

CONSULTANCY REF.: AFCD/FIS/02/19
CONSULTANCE SERVICE FOR ENVIRONMENTAL IMPACT ASSESSMENT
STUDY FOR DESIGNATION OF NEW FISH CULTURE ZONES
Environmental Impact Assessment (EIA) Report for Establishment of Fish Culture
Zone at Po Toi (Southeast)

1A STAKEHOLDER ENGAGEMENT ACTIVITIES

1A.1 Objectives of Stakeholder Engagement

The objectives of the stakeholder engagement carried out for the Project include the following:

- To build an understanding of the need for the Project and explain the key elements of the Project to stakeholders, to actively seek their views and, address their concerns related to the future Project development and implementation; and
- To ensure transparent, responsive and responsible communications with stakeholders.

1A.2 Engagement Period

Project Profile No. PP-593/2019 was exhibited to the public for comments on 16 October 2019. Comments were received from the public during the 14-day public inspection period of the Project Profile stage. During this EIA Study, engagement with selected stakeholder groups commenced in June 2021 and was continued throughout the study period.

1A.3 Key Comments and Summary of Responses on the Project Profile

A summary of the key comments received from the public on the Project Profile and the responses are listed in *Table 1A.1.1*.

Table 1A.1.1 Key Comments Received from the Public and Responses

Aspect	Key Comments	Responses		
General	Commentors showed their concern on the need of establishing new fish culture zones (FCZs), given that some of the existing FCZs are not active.	The environmental benefits of the Project are provided in Section 2 , which has compared the use of traditional fish farm designs in existing FCZs with modernised fish farm designs to be adopted in the new FCZs. It is anticipated that the new mode of mariculture operations of the Project would reduce environmental impacts on water quality, marine ecology and fisheries, and would be important to support the development of sustainable mariculture operation.		
General	Commenters showed their concern on the environmental impact from the relocation of the fish rafts during adverse weather. Commenters recommended to include the associated environmental impacts of such relocation in the environmental impact assessment.	Impact due to the relocation of fish rafts under adverse weather, such as typhoons or algal blooms would be temporary and the associated impacts have been assessed in Sections 3.8.1.8, 4.5.2.2 and 5.5.2.2 of this EIA Study.		
Marine Ecology	Commenters showed their concern on the impacts of the fish rafts and the associated use of vessels (including generation of underwater noise and potential collision) during the Project's construction and operation on cetaceans including Finless Porpoise. Mitigation measures such as limitation of vessel	According to AFCD's Marine Mammal Monitoring Report 2021/22, the long-term study on marine mammals in Hong Kong shows that, Finless Porpoises (FPs) are commonly found and distributed in the southern and eastern waters of Hong Kong where the Project site is located. FPs usage of marine waters around Po Toi and		

