



**REGIONAL FISHERIES LIVELIHOODS PROGRAMME
FOR SOUTH AND SOUTHEAST ASIA (RFLP) – VIET NAM**

**CURRENT FISHERIES AND AQUACULTURE
POLICIES RELEVANT TO RFLP IN VIET NAM**

**For the Regional Fisheries Livelihoods Programme
for South and Southeast Asia – Viet Nam**

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Table of Contents

LIST OF ABBREVIATIONS.....	4
EXECUTIVE SUMMARY.....	5
INTRODUCTION.....	7
AQUACULTURE.....	7
PROCESSING.....	9
FISHING SECTOR	10
<i>Overfishing, and overexploited resources in coastal areas</i>	10
POLICIES TO REDUCE FISHING PRESSURE IN COASTAL AREAS	11
SUSTAINABLE DEVELOPMENT	11
PROMOTION OF LARGE VESSEL CONSTRUCTION.....	12
AQUACULTURE DEVELOPMENT TO REDUCE THE NUMBER OF PEOPLE INVOLVED IN EXPLOITATION OF NATURAL FISHERIES RESOURCES.....	12
DEVELOPMENT OF SEA FISHERIES SERVICES	13
OTHER POLICIES	13
PROTECTION OF NATURAL RESOURCES AND BIODIVERSITY	14
FISHING LICENSES.....	14
CONTROL OF PRODUCTIVITY SUBJECT TO SPECIFIC REGION AND MARINE AREAS	14
CONTROL OF FISHING BOATS IN SPECIFIC MARINE AREAS.....	14
PROTECTION OF ENDANGERED AND RARE SPECIES	15
CONTROL OF DESTRUCTIVE FISHING GEAR AND FISHING METHODS	16
PROTECTION OF AQUATIC HABITAT.....	16
REHABILITATION AND PROTECTION OF FISHERIES RESOURCES	17
PUNISHMENT	17
CO-MANAGEMENT FOR THE SUSTAINABLE UTILIZATION OF FISHERIES RESOURCES.....	17
IMPROVED SAFETY AND REDUCED VULNERABILITY FOR FISHER COMMUNITIES. 19	
IMPROVED QUALITY OF FISHERY PRODUCTS AND MARKET CHAINS.....	21
LAWS AND ORDINANCE RELATING TO FOOD SAFETY OF FISH AND FISHERY PRODUCTS (F&FP)	21
DECISIONS AND DECREES ISSUED BY THE GOVERNMENT RELATING TO FOOD SAFETY OF F&FP.....	21
LEGAL DOCUMENT ON THE STATE MANAGEMENT SYSTEM ON FOOD SAFETY OF F&FP.....	22
DIVERSIFIED INCOME OPPORTUNITIES FOR FISHER FAMILIES.....	23
MICROFINANCE SERVICES FOR FISHERS, PROCESSORS AND VENDORS	24
INVESTMENT POLICIES	25
OTHER POLICIES	26
REGIONAL SHARING OF KNOWLEDGE IN SUPPORT OF LIVELIHOOD DEVELOPMENT AND REDUCED VULNERABILITY FOR FISHER COMMUNITIES AND OF SUSTAINABLE FISHERIES RESOURCE MANAGEMENT.....	27
RECOMMENDATIONS	28
REFERENCES	29

List of Figures and Tables

Figure 1 Vietnamese capture fisheries and aquaculture production 1995 -2008	8
Table 1 Water surface area (hectares) used for brackish aquaculture	7
Table 2 Processing plant status, 2008	9

List of Abbreviations

BRC	British Retail Consortium
BSP	Bank for Social Policy
CCRF	Code of conduct for responsible fisheries
CIB	Commercial Investment Bank
CPRGS	Vietnam's Comprehensive Poverty Reduction and Growth strategy
DECAFIREP	Department of Capture Fisheries and Resources Protection
DOFI	Department of Fisheries, merged into DARD since 2008
EEZ	Exclusive Economic Zone
EU	European Union
F&FP	Fish and fishery products
FSPS	Fisheries Sector Program Support (DANIDA/MOFi)
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Point
MARD	Ministry of Agriculture and Rural Development
MPAs	Marine protected areas
NAFIQAD	National Agro-Forestry-Fisheries Quality Assurance Directorate
RFLP	Regional Fisheries Livelihoods Programm
SEAFDEC	Southeast Asia Fisheries Development and Economic Commission
SPS	Sanitary and Phyto-sanitary Measures
SQF 2000	Safe Quality Food
SSOP	Sanitation Standard Operating Procedures
TBT	Technical Barriers to Trade
VASEP	Vietnam Association of Seafood Exporters and Processors
VBARD	Vietnam Bank for Agriculture and Rural Development
WTO	World Trade Organization

