

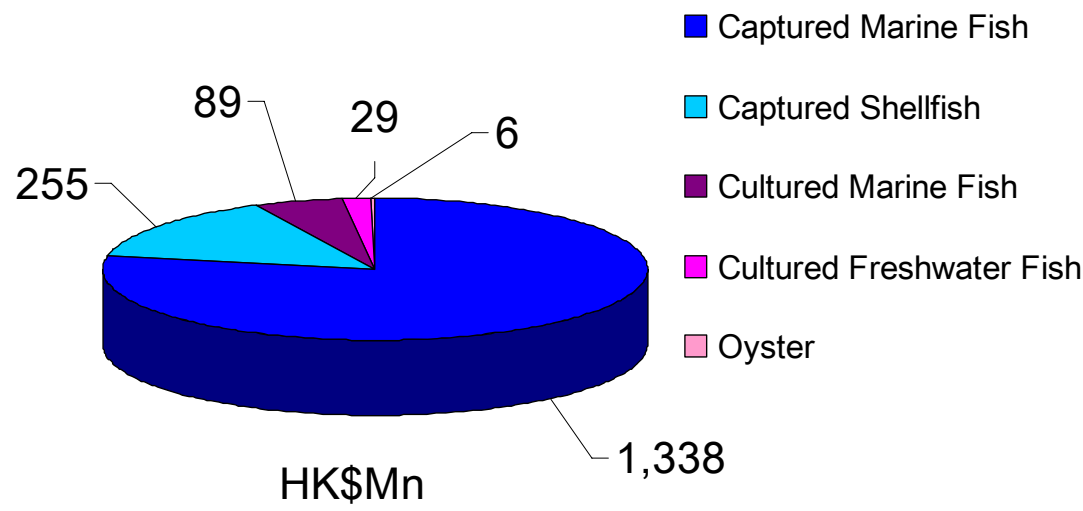
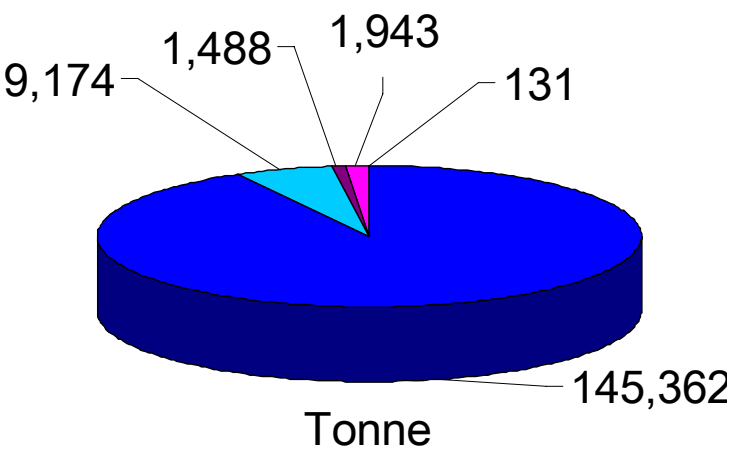
Accredited Fish Farm Scheme in Hong Kong



Chow Wing Kuen
Agriculture, Fisheries and Conservation Department
Hong Kong SAR, China