Aspect	Key Comments	Responses
	type and boat speed (e.g. at or below 10 knots), and restrictions on construction and operation period (if any) shall be recommended.	Southern waters of Hong Kong were shown to be low to moderate and no recorded sightings were found within the Project site. Considering that the area affected represents only a small portion of the available habitat for the FPs and a minor portion of an individual animal's movement range, unacceptable impacts on marine mammals are not expected. Mitigation measures for cetaceans including FPs are therefore not necessary. Relevant description is provided in Section 4.5.1.1 & 4.5.1.2 of this EIA Study.
Marine Ecology	Commenters showed their concern on the risk of introducing invasive alien species or non-native species to the local ecosystem and local species during the operational phase of the fish culture zone at Po Toi (Southeast). Commenter suggested to carry out risk assessment on the invasive species and provide mitigation measures in this EIA.	 Impacts of the introduction of invasive species have been assessed in Sections 4.5.2.5 and 4.6 of this EIA Study.
Fisheries	Commenters showed their concern on the environmental impact of the proposed fish culture zone on spawning and nursery grounds of fish and marine creatures and the impact of using additive and drug for fish disease treatment. These were suggested to be assessed in the environmental impact assessment.	Impacts on spawning and nursery grounds of fish and marine creatures and the impact of using additive and drug for fish disease treatment due to the operation of the proposed fish culture zone have been assessed in Section 3 and Section 5 of this EIA Study.
Fisheries	 Commenter recommended to provide standard operations for mariculture with reference to AFCD (2009) Environmental Management of Aquaculture. 	Recommendations to provide standard operation for mariculture are mentioned in Appendix 2A.
Marine Ecology and Fisheries	 Commenters suggested that the ecological impact assessment of proposed neighbouring fish culture zones and existing fish culture zones shall be considered. 	Assessment on cumulative and residual impacts of the Project site and other proposed and existing FCZs have been mentioned under Sections 4.7 and 4.9 and Sections 5.7 and 5.9 of this EIA Study respectively.
Water Quality and Noise	Commenter suggested to provide details on the use of pellet feed and the handling of chemicals and excess feed. In addition, commenter suggested to include allowable levels of pollution and noise, etc. in this EIA.	The use of pellet feed and handling of chemicals and excess feed are discussed in Section 3.5.2, 3.8.3 and 3.8.4 and 3.9.2 . The compliance levels of water quality of the Project are also discussed in Section 3 of this EIA Study. Other impact assessments, such as for noise and air

Aspect Key Comments		Responses		
		were not conducted as the Project site is located in a remote location, no noise and air sensitive receivers are identified in the vicinity of the Project site.		
Water Quality and Waste	Commenters showed their concern on the environmental impact from human activities on the fish rafts and additional structures on the fish rafts. It was suggested to be assessed in the environmental impact assessment.	Impacts from human activities on water quality and waste management have been reviewed and assessed in Sections 3.7 , 3.8 , 6.3 , 6.4 and 6.5 of this EIA Study.		
Waste	Commenters showed their concern about the disposal of wastes related to fish farm construction and operation activities. It was suggested to impose effective measures to avoid illegal and inappropriate disposal of wastes.	Measures to avoid illegal and inappropriate disposal of wastes have been discussed in Section 6.5 of this EIA Study.		
Visual	Commenters showed their concern about the potential adverse visual impact of the Project on hikers and tourists travelling in the vicinity.	Visual impacts of the Project site on recreational users have been assessed in Section 7.8 of this EIA Study, and the Study showed that there is no adverse visual impact.		

1A.4 Key Comments and Summary of Responses during EIA Stage

1A.4.1 Key Stakeholders

Since June 2021, a series of briefings and meetings have been arranged with interest groups and stakeholders as listed in *Table 1A.1.2*.

PowerPoint presentations were used as tools to inform the stakeholders and enhance their understanding of the Project.

Table 1A.1.2 Types of Stakeholder Consulted

Stakeholder Type

- Fishermen Groups
- Mariculture Groups
- Green Groups
- Legislative Councillors
- Rural Committee Representatives

1A.4.2 Comments and Responses

This section provides a summary of the key comments and suggestions relating to the Project made by those stakeholders consulted.

1A.4.2.1 Water Quality

Stakeholders were concerned about the potential impacts to water quality from the Project, in particular, the generation of wastewater, carrying capacity and water quality monitoring of the Project site.

The key views relating to water quality, and responses are summarised in *Table 1A.1.3*.

Table 1A.1.3 Key Views and Responses Relating to Water Quality

Ke	Key Views		Responses	
•	Domestic wastewater produced by personnel during future operation on the fish farm should be treated properly with modern technology to minimise potential impacts of water pollution.	•	Impact of domestic wastewater production by personnel has been assessed in Section 3.8.4 of this EIA Study. As the Project operation would be typically manned minimally onsite and relies mostly on automated / remote control, generation of domestic wastewater would be limited.	
•	How should the carrying capacity of the Project site be interpreted?	•	The carrying capacity of the Project site should be considered as the maximum standing stock of fish that can be kept under sustainable environmental conditions within the Project site area.	
•	Will the water quality monitoring data of the Project site will be available to the public?		Water quality monitoring data of existing FCZ (e.g. Tung Lung Chau FCZ) has been published online for public's reference and the same arrangement would be applied to the Project site.	