Executive Summary

The Fisheries sector is significant contribution to the economy of Vietnam, the export value in 2008 was US\$ 4.509 billion. The fisheries and aquaculture sectors have expanded rapidly over the past decade, with aquaculture production rising from 1,202,500 to 2,430,944 tonnes over the period from 2004 to 2008, with more than 1.3 million MT tons of *Pangasius* and 450,000 MT of brackish and freshwater shrimp and prawn. Fisheries production in 2008 was about 2,134 thousand tons, of which marine capture contributed 1,937 thousand tons.

The natural resources, particularly inshore fisheries are considered to be over-exploited with many high valued fish resources having declined to low levels. The number of vessels has increased continuously without control since 1980. This leads to increased competition in inshore areas. In order to earn a living, fishermen use many destructive fishing gears and bad practices including smaller mesh sizes than required, other destructive fishing methods like electricity, poisons, dynamite. As a result, fish of all sizes are captured, including young and fingerling fish. In recent years, the Government of Vietnam has enacted many policies to support the aim of sustainable development, and poverty reduction while protecting natural resources.

To reduce fishing pressure in coastal areas, many programs have been promoted by the Government including offshore fisheries, aquaculture development, services on sea development and infrastructure development. The offshore fishing vessels under Government's offshore fishing program are supported by a credit scheme for boat construction, upgrading of fishing vessels and offshore fishing services. Considered one of the major alternative activities to diversify income for coastal communities, the aquaculture sector has received increasingly strong support under Government of Vietnam policy over the past 20 years. The main focus has been on the establishment of infrastructure for aquaculture development, and to convert saline paddy fields, low lying land, land used for salt production, flooded land and other unproductive land to aquaculture. In addition Government policy has supported fishers and farmers in isolated areas through credit schemes.

Micro-finance is conducted through the Vietnam Bank for Agriculture and Rural Development (VBARD), the Commercial Investment Bank (CIB) and the Bank for Social Policy (BSP). BSP mainly provides subsidized loans to poor households, while VBARD and CIB make large loans to enterprises. These policies have supported fishermen investing in pond construction, buying of equipment, seed, feeds and other items.

To protect natural resources and bio-diversity the following activities have been implemented: Fishing licensing, control of productivity in specific marine areas, protection of rare and precious species that are in danger of extinction, restocking to enhance breeding population size and density, protection of aquatic habitats, and rehabilitation and protection of fisheries resources etc.

Co-management is considered as a potential tool for sustainable utilization of fisheries resources in Vietnam, particularly for small-scale fisheries. In Vietnam, co-management has recently been included in many policy instruments and pilots are in operation in Vietnam with varying degrees of success.

Vietnam has set up and is continuously improving the law, regulations and standards on conditions for food safety, environment and animal health protection, which meets most of the provisions, articles for technical barriers to trade (TBT) and Sanitary and Phyto-Sanitary (SPS) measures on food quality and safety of fish and fishery products, from aquaculture to processing and trading of fish and fishery products. The assurance of food safety needs requires the use of a systematic approach from raw material production, handling, processing, preservation and distribution of fish and fishery product to the customers.

Over last 20 years, the Vietnam government has enacted many policies to improve safety and reduce vulnerability for fishing communities such as policies on improving safety for fishermen and fishing boats at sea, support of radio communication devices for owner of fishing boats, support to fishermen to overcome natural risks at sea, support to protecting and reduce the affects of natural calamities at sea, insurance support for vessels and fishers, establish anchorages and storm shelters, and establishment of information networks on sea and islands, etc.

Introduction

The *fisheries sector* is one of the most important and cutting-edge sectors of the Vietnamese economy. The fisheries sector in Vietnam was also the first economic sector to embrace economic liberalization and international integration.

