakeholders

Stakeholders of existing projects: Panjin City, Zhuhai City, Beihai City, Fourth Institute of Oceanography, Ministry of Natural Resources, Guangxi Mangroves Research Center and other institute, related enterprises

Potential Stakeholders: local governments, communities, enterprises in regions where pond culture is developed, as well as research institutes

#### 5. Beneficiaries

Farmers, local communities, tourists, consumers.

#### 6. Total investment

Not more than 150,000 RMB / hectare.

#### 7. Matching funds and capital composition

Enterprise funds, government technological and ecological restoration funds.

## **8. Project level**

Local.

## **9. Mitigation and adaptation to the effects of climate change**

Absorb carbon dioxide, reduce nitrous oxide emissions, increase fisheries and replenish sea areas.

## **10. Social, economic and environmental impacts**

Promote the transformation of community industry, improve economic efficiency, boost ecological farming and ecotourism industry, improve biodiversity and the capacity to deal with climate change.