



Solving the Sustainability Challenges at the  
Food-Climate-Biodiversity Nexus

# Developing aquaculture for food, climate mitigation and biodiversity

China Team



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## **Developing aquaculture for food, climate mitigation and biodiversity**

Please list the case study's main 3 research questions here.

1. How do seaweed farming and climate change interact?
2. Can seaweed farming help enhance biodiversity?
3. What is the expansion potential of seaweed farming in China and globally?

## Developing aquaculture for food, climate mitigation and biodiversity

Please list the main deliverables of this case study.

### 1. Regional and global datasets:

- Production potential of seaweed farming under different climate scenarios
- Carbon sequestration potential of seaweed farming

### 2. Publications:

- Global Estimates of Suitable Areas for Marine Algae Farming
- Carbon sequestration potential of seaweed farming
- Assessing the impact of seaweed farming on biodiversity based on eDNA analysis

### 3. Policy memo for seaweed farming planning

## **Developing aquaculture for food, climate mitigation and biodiversity**

Please mention the main methodological approaches used for this case study.

1. Species Distribution Models
2. Individual-based and ecosystem-based growth modeling
3. Scenario modeling
4. eDNA