During the last two decade, like other sectors in Vietnam, the fisheries sector has made great progress and been very important for the national economy. With an average growth rate of about 12% per year, the sector is actively contributing to the industrialization and modernization of agriculture and rural development in particular and the economic development of the country in general.

In the last 15 years, the sector has contributed more than 5% of the country's GDP, 7 – 11% of national annual exports. Moreover the sector employs more than 4 million people and an estimated 10% of the total population that derives their main income directly or indirectly from fisheries. The fishery processing sub-sector in particular provides important employment opportunities for female labour. In 2008 the total production of both capture fisheries and aquaculture was 4.5 million MT with an export value of US\$ 4.509 billion. After oil, garments and shoes, seafood exports were the fourth largest export commodity.

Aquaculture

Vietnam has 3,260 km of coastline, 12 large lagoon regions, straits and bays, 112 estuaries, very rich canal systems and over 4,000 small and larger islands scattered along the coast, which have potential for aquaculture activities. The total area used for aquaculture has increased from 952,600 ha in 2005 to 1,008,000 hectares in 2007. Of this, 702,500 hectares (70%) was used for marine and brackish water and 305,500 hectares (30%) for freshwater aquaculture (Table 1).

Table 1 Water surface area (hectares) used for brackish aquaculture

	2005	2006	2007
Total	952,600	976,500	1,008,000
Area of sea and brackish water	661,000	683,000	702,500
Water for fish	10,100	17,200	26,400
Water for shrimp	528,300	612,100	625,600
Water for mixed and other aquatic products	1,22,200	53,400	50,200
Water for breeding	400	300	300
Area of fresh water	291,600	293,500	305,500
Water for fish	281,700	283,800	295,700
Water for shrimp	4,900	4,600	4,700
Water for mixed and other aquatic products	1,600	1,700	1,600
Water for breeding	3,500	3,400	3,500

(Source: FiCEN/CIS)

Aquaculture production has increased from a total of 1,202,500 tonnes in 2004 to 2,430,944 tonnes in 2008 (Figure 1); with more than 1.3 million MT tons of *Pangasius* and 450,000 MT of brackish and freshwater shrimp and prawn. In 2009, total aquaculture production was 2,665,975 MT.

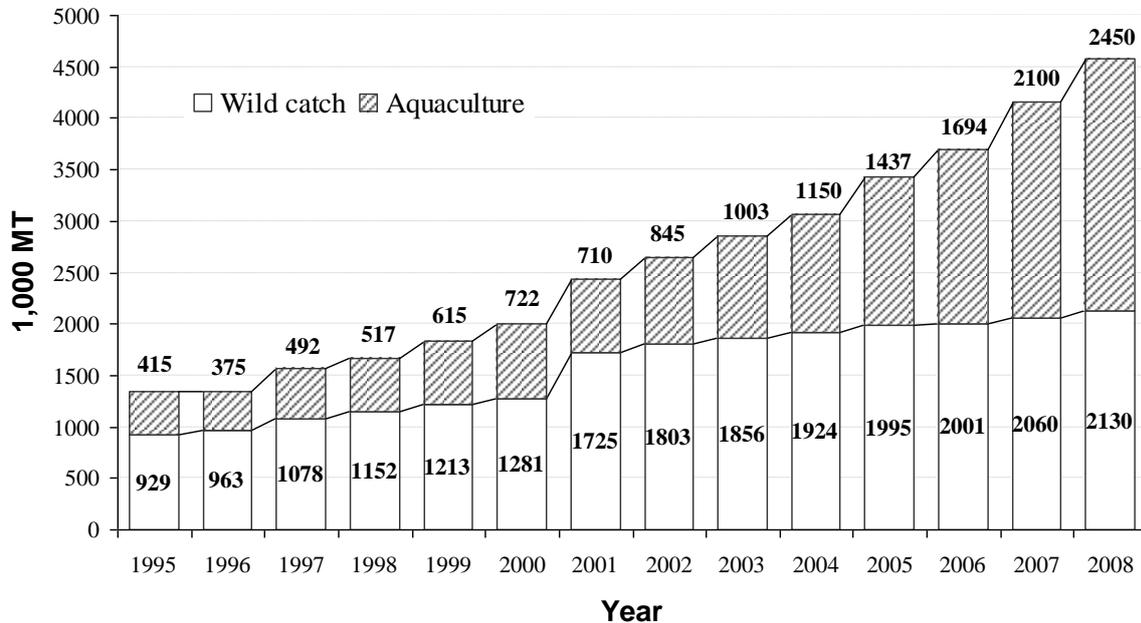


Figure 1 Vietnamese capture fisheries and aquaculture production 1995 -2008

(Source: Annual report of Ministry of Agricultural and Rural Development)

