

**For discussion  
on 14 November 2017**

**Legislative Council**  
**Panel on Food Safety and Environmental Hygiene**

**Progress Report on the Implementation of the  
Sustainable Fisheries Development Fund**

**Purpose**

This paper updates Members on progress of the implementation of the Sustainable Fisheries Development Fund (SFDF).

**Background**

2. The fisheries industry in Hong Kong comprises capture fisheries and aquaculture fisheries. The industry makes an important contribution to Hong Kong by maintaining a steady supply of fresh and quality fish products to local consumers.

3. The industry has been facing increasing challenges, most notably the lack of manpower due to an aging workforce in both the capture and aquaculture fisheries; impact of reduced areas in the Hong Kong waters due to marine works projects and decline in marine resources affecting the operation and income of Hong Kong's capture fishermen; shortened period for capture fishermen's operation in the South China Sea due to fishing moratorium; threats to the production of marine fish culture arising from global climate change that increases the chance of inclement weather and red tides; and severe competition from imported aquatic products in the market, etc.

4. In 2010, the Committee on Sustainable Fisheries (the Committee) established by the Government to study the long-term goals, the direction and feasible options for sustainable development of the local fisheries industry, recommended among others that the Government should assist the fisheries industry in developing or switching to modernised and sustainable modes of operation through the provision of technical and financial support. The Government has taken on board the recommendations of the Committee over the past few years. In the face of the challenges set out in paragraph 3 above, the industry's future lies not in pursuing increase in productivity, but in modernising their operations to enhance efficiency and switching to high

value-added operation / products in order to attain a sustainable mode of development.

## **SFDF**

5. Against the above background, the Government established in 2014 the \$500 million SFDF to provide the industry with financial assistance for carrying out research and development programmes that will help improve the operating environment and competitiveness of the industry. Depending on the nature of individual projects, new technology and practices developed in funded projects would have to be shared within the fisheries industry in an open, transparent and non-exclusive manner, and the final report of all projects would be made available for public reference to ensure that the industry as a whole could benefit from the project outcomes. Progress of the implementation of SFDF is set out in paragraphs 6 to 12 below.

### *Projects funded so far*

6. As at end-October 2017, a total of eight applications involving a total commitment of about \$41 million have been approved upon the recommendation of the SFDF Advisory Committee<sup>1</sup>. A list of the approved projects is at **Annex**. Among the approved projects, six seek to promote the development of aquaculture and two on fisheries-related eco-tourism. Project proponents include companies established by fishermen, local non-profit-making organisations and universities in collaboration with fisheries associations, as well as local universities jointly with fish farmers. Project duration ranges from two to five years and one project is expected to be completed in early 2018. Some projects have already shown encouraging preliminary results.

7. For instance, the “Mariculture Using Enclosure Net Cages Project” is carried out by a local fisheries company formed by a few former trawler vessel owners who have ceased their fishing operations after the ban on trawling in Hong Kong waters<sup>2</sup>. With the funding support of SFDF, these fishermen culture white flower croaker (mainly for its swim bladder to produce high value fish maw) together with two other species, namely giant

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<sup>1</sup> The SFDF Advisory Committee is appointed to advise the Director of Agriculture, Fisheries and Conservation on the overall strategy for funding projects under SFDF, and the vetting of applications.

<sup>2</sup> Trawling is a non-selective fishing operation. The trawl ban in Hong Kong waters came into effect on 31 December 2012.

grouper and pompano, in large enclosure net cages extending from the water surface down to the seabed in Cheung Sha Wan Fish Culture Zone. Both the culture system and the species cultured are new to Hong Kong. The successful business and experience of these fishermen is a good example of the feasibility of fishermen switching to more sustainable and high value-added fisheries operations. To transfer the knowhow acquired in this project to the mariculture sector, on-site visits to the fish farm and seminars would be organised for other local fishermen and fish farmers, sharing the valuable experience and technique in culturing the white flower croaker as well as their successful operation of a fisheries company.

8. There are also projects helping fishermen pursue alternative modes of making a living. The “Fisheries-related Eco-tour Guide Training Programme for Fishermen (North-eastern Waters)” and the “Fishery & Eco, Conservation Programme (Cheung Chau Waters)” are conducted by a local non-profit-making organisation in collaboration with local fisheries associations. The projects assist fishermen in developing fisheries-related ecotourism business by equipping them with the necessary knowledge and skills as well as practical experience in operating eco-tours. Aside from providing training to fishermen, the projects also involve the planning and design of new eco-tour routes incorporating fisheries culture and conservation elements and formulation of publicity plan of the tours. So far, some 110 fishermen trained under the two projects have been participating in the operation of the eco-tours. In addition, seminars would be held for sharing the practical information about how to plan, design, promote and operate eco-tours so that the knowledge and experience of operating an eco-tour business can be shared with the trade.

9. Other approved projects involve the application of modern technology to enhance the quality of local aquatic products through setting up a depuration system to enhance the safety and quality of local oysters; provision of assistance to fish farmers for obtaining organic accreditation of their culture operation; development of fish fry hatchery and fry culturing technique for marine fish; and the use of local food waste to produce low cost pellet feed for the local mariculture sector.

10. Overall, we are pleased to see that SFDF could bring new techniques and facilitate the industry to switch to high-value operations. The overall competitiveness of the fisheries industry will benefit from the experience and knowledge sharing by the project owners.

