



Implementing the Strategic Action Programme for THE SOUTH CHINA SEA AND GULF OF THAILAND (SCS SAP) Project

Second Roundtable of Local Representatives
of the SCS SAP Project
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Chart on Practices and Lessons Learnt at the Site/local Level

[Jitimen Estuary of the Pearl River estuary Site & China]
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About my site

❖ Total area (ha) and population

Total area is 4988 ha, including 435.26 ha of coastal wetlands.
456,000 people (see the Fig. (a)).

❖ Specific indigenous feature, if any

The reed-mangrove community constitutes a distinctive ecological landscape at Jitimen Estuary (see the Fig. (b)).

❖ Area (ha) of critical habitats (Mangroves; Coral Reefs, Seagrass Beds, Tidal flat...)

The area of mangroves is 18.51 ha, and the mangrove-salt marsh community covers 36.86 ha.

❖ Main economic activities

Aquaculture, eco-tourism, nature education, etc.

❖ Threats to coastal habitats

Waves erode the coast.

❖ Environment concerns (pollution, habitat loss and degradation, resource decline...)

Pollution. The development of urbanization and **population growth** have led to an increase in the discharge of industrial wastewater and domestic sewage, thereby raising the risk of water pollution.

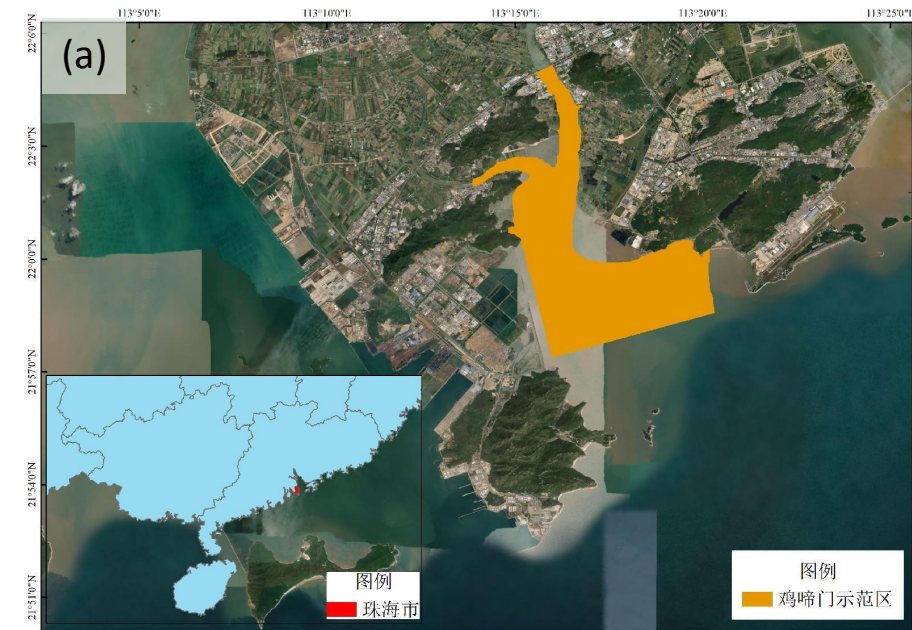


Fig. (a) The site location map.

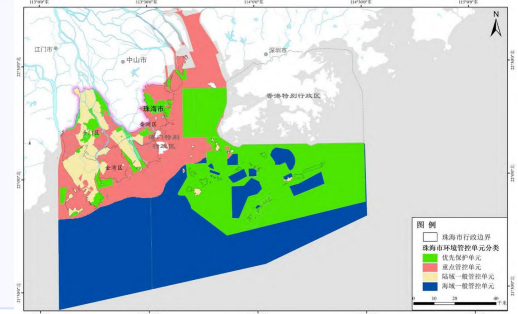


Fig. (b) The reed-mangrove community.

Highlights of key activities for conservation & sustainable use of coastal habitat and/or fisheries & land-based pollution management

Strengthening the zoning and control of ecological protection and restoration

- Strengthen planning leadership.
- Promote ecological restoration.
- Strengthen monitoring and early warning.