Aquaculture of shrimp, prawn, crab, and finfish farming has proven highly profitable as the domestic demand for aquatic products continues to grow in all urban areas. *Pangasius* species (*P. boucourtii* – basa, and *P. hypophthalmus* – tra catfish), have realized a very sharp and rapid development due to both the expansion of markets and the application of advanced technologies for artificial spawning, seed production and culture. In 2008, *Pangasius* production were estimated at 1.3 million MT, of which 640,829 MT was exported to more than 126 countries around the world and earning US\$ 1.453 billion in revenue.

Tiger shrimp (*Penaeus monodon*) farming has developed rapidly in Vietnam, spreading through coastal localities and leading to improved incomes for farmers. In the spring of 2008, the Ministry of Agriculture and Rural Development (MARD) approved farming of white leg shrimp (*Litopenaeus vannamei*) in the Mekong Delta under controlled conditions. In 2008, an estimated 450,000 MT of black tiger and white leg shrimp were produced, of which 191,553 MT was exported with a value of US\$ 1.625 billion.

Aquaculture makes a vital contribution to the socio-economics of Vietnam. More than 5 million people live in tidal areas, swamp and lagoon areas of the 28 coastal provinces and cities of Vietnam and millions more are the considerable labour force required by the aquaculture sector. Furthermore, many capture fishers are also moving away from fishing to the aquaculture and agriculture sectors as capture fisheries opportunities and catch decline.

Aquaculture has also helped in poverty alleviation in both the mountainous and lowland areas of Vietnam. Developing aquaculture has contributed to a positive shift in the structure of the

rural economy, the creation of employment, increased income, and improved living standards of both farmers and fishermen. This will contribute to the building of social order and security in rural, coastal and remote areas.

Processing

The 2008 Annual Report of the National Agro-Forestry-Fisheries Quality Assurance Directorate (NAFIQAD) states that the fisheries sector has 568 industrial level processing plants. Almost all of which are private sector owned, with only very few being state-owned. Currently, more than 300 enterprises certification to export seafood products to the EU, Norway, Switzerland, Canada, while more than 400 factories are exporting to the United States, China, Korea and other markets (Table 2). Eighty two percent (82%) of the total processing plants are located in the Southern region, while 12% are in the Central region and 6% in the North of Vietnam.

Table 2 Processing plant status, 2008

	Indicators	Total number in 2008	Percentage of total number of plants, %	Compared to 2007, %
1	Meeting National Hygiene and Food Safety Standards	432	76.0	117
2	Approved to export seafood to EU, Norway, Switzerland	303	53.3	124
3	Approved to export seafood to South Korea	414	72.8	121
4	Approved to export seafood to United States	432	76.0	117
5	Approved to export seafood to Canada	293	51.6	136
6	Approved to export seafood to China	416	73.2	123
7	Approved to export seafood to Russia	39	6.0	138
8	Total number of industrial seafood processing plants	568	100	111

(Source: NAFIQAD 2008 Annual Report.)

The main products were: 640,829 MT of frozen *Pangasius* fillets; 191,553 MT of frozen shrimp; 131,656 MT of frozen marine fish and 52,818 MT of fresh and frozen tuna; 86,704 MT of frozen cephalopods; 32,676 MT of dried seafood; and 100,107 MT of other fisheries products.

Many modern processing technologies have been established. The hygiene and safety status of the Vietnam fisheries processing sub-sector has been improving from one year to the next.

Hygiene, food safety and quality management improvement programs are being implemented, including GMP, SSOP, HACCP and ISO 9000 standards. Many processing plants have been certified to higher and more rigorous international standards, including BRC, SQF 2000, etc.

Many legislative and structural reforms needed to modernize the sector have been implemented over the last 25 years making the industry more competitive, market- and export-driven. Many national policies are in place to support the development of the aquaculture and fisheries sector. Various Government programmes in support of the sector have contributed to its growth, aimed specifically at hunger elimination and poverty reduction, livelihood generation and food security.