### *Procurement of modern equipment*

11. While some modern equipment for fish culture and capture fisheries has emerged in the market in recent years and is being gradually adopted in other places, some of the small-scale family-based local fisheries operations are unaware of such equipment and continue their traditional mode of operations. To promote the modernisation of the fisheries industry and encourage the adoption of more efficient and newer equipment, having considered the view of the industry, the SFDF Advisory Committee has recently supported a proposal to allow SFDF applicants to acquire equipment that is partially funded by SFDF for use by fishermen / fish farmers in their fishing vessels or fish farms<sup>3</sup>. The Agriculture, Fisheries and Conservation Department (AFCD) is currently making preparation for the implementation of the proposal.

12. AFCD has been promoting the good use of SFDF through the established liaison network with the fisheries community. To facilitate interested parties to make applications, AFCD will continue to provide applicants with technical support in preparing applications and explore ways to simplify the application procedures with the advice of the SFDF Advisory Committee.

### **Other support measures**

13. While SFDF helps drive the modernisation of the local fisheries industry with the provision of funding support, the Government also implements other support measures to create a conducive environment to complement SFDF with a view to helping the industry develop towards high-value operations.

### *Training*

14. AFCD has been providing tailor-made, free training courses and seminars to assist fishermen in developing sustainable fisheries and related operations. These training programmes include lectures and practical sessions to help fishermen switch to sustainable practices, upgrade their skills and acquire the latest fisheries knowledge such as on fisheries maritime safety and the latest rules of operating fishing vessels on the Mainland. Since 2010, more than 90 training courses and seminars have been organised for over 1 900 fishermen.

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<sup>3</sup> The grant will cover up to 80 per cent of the cost of the equipment acquired, capped at \$30,000 for each fisherman / fish farmer. To minimise the chance of abuse of public funding and help ensure that the equipment acquired will be put to productive use the beneficiary (i.e. individual fisherman / fish farmer) is required to bear at least 20 per cent of the cost of the equipment.

### *Monitoring and Management of Red Tides*

15. To alleviate the impact of red tides on the marine fish culture industry, AFCD has implemented a phytoplankton monitoring programme aimed at early detection of the formation of red tides and issuing timely warnings. Under the programme, AFCD has been collecting samples in different areas of Hong Kong waters on a weekly basis to analyse the planktonic algae in water. More than 3 000 marine water samples are tested each year. AFCD is working closely with the academia on developing advanced phytoplankton monitoring technologies including automated real-time *in situ* microscopic imaging and hydraulic modelling to enhancing the existing monitoring system.

### *Technical Extension*

16. To strengthen the sustainability of aquaculture industry, AFCD conducts adaptive studies on fish husbandry practices and new culture species, and transfers the technology and skills to fish farmers. Technical services such as fish health management and good aquaculture practices programme have been implemented to help fish farmers enhance their farm management and tackle fish diseases commonly found in Hong Kong.

### **Advice Sought**

17. Members are invited to note the content of this paper.

**Food and Health Bureau  
Agriculture, Fisheries and Conservation Department  
November 2017**

**Details of Approved Projects under SFDF**

<b>Project</b>	<b>Government funding involved</b>
<p>(i) “Mariculture Using Enclosure Net Cages”</p> <p>The project involves using large enclosure net cages extending from the water surface down to the seabed for culturing white flower croaker (mainly for its swim bladder to produce fish maw) together with two other species, namely giant grouper and pompano. Both the culture system and the culture of white flower croaker are new to Hong Kong.</p>	\$6.4 million*
<p>(ii) “Fisheries-related Eco-tour Guide Training Programme for Fishermen (North-eastern Waters)”</p> <p>The project seeks to help the fishermen develop or switch to fisheries-related ecotourism business by equipping them with the necessary knowledge and skills as well as practical experience of operating eco-tours.</p>	\$2.3 million
<p>(iii) “Depurated Oyster Project Proposal”</p> <p>The project makes use of a depuration process and a monitoring programme to enhance the safety and quality of local oysters. It seeks to build its own brand, extend the sales network and, in the long run, maintain a stable supply of a variety of oyster products that are safe and fresh for the local market.</p>	\$3.0 million*

<b>Project</b>	<b>Government funding involved</b>
<p>(iv) “Fishery &amp; Eco, Conservation Program (Cheung Chau Waters)”</p> <p>The project helps fishermen switch to recreational fisheries by equipping them with the necessary knowledge and skills as well as practical experience of operating eco-tours. It also involves planning and design of new eco-tour routes and related facilities which will be conducive to the development of new recreational fisheries in the waters of Cheung Chau.</p>	\$2.3 million
<p>(v) “Promotion and Support Scheme on Organic Certification for the Organic Aquaculture in Hong Kong”</p> <p>The project provides assistance to the fish farmers in obtaining organic accreditation and organises activities to enhance public understanding of organic aquaculture and to promote the development of a high-end market for organic aquaculture products.</p>	\$10.5 million
<p>(vi) “Establishment and Demonstration of Recirculation Aquaculture System for Fry Culture on Rafts”</p> <p>The project aims to develop grouper fry culture techniques with the use of a seawater recirculating system on fish rafts and to promote such culture techniques to local fish farmers.</p>	\$3.8 million
<p>(vii) “Safe and Quality Fish Production: Development of High Grade Pellets Using Food Wastes for Three Popular Marine Fish Species”</p> <p>The project makes use of local food waste to produce pellet feed for the local mariculture industry, which will facilitate the sustainable development of the industry and benefit the environment.</p>	\$8.5 million

<b>Project</b>	<b>Government funding involved</b>
(viii) Lai Chi Wo Hatchery Development for Sustainable Fishery in Hong Kong Waters  The project introduces fish hatching and larval rearing techniques in brackish water ponds to supply marine fish fry to the local aquaculture industry.	\$4.4 million
Total amount:	\$41.2 million

\* Projects involving commercial elements will be funded on a dollar-for-dollar matching basis, with the Government's total contribution capped at the applicant's total contribution.