Hong Kong Fisheries Profile 2006



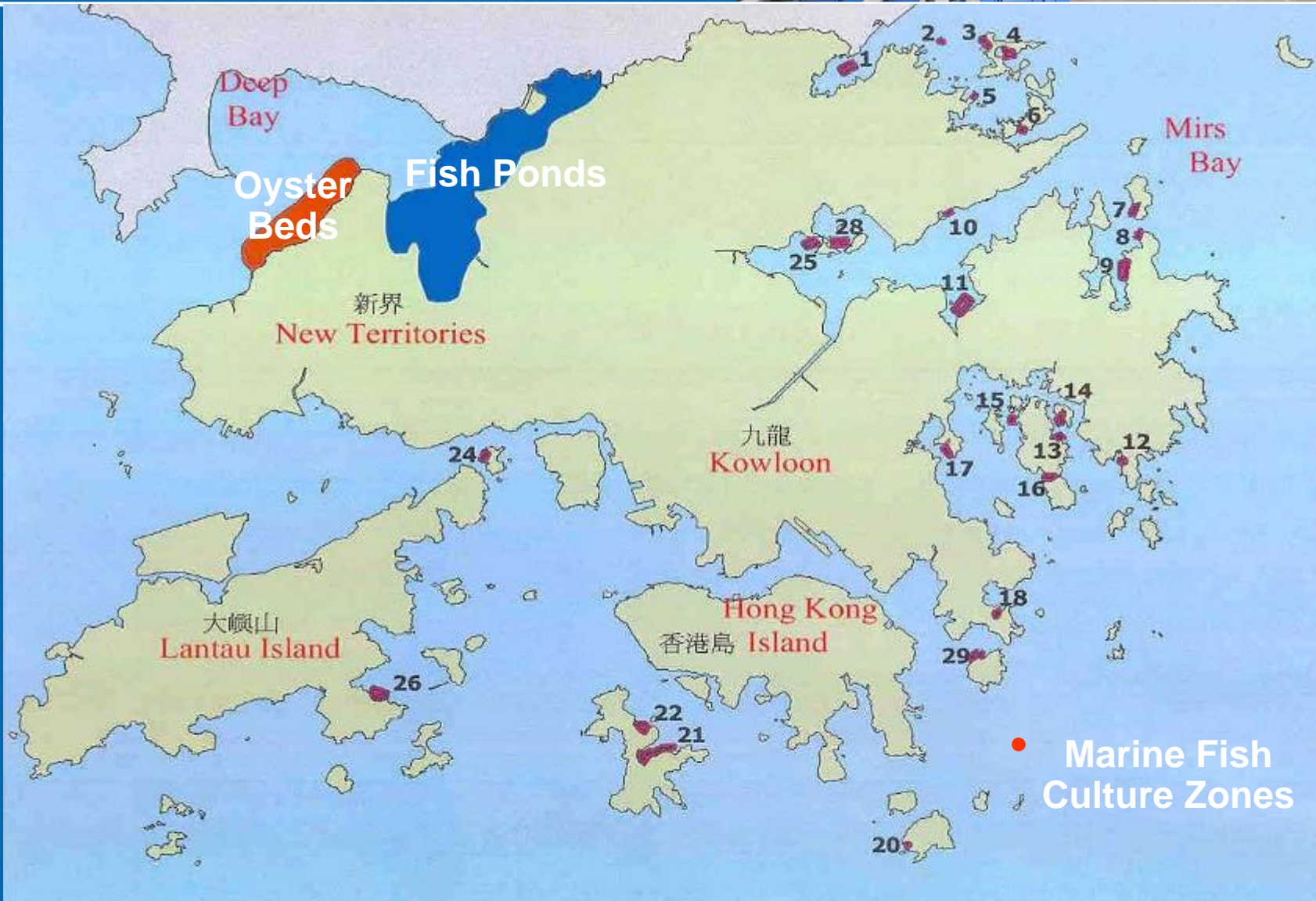
Aquaculture in Hong Kong






Production in 2006

Marine Fish	1,500 t	HK\$90 Mn
Pond Fish	1,900 t	HK\$29 Mn
Oyster	130 t	HK\$6 Mn
Total	3,530 t	HK\$125Mn

Aquaculture in Hong Kong



Common Cultured Species - Marine Fish

Seabreams		Gold-lined seabream
		Yellow-finned seabream
Snapper		Mangrove snapper
		Russell's snapper
		Red snapper
Groupers		Green grouper
		Spotted grouper
Others		Purple amberjack
		Cobia
		Pompano