1A.4.2.2 Marine Ecology and Fisheries

Stakeholders were concerned with the potential impacts to marine ecological and fisheries resources, and the cumulative impacts from concurrent operation of nearby existing and proposed FCZs.

The key views relating to marine ecology and fisheries, and responses are summarised in *Table* 1A.1.4.

Table 1A.1.4 Key Views and Responses Relating to Marine Ecology and Fisheries

Key Views	Key Views		Responses	
capture fi stakehold	of the Project on nearshore isheries and mariculture ders, particularly near the ite should be considered.	•	Impacts which are related to environmental aspects of fisheries have been evaluated in Section 5 of this EIA Study.	
coral spe	coral habitats, including rare cies in the vicinity of the ite been assessed?	•	Coral habitats, including potential habitats with rare corals have been assessed in Section 4.3.3, 4.3.4, 4.3.5, 4.5 and 4.6 of this EIA Study.	
arising fro	any plans to deal with issues om marine fouling with the ment of the FCZ?	•	Good mariculture practices will be implemented at the FCZ, such as regular fish net maintenance to prevent and minimise impacts from marine fouling. Also, new methods of cleaning fish nets are currently being explored in the Tung Lung Chau FCZ and will be considered at the Project site if applicable.	
risks to th	sh nets / cages pose potential ne Finless Porpoises present inity of the Project site?	•	With reference to the latest facilities used in Tung Lung Chau FCZ, the new fish nets / cages are very densely knitted to provide a sturdy structure and adverse impacts on marine mammals are not anticipated. It is expected that the new FCZ facilities will be monitored by AFCD.	
	onstruction and operation of avoid peak seasons of Finless s?	•	Impact of FCZ construction and operation on Finless Porpoises has been assessed Section 4 of this EIA Study, and it is determined that mitigation measures, such as avoidance of FP peak seasons are not required.	

Key Views	Responses	
Will the harvesting of mariculture products cause potential impact on nearby tern colonies or seabirds of concern during their breeding season?	A review on the impacts to the White-Belled Sea Eagle (WBSE) has been provided in Section 4.3.3.9 . As the nesting grounds of WBSE in Sung Kong at the vicinity of the Project site has a relatively low usage compared to other nesting grounds in Hong Kong, the impact of the Project on the WBSE is therefore not anticipated. Fish cages or nets that would be used in the new FCZ would be properly secured and maintained in the fish farm and the harvesting of mariculture products would not result in free floating nets or other equipment that could pose threats to the seabirds e.g. entanglement. The presence of fish farm is not expected to pose threats to seabirds.	

1A.4.2.3 Waste Management

Zone at Po Toi (Southeast)

Some stakeholders were concerned about the treatment of potential waste generated by the Project.

The key views relating to waste management and responses are summarised in *Table 1A.1.5*.

Table 1A.1.5 Key Views and Responses Relating to Waste Management

Key Views		Responses		
What will be the wa arrangements of fis general waste prod workers?	h farms, such as	a e c v t r	New mariculture facilities are expected to be mostly automated, with minimal manual support. Proper-labelled enclosed waste containers will be provided to store general refuse, floating waste, recyclables and operation wastes generated at the Project site to avoid waste being hrown into the sea. The collected waste will also be regularly transported to landside refuse collection points / authorised recyclers via marine vessels.	

1A.4.2.4 Visual

Some stakeholders were concerned about the potential visual impact during the construction and operation of the Project.

The key views relating to visual, and responses are summarised in Table 1A.1.6.

Table 1A.1.6 Key Views and Responses Relating to Visual

Key Views	Responses
Will the potential impact of glare associated with	The potential impact of night lighting and glare
light sources generated from the Project	has been assessed in Section 7.8.5 of this EIA
considered in this EIA Study?	Study.