Fishing sector

Department of Capture Fisheries and Fisheries Resources Protection (DECAFIREP) under MARD data shows that to October 2008, there were 123,000 fishing boats and vessels in all coastal regions of Vietnam, of which 95,000 were motorized vessels. By the end of 2009 the number of fishing vessels had increased to 128,000. The total fishing capacity has increased by 18.3% per year for the last two recent decades, with the average vessel power reaching 55 Horse Power (HP) in 2007.

Currently, there are more than 40 types of fishing gear commonly used in Vietnam, divided into 5 main groups, namely trawl, gill net, purse seine, long line, and fixed traps. 30% of all fishing vessels are trawlers, which account for nearly 51 % of the total offshore fishing fleet. Most vessels are made of wood and go out for only short operation periods. Most offshore fishing vessels are fitted with re-used engines which have a short life, high and inefficient fuel consumption costs.

Total capture fisheries (marine plus inland production) in 2008 was about 2,134 thousand tons (Figure 1), of which marine capture fisheries contributed 1,937 thousand tons (shrimp 103 and others 358 thousand tons respectively) (MARD 2008 annual report).

Overfishing, and overexploited resources in coastal areas

Presently in-shore areas are considered as overfished, and some fish resources, particularly larger species are in serious decline. More than 84% of vessels equipped with engines less than 90 HP or non-motorized boats, most of which fish mainly in inshore areas, this puts tremendous fishing pressure on inshore fishery resources. Furthermore, there are over 14,000 offshore-fishing vessels with the total engine capacity of around 2,500,000 HP, which conduct fishing activities in both inshore and offshore areas, thereby also contributing to the destruction of inshore aquatic resources. Under the Master Plan of Fisheries Development of 2010, a target of only 50,000 marine fishing vessels operating in 2010 was highlighted. However, there were about 128,000 vessels estimated to be in operation at the end of 2009. Although the Master Plan aims to reduce the number of fishing vessels considerably, fishers can upgrade several small-vessels to larger vessels/large-scale to fish offshore, or can stop fishing to seek other jobs. However, the enforcement of the Plan is extremely weak and the goals of reducing the number of vessels to 50,000 will be un-achievable. Also, it should be noted that the vessel-reduction goal, even if achieved, may not mean capacity reduction (for example if the boats are

converted to bigger offshore boats with large capacity). It is important to note that the Master Plan does not advocate “capacity reduction” per se, just vessel reduction.

The fishing fleet increased rapidly when fish stocks were abundant leading to a balance between fishing fleet size and resource availability. As vessel numbers continued to increase it resulted in decreased quality of the fishing grounds, and fishing productivity declined from 0.9 ton/HP in 1999 to 0.3 ton/HP in 2007. Moreover the proportion of trash-fish is high, for example: 40-50% for seine fishing and up to 70-80% for shrimp trawling in coastal areas.

The number of vessels has increased continuously without control since 1980. Although coastal natural resources have become severely depleted, the number of small-scale fishing boats is increasing at about 2,300 vessels per year, and the number of fishermen is also increasing at 23,155 people annually. This has led to fierce competition between capture fishers in inshore areas. In order to earn a living, fishermen use many destructive fishing gears and inappropriate fishing practices including illegal undersized meshed nets, and other destructive fishing methods including electric fishing, poisons, explosions which result in fish of all sizes being caught, including young and juvenile fish of important commercial fish species.

Despite the Government’s efforts, awareness of the need to protect marine resources is still low in Vietnam. Responsible fishing and practices are also weak because as yet the participation of fishers in resources management is still limited even though they are beginning to recognize the threats of overexploitation and habitat degradation. Education and empowerment are essential to enable Vietnam to sustainably manage its marine resources.