Common Cultured Species - Pond Fish

Carps



Grass Carp

Big-head Carp

Common Carp

Edible Goldfish

Others



Grey mullet

Tilapia

Spotted Scat

Aquaculture in Hong Kong



The local aquaculture industry is facing two major challenges:

- ✿ competition with imported aquatic food products
- ✿ Increasing public concerns about the food safety of aquaculture products

Accredited Fish Farm Scheme



- voluntary scheme launched in June 2005
- aimed to assist local fish farmers
 - to increase the competitiveness of their aquaculture products and
 - to provide quality and safe aquaculture products to the public



Accredited Fish Farm Scheme



Objectives :

- To enhance the quality of local aquaculture products by introducing "Good Aquaculture Practices" to local fish farms
- To increase transparency of production process by standardization of processes in order to gain consumer confidence in local aquaculture products



Accredited Fish Farm Scheme



Objectives (Cont') :

- To highlight the safety of local aquaculture products by introducing pre-marketing product tests
- To make local aquaculture products stand out by branding



Accredited Fish Farm Scheme



➤ Farm Registration System



➤ Fry Registration System



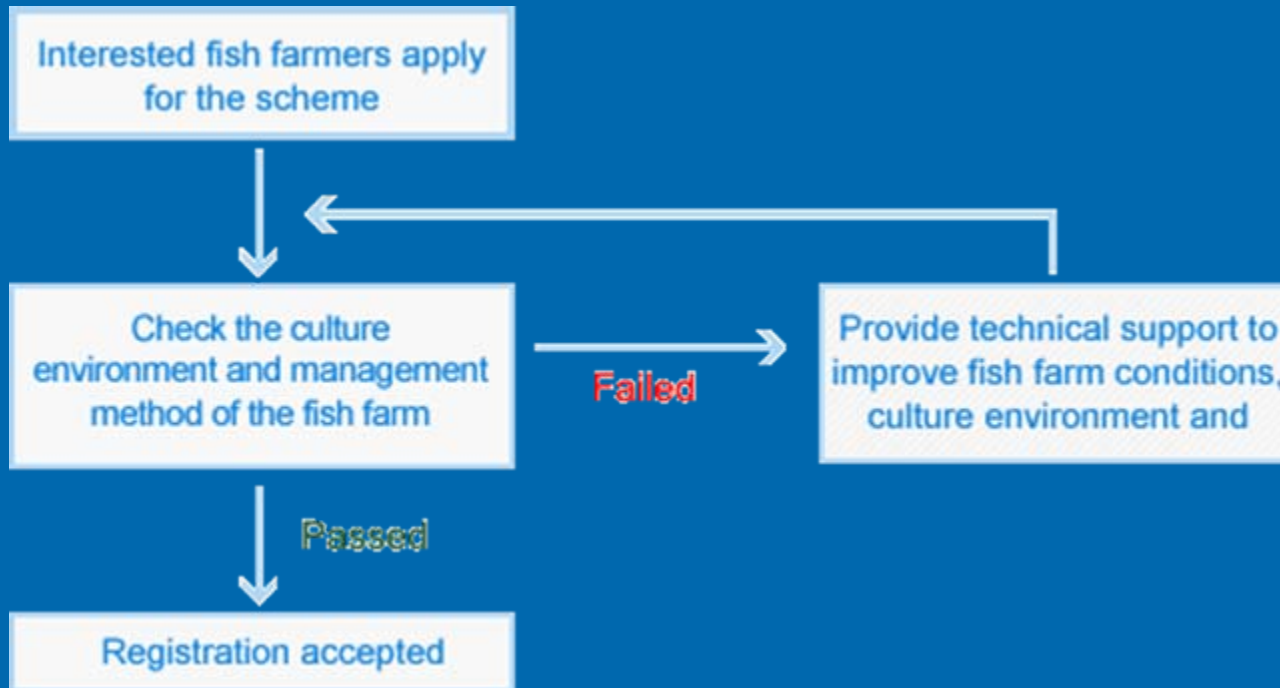
➤ Quality Assurance System



Accredited Fish Farm Scheme



➤ Farm Registration



Accredited Fish Farm Scheme



Basic requirements for farm registration :