Strengthen the management of the aquaculture industry

- Strictly regulate aquaculture.
- Actively promote green aquaculture.
- Advance the treatment of wastewater from aquaculture.



Strengthening the management of land-based pollution

- Action to inspect and rectify sewage discharge outlets.
- Action for Improving Water Quality of Rivers Entering the Sea.
- Strengthen the management of marine debris.



Highlights of key achievements

1/ Approval and implementation of plans for sustainable resources management & use, and land-based pollution management

❖ **The formulated and implemented sustainable resource management and utilization plans, as well as the effectiveness of land-based pollution control efforts.**

- (1) In 2021, the Site was included in the **ecological protection red line**. This red line was integrated with the national land space planning to strengthen the ecological security barrier of the coastal wetlands. As a result, 435.26 ha of coastal wetlands in the Site were protected.
- (2) In 2024, the "**Zhuhai Biodiversity Conservation Strategy and Action Plan (2023-2030)**" was issued, strengthening the protection of the coastal wetlands, which is a key area for biodiversity.
- (3) The coverage rate of vegetation in the coastal wetlands of the Site, the quantity and variety of algae and shellfish in the intertidal zone, and the number of birds all show an increasing trend. The quality of seawater has been improved.



Zhuhai has a diverse range of ecosystems. Fig. (a) shows the mangroves in the Zhuhai Qiao-Danggang Island Provincial Nature Reserve, and Fig. (b) shows the Chinese white dolphin.

Highlights of key achievements

2/ Reform of regulations or management approach for ecosystem sustainable use and land-based pollution prevention

Six regulations related to ecological protection have been promulgated. Among them, the "Zhuhai Economic Special Zone Mangrove Protection Regulations" came into effect on Feb. 2, 2025, pioneering the "zone-based management + ecological restoration" mechanism.

3/ Engagement of related stakeholders

(1) **Government departments:** Including *The Department of Natural Resources of Zhuhai City, The Department of Ecology and Environment, etc.*

(2) **Non-governmental organizations (NGOs):** Birdwatching associations, research institutions and universities, etc.

(a)



(b)



Fig. (a) Group photo at the research site, and Fig. (b) Sampling sites for the survey of invasive alien plants.

Highlights of key achievements

4/ Enforcement mechanism and effectiveness

Establish a working mechanism where the government takes the lead and social organizations participate, clearly define the responsibilities, and form a joint force to promote ecological protection and restoration.

5/ Financial mechanism for sustaining conservation and management

- (1) The Zhuhai marine ecological restoration project implemented in the demonstration area has received 250 million yuan of central government financial support.
- (2) The key marine area comprehensive governance campaign implemented in Zhuhai mainly relies on financial resources (such as central, provincial and municipal fiscal funds, etc.).



Other ecological restoration cases in Zhuhai. Fig. (a) shows the key bay renovation project in *Dong'aowan*, and Fig. (b) shows the ecological restoration of the beach in *Xiangluwan*.

Lesson learnt (challenges and solution to address challenges)

❖ Challenges

- (1) Impact of climate disasters
- (2) Storm surge erosion
- (3) Population growth leads to an increase input of land-based pollution.
- (4) Threatened by invasive alien plants.

❖ Solution to address challenges

- (1) Implementing marine ecological restoration projects to restore mangrove salt marsh wetlands.
- (2) Setting up protective nets around the periphery of the mangrove restoration area has played a positive role in the implementation of habitat modification.
- (3) Carry out the construction of artificial rocky intertidal zones to effectively purify stormwater and sewage runoff.
- (4) Conduct an investigation of invasive alien plants in the Site, providing a basis for subsequent management.