Policies to reduce fishing pressure in coastal areas

The policies focus on the enforcement of laws in a bid to reduce fishing pressure in coastal areas. Policies issued and conducted include:

Sustainable development

The Government of Vietnam adopted the FAO Code of Conduct for Responsible Fisheries (CCRF) in 1995. The CCRF defines the principles for sustainable fisheries management. To conduct the Code, the Government of Vietnam has enacted Decision 153/QĐ-TTg dated 17 August 2004, promulgating a strategy for sustainable development in Vietnam (called Vietnam Agenda 21). Article IV in this strategy specifies protection of the marine environment, coastal area, islands and developing marine resources. The strategy includes reference to the following priority actions: develop offshore-fishing, reducing coastal fishing; encourage the development of an aquaculture sector which is friendly to the environment; research and application of advanced post-harvest technology in order to improve the quality of fisheries products; development of fisheries logistic services include fishing ports, boatyards for the repair and building of fishing boats, net making, fishing gears etc.; creation of livelihoods and diversified income opportunities for poor fishermen, and improved living standards for fishing communities. To protect the environment the following actions are specified: establishment and management of marine protected areas (MPA’s) and coastal areas; the application of national, and sectoral environmental standards; improved research, and the application of environmental protection technologies.

The Fisheries Law (2003) has one article dealing with sustainable development which states: “The State shall issue policies to ensure the sustainable development of fisheries, promote and facilitate the organizations and individuals to rationally use and exploit fisheries resources; ensure the rehabilitation of fisheries resources and aquaculture development at sea, rivers, ponds, lagoons, and other natural waters.

The State encourages organizations and individuals to invest in research of science and advanced technology, human resources development, construction of infrastructure in fisheries activities, development of safe and clean aquaculture, improve the effect of fishing activities, protection and development fisheries resources through extension activities....”

Promotion of large vessel construction

The GOV has targeted capping the building of fishing boats with engine capacity of less than 45 HP with the intention of moving fishers from inshore to offshore fisheries:

Article 12, of the Fisheries Law regulates the offshore fisheries, stating that State shall issue policies on investment, occupational training, establishment of communication system etc., to encourage organizations and individuals to develop offshore fisheries (clause 1); organizations and individuals investing in offshore fisheries shall be provided with preferential treatment policies as provided for in Law on promotion of internal investment.

Article 13, Fisheries Law regulates that Organizations and Individuals engaged in coastal fishing when transferring to offshore fisheries and/or aquaculture shall be provided with guidance, training, capital support, allocation of land and marine areas, etc.

Credit loan (decision No. 393/TTg, 159/1998/QĐ-TTg on the regulation on management and use of credit loans invested according to State plans for projects dealing with building, upgrading of fishing vessels and offshore fishing services). After five years of implementation, a total of 1,302 offshore vessels were built and upgraded.

Aquaculture development to reduce the number of people involved in exploitation of natural fisheries resources

Aquaculture is considered as one of the major alternative activities to diversify income for coastal communities. Therefore for the past 20 years, the aquaculture sector has received increasingly strong Government policy support.

Chapter IV of the Fisheries Law is on aquaculture, and covers policies such as allocation of marine areas and land for aquaculture; organizations and individuals engaged in aquaculture shall be protected by the State when their legitimate rights are violated; they shall be provided with guidance on aquaculture, right of inheritance, mortgage, etc.

The Prime Minister’s Decision No. 224/1999/QĐ-TTg, approved the Program on Aquaculture Development for the Period 1999-2010, which contains many promotion policies such as the use of surface water for aquaculture, allocation or lease of land and water surface, channels, lagoons, reservoirs previously under the control of other economic sectors for aquaculture; the conversion of saline paddy fields, low lands, land for salt production, flooded land and other ineffective land for aquaculture use; fishers and farmers in isolate areas are to be given preferential treatment when seeking loans for aquaculture.

Decision No. 112/QD-TTg of the Prime Minister dated 23 June 2004 approved the Program on Fish Fry Development to the Year 2010, which contains many policies for the promotion of fish seed availability including finance, technology and international cooperation.

Prime Minister's Decision No. 126/ND-CP of 01 June 2005 provides policies to Promote Aquaculture at Sea and around Islands, under which the State will provide funds for invest in and support to the masterplan on fish farming at sea and around islands throughout the country; the decision will provide support for projects importing certified disease-free seed of high economic value species and the development of technology for the local artificial breeding and production of fish seed; support projects that develop and apply advanced technologies for fish seed production and fish farming at sea and around islands; provision of training of technical and scientific staff to research and apply science and technology for fish seed production and fish farming.

Several provinces also had their own aquaculture development policies for example Decision 23/QD-UBND dated 13 August 2007 of Binh Dinh province has been issued to promote the development of aquaculture in Binh Dinh province.