- ✓ Regular monitoring of fish health & water quality
- ✓ Regular disinfection of tools
- ✓ Quarantine for newly acquired stocks
- ✓ Separation / proper treatment of sick fish
- ✓ Proper disposal of fish carcass
- ✓ Controlled use of minced fish
- ✓ Appropriate use of feed additives & drugs
- ✓ Maintenance of fish farm management records



Accredited Fish Farm Scheme



➤ Fry Registration

- ✓ register fish stock at the beginning of culture cycle
- ✓ maintain records of the quantity and culturing period of each stock of fish fry
- ✓ sample fry for inspections & laboratory testing
- ✓ prevent the abuse of the scheme by "fish hotels"



Accredited Fish Farm Scheme



➤ Quality Assurance

Regular inspection & monitoring

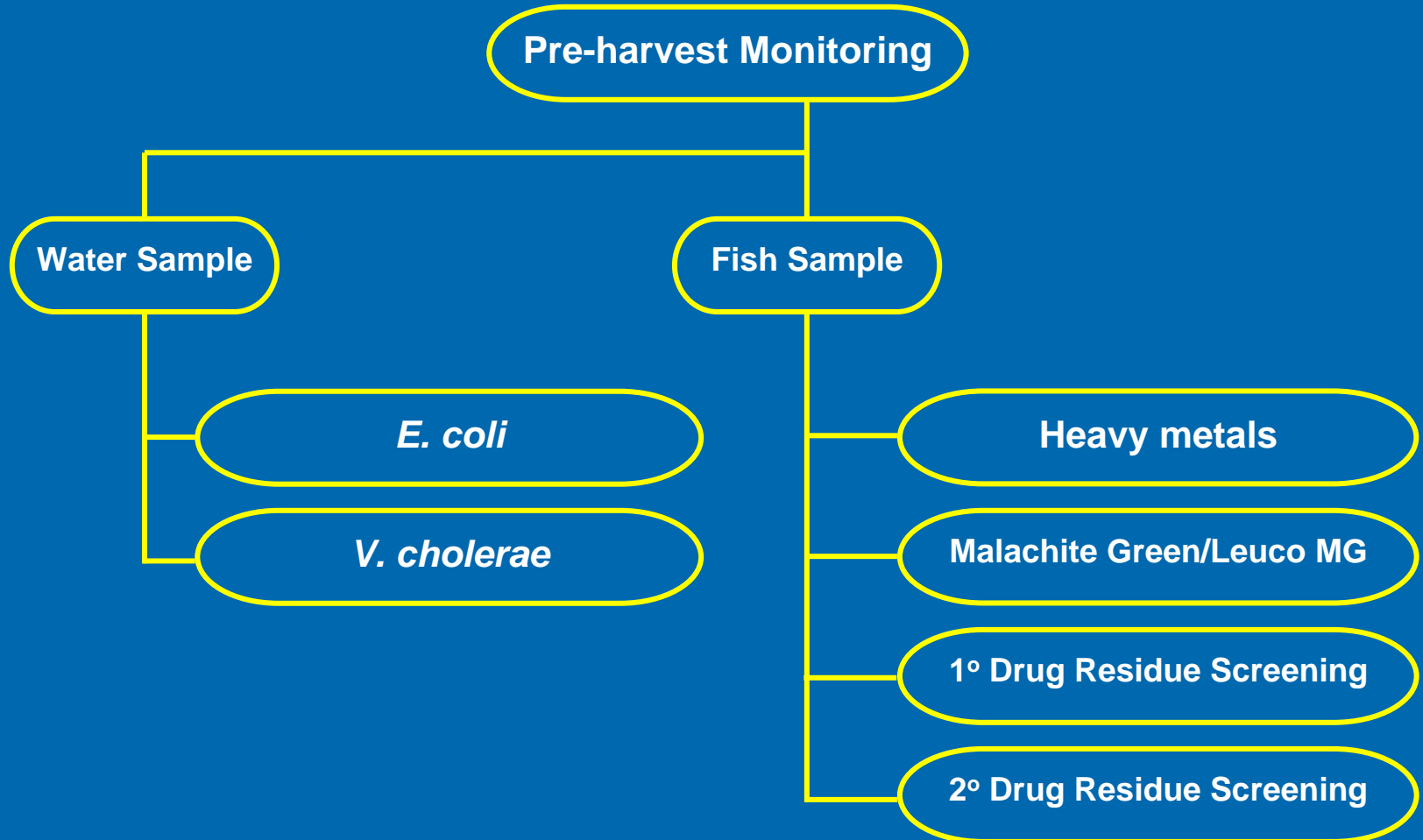
- ✓ Farm hygiene, facilities & equipment, management records, water quality, feed quality, etc.
- ✓ Heavy metal content in fish
- ✓ Drug residues in fish & microbiology tests on water samples