(a)



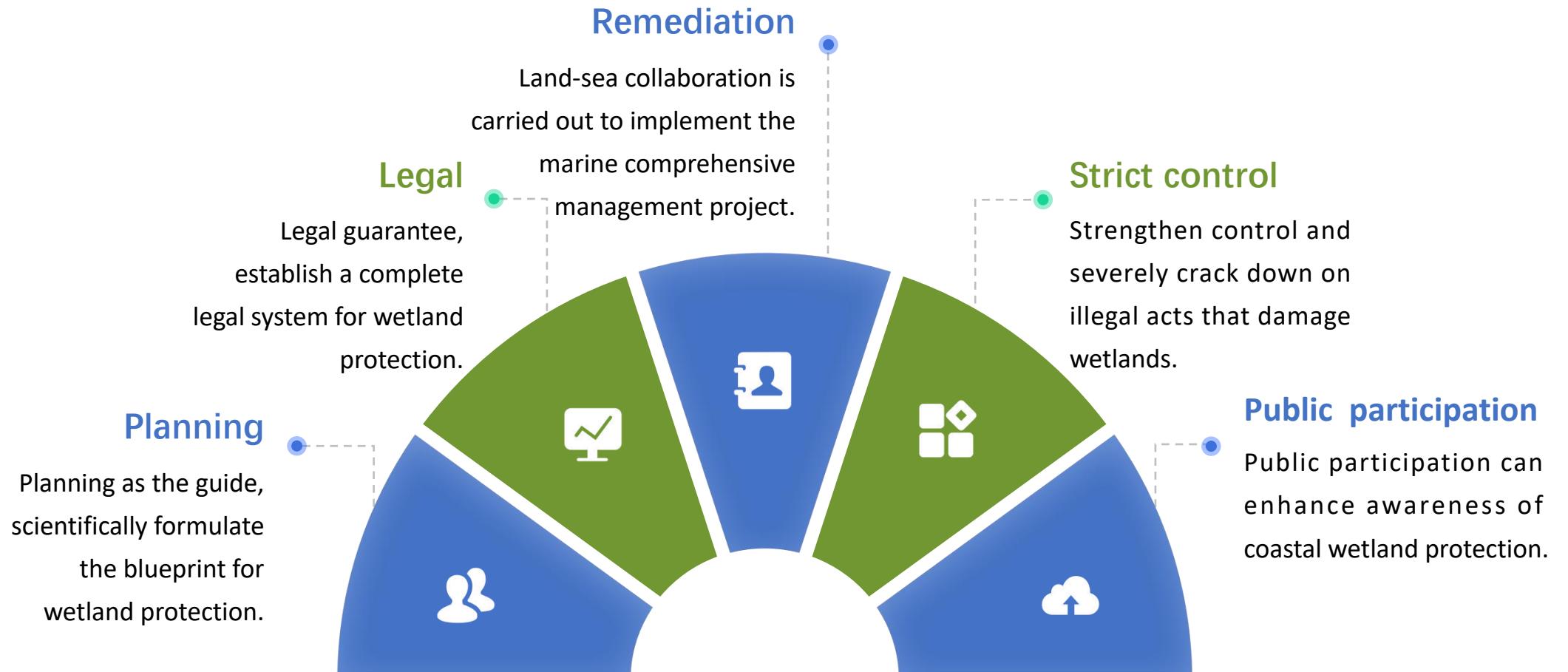
(b)



The left picture shows the invasive alien plants in the demonstration area. Fig. (a) *Mikania micrantha*, and Fig. (b) *Spartina alterniflora*.

Lesson learnt (challenges and solution to address challenges)

The management of coastal wetland protection and restoration in Zhuhai has established a governance system of "planning guidance - legal guarantee - restoration implementation - strict control - public participation", which promotes the overall creation of coastal habitats and the enhancement of ecological functions, effectively prevents the degradation of coastal wetlands. The main experiences can be summarized in the following five aspects.



Lesson learnt (challenges and solution to address challenges)

❖ Case Study

In the Jitimen River Basin, a place that has been voluntarily protected and developed by enthusiastic citizens, "*Swan Kingdom*" has been home to 300,000 birds for years. In 2021, it was recognized as a provincial environmental education base and receives approximately 20,000 visitors for study tours each year. "*Swan Kingdom*" has established a "*government + community + expert*" joint management mechanism, which is a vivid practice of harmonious coexistence between humans and nature, providing an experience model and reference for wetland protection.



The picture of "*Swan Kingdom*". Obtained from the Internet.



This is the Trough Beach of the Site, where there is a distribution of mangrove-salt marsh vegetation communities.