Accredited Fish Farm Scheme



➤ Quality Assurance



Accredited Fish Farm Scheme



➤ Quality Assurance

Pre-harvest monitoring

- ✓ Drug residues
- ✓ *E. coli* & *V. cholerae*
- ✓ Issue Certificate of Accredited Fish
 - fish farm, fish species, quantity of fish stock and quality tests passed



Automatic Microbial Identification System (VITEK)

- rapid and fully automated identification and susceptibility system
- automatically scanned by the photometric sensors under controlled chamber once every hour
- detecting the change in color and turbidity for identification of groups of bacteria



Automatic Microbial Identification System (VITEK)

Testing:

- Gram-negative bacteria (GNI+)
- Gram-positive bacteria (GPI)
- Gram-negative non-fermenting bacteria (NFC)
- Anaerobic bacteria (ANI)
- Yeast (YBC)
- Bacillus species (BAC)
- Neisseria and Haemophilus species (NHI)
- Bioburden (BIO)
- Susceptibility tests of Gram-negative bacteria (GNS)
- Susceptibility tests of Gram-positive bacteria (GPS)

Accredited Fish Farm Scheme



Primary Drug Residues Screening: Premi[®] Test

- *Bacillus stearothermophilus* – very sensitive to many antibiotics & sulphonamide residues
- Meat fluid is added to Premi[®]Test and incubated at 64°C. If antimicrobials residues are present in sufficient amount, no growth of *Bacillus stearothermophilus*. This will be visible by no color change.
- Advantage: screen a broad spectrum of antibiotic at very short time.



Accredited Fish Farm Scheme



Drug residues detected by Premi[®] Test :

β -lactam

- Amoxicillin
- Ampicillin
- Penicillin

Tetracyclines

- Chlortetracycline
- Oxytetracycline
- Tetracycline
- doxycycline

Macrolides

- Tylosin
- Lincomycin
- Spiramycin
- Erythromycin

Sulphonamides

- Sulfapyridine
- Sulfamethoxypyridine
- Sulfathiazole
- Sulfadiazine
- Sulfamerazine
- Sulfaquinaxaline
- Sulfamethoxy-pyridine
- Sulfaquinaxaline

Cephalosporins

- Cefquinome
- Ceftiofur

Aminoglycosides

- Gentamicin
- Streptomycin
- Neomycin

Quinolones

- Oxolinic acid
- Sarafloxacin

Other

- Florphenicol
- Chloramphenicol

CHARM II 7600

Drugs Residue Analyzer

- single sample LSC/LUM counting chamber
- competitive immuno-assay
- rapid detection of antibiotics and pesticides in foods (4 – 6 hr)
- rapid detection of drugs, such as amphenicols, tetracyclines and spectinomycin
- confirm by LC-MS

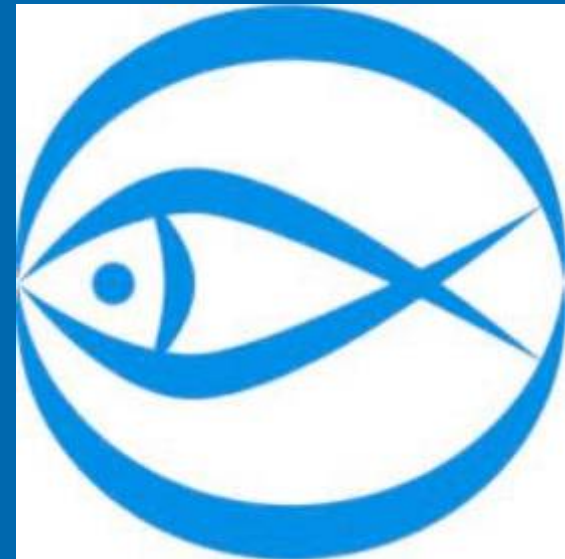


Accredited Fish Farm Scheme



“Accredited Fish Farm Scheme” Brand Name

- Registered fish farm may sell the accredited fish stock under the brand name of Accredited Fish Farm Scheme
- Registered fish farm may also sell the accredited fish through the Fish Marketing Organization in Hong Kong



Accredited Fish Farm Scheme



Fish Tag



- fish tags with serial control number & counterfeit technology



Accredited Fish Farm Scheme



Progress

- 65 registered fish farms
(18 pond fish & 47 marine fish)
- Registered fish farms represent over 11% of the total area of fish farms in Hong Kong
- Registered farm list available on website (<http://www.hkaffs.org>)

漁農自然護理署
優質養魚場計劃
AFCD ACCREDITED
FISH FARM SCHEME



Please select language: [English](#) | [繁](#) | [簡](#) | [Text Only](#)

[Background](#) | [Details of scheme](#) | [Farm Registration System](#) | [Fry Registration System](#) | [Quality Assurance System](#) | [Deregistration](#) | [Branding & Marketing](#) | [Fish Marketing Organization](#) | [Download areas](#) | [Related Links](#) | [Contact us](#)

Accredited Fish
Farm Scheme
Enhance the Quality of
Locally Cultured Fish



What's New

Registered Fish Farms



Background

The local aquaculture industry is facing two major challenges: competition with imported aquatic food products and the lack of consumer confidence in fish and seafood.

Due to the high production costs locally, competition with imported aquatic food products by price is impossible. Improving the quality of

Accredited Fish Farm Scheme



Progress

- Total sales of accredited fish stock above 77,000 cattles (47,000 Kg)
- Retail points at supermarkets, wet markets, accredited fish specialty store & on-line sales and deliver service
- 23 fish species registered in Accredited Fish Farm Scheme (18 marine & 5 pond fish)

Accredited Fish Farm Scheme



Publicity & Promotion

- Local agricultural and fisheries products Fair (December 2005 & Jan 2007)



Accredited Fish Farm Scheme



Publicity & Promotion

- News & TV coverage



Accredited Fish Farm Scheme



Publicity & Promotion

■ Promotion in supermarkets



■ Accredited Fish Specialty Store



Accredited Fish Farm Scheme



Publicity & Promotion

- Press coverage



Local producers trying to compete with mainland fish imports may have something to celebrate under a new government scheme. Photo: Martin Chan

Fishermen hope local brand will catch on

Amy Ling

A new brand of quality-controlled fish will appear in markets in three to six months as part of efforts to help local producers compete with cheaper mainland imports.

Fish farms that meet the standards of the government's Accredited Fish Farm Scheme will be able to sell their fish under the brand.

"We aim to help fish farms stay in business, raise the competitiveness of local fish products and enhance public confidence in local fish," senior fisheries officer Chow Wing-kwan said.

The brand will be promoted by

the Fish Marketing Organisation. To be registered under the scheme, fish farms will have to meet several requirements governing such areas as size of ponds, drainage, source of water and precautions against red tides.

They will have to inform the Agriculture, Fisheries and Conservation Department within 14 days of buying fish fry, after which the department will regularly check hygiene and use of medicine and feed as the hatchlings grow.

A drug-residue test will be used before the fish are sold.

Farms that breach the guidelines will be de-registered.

Fish being sold under the new brand will be identified, possibly with tape on their dorsal fins.

Local fish products face difficulty competing with mainland imports. For example, the market price of mainland mulllet is \$30 to \$12 a catty, compared with \$36 a catty for local mulllet.

So far about 30 of the city's 1,450 fish companies have agreed to join the scheme.

The government has promised to provide technical assistance for small-scale companies that want to join.

Companies believe it won't cost them much more.

"We believe the cost of feeding fish after joining the scheme will increase by only 10 per cent because we have adequate facilities," said Yeung Sai-leung, director of Yeung's Marine Products, the first company to join the scheme.

"We need help from the government with the drug-residue and quality-assurance system the most because the guarantee of public confidence is very important to us."

His company will focus on feeding profitable species.

"We need to feed three kinds of fish but now we'll focus on pangas because it's more lucrative," he said.



Tags offer peace of mind – at a price

Fish from accredited farms go on sale with security badges declaring them safe

Celine Sun

The first government accredited farm fish went on sale in markets yesterday, with anti-counterfeit tags and higher prices.

The products came from 30 local fish farms that qualified under the Agriculture, Fisheries and Conservation Department's accredited fish farm scheme. All were fresh fish, but there were plans to extend the scheme to live fish.

Buyers seemed enthusiastic – despite an increase of two to four dollars per 500 grams – but the department was unable to give figures on the amount of fish sold.

Anti-counterfeit tags, with a picture of a fish in a blue circle, are inside a waterproof casing and fixed to the fin or tail of each fish. Buyers can test the authenticity by breaking the casing and wiping the tag with a wet cloth. If it is genuine the pattern will disappear and return when the tag dries out.



Fish farmers (above) harvest stock yesterday that will appear in markets with tags certifying their safety (left). Photos: Hubert Ng

"With rising concerns over food safety, it is our responsibility to provide the market with quality products," said legislator Wong Tung-kan, who represents the fisheries and agriculture sector.

Pongpano, green grouper and grey mullet were the three main fish species sold at some ParkShop and Walkway supermarkets as well as wet markets.

A customer, who gave her name only as Miss Lu, was among the first to buy the accredited products at a ParkShop store in Aberdeen yesterday morning. She spent \$51.60 on pangas.

"The name of 'accredited fish farms' sounds quite interesting, though I don't really know what it means. As this is something new, I

do want to give it a try," she said. Another customer, Mr. Chung, said labelling was an excellent idea.

"We've heard too many scary stories about mainland fish," he said. "It used to be hard to tell the locally raised fish from those from the mainland, and this can help."

The accreditation scheme was launched in mid-June after a health scare about use of the banned preservative malachite green in mainland fish products.

Under the scheme, farmers must meet certain conditions including the size of ponds, drainage, source of water and protection from contamination, as well as submitting to regular government checks. Tests of drug residues and heavy metals are also part of the scheme before the products are sold in markets.

TALKBACK
Are you willing to pay extra for fish certified as safe?
Send your comments to talkback@corp.com

Accredited Fish Farm Scheme



Marketed Fish Products: green grouper, pompano, brown-spotted grouper, red seabream, red snapper, white blotched snapper, sweetlip, cobia, red drum, black croaker, mangrove snapper, Russell's snapper, emperor red snapper, purple amberjack, head grunt, goldlined seabream, giant grouper, grey mullet & jade perch



Accredited Fish Farm Scheme



Way Forward

- Continue to promote Accredited Fish Farm Scheme to local fish farmers
- Organize technical seminars, e.g., good aquaculture practices, proper use of drugs, etc.
- Explore with the industry to expand the sales channels, e.g., direct sales method and accredited fish specialty wholesale market

THANK YOU