Development of Sea Fisheries Services

Decision 251/QD-TTg of the Prime Minister dated 25 December 1998 approved the Program on Seafood Export to the Year 2005, and states that: Marine capture fisheries techniques and livelihoods will be improved, the offshore fleet will be gradually established to rationally exploit offshore marine resources and to boost the proportion of exported seafood from 20% to 22% and 24% in the years 2000 and 2005 respectively; the facilities and means for preservation of fish on board shall be improved, investment will be made in specialized vessels for preservation, and transport of seafood and logistic sea services will be provided. Fishing markets and fishing port infrastructure shall be improved in order upgrade post harvest technology and to improve the quality of exported product.

Other policies

On conservation, protection and development of fisheries resources, Article 8 para. 1 of Fisheries Law states that, the State shall promote scientific research to identify appropriate measures for the development of fisheries resources; invest in fish seed production to release into natural habitats and to create artificial reefs for the rehabilitation and development of fisheries resources.

Para. 2, Article 41 of the Fisheries Law provides for the State to invest in fishing port, and storm harbour infrastructure and support investment in fish landing site infrastructure; will encourage organizations and individuals from all economic sectors to invest in construction that serves the production and trading of aquatic products at fishing ports, fish landing sites and storm harbours.

Para. 2, Article 42 of that Fisheries Law states that, The State shall issue policies to support the investment in fish wholesale markets, shall encourage organizations and individuals to engage in the construction and trading, exploitation and management of fish wholesale markets.

Vietnam's Comprehensive Poverty Reduction and Growth strategy (CPRGS) was unveiled in 2002. The strategy highlights that there is significant growth potential in aquaculture and offshore-fishing, and also identifies that intensive aquaculture and capture fishing play an important role in accelerating economic growth and poverty reduction. The CPRGS includes reference to support activities including: support fishery infrastructure, power transmission lines, and roads in aquaculture areas that are newly established or converted from rice or salt production; improving the access of poor fishing household to information, extension services, credit and markets, etc.

Protection of natural resources and biodiversity

The Fisheries Law was adopted by National Assembly at its legislature XI, 4th session (26/11/2003) and came into force on 1/7/2004 has improved the management of fishing operations, the protection of fisheries resources and their habitat; harmonized the law and policies; identified the authorities and duties of organizations and individuals in the management, control and use of aquatic living resources. The Fisheries Law and regulations cover many management activities, including:

Fishing licenses

Vietnam has applied a fishing license system since 1992 and according to the Fisheries Law "fishing license" shall be a binding requirement to organizations and individuals engaged in fishing operations (para. 1, Article 16, Fisheries Law - 2003) except for fishing vessels less than 0.5 tons or none motorized fishing vessels". The main content of fishing licenses include: fishing gears, allowable fishing regions, allowable fishing time and period of license. Article 17 set the conditions to licence for organizations and individuals and Article 18 set the withdrawing of licence.

Fishing licenses will be granted to fishing vessels including vessels belonged to foreign-investment enterprises in Vietnam (para.3, Article 4 of Decree No.191/ND-CP dated on 18 November 2004) by DECAFIREP.

Control of productivity subject to specific region and marine areas

In Vietnam, there is no regulation of individual vessel catch quota, but only general regulations imposed on fishing regions and marine areas. Article 10 of the Ordinance on Fisheries Resources Protection (1989) regulates that the "Ministry of Fisheries shall regulate the productivity, fish species and other fisheries in waters in order to ensure the natural renewal of the aquatic resources". To this end, the Ministry of Fisheries issued Circular No. 04/TT-TS dated 30 August 1990 which sets a total quota for pelagic, and demersal fish from the 5 marine fishing areas of Vietnam with a water depth of less than 200 m of 1.3 million tons, being 0.7 million tons are pelagic fish and 0.6 million tons of demersal fish respectively. Circular No. 04 also sets regulations for the allowable catch of bottom trawlers in 12 main fishing grounds and an allowable quota of shrimp to be taken from 4 marine areas.

Control of fishing boats in specific marine areas

The decree 123 regulate that the fishing vessels with the length less than 15m non motorized or with motorized less than 20 CV are allowed to fishing in inshore area; the fishing vessels only

allowed to operate in inshore area of the province, where they registered; the inshore fishing vessels are not allowed to operate in nearshore and offshore areas.

The fishing vessels with the length from 15 m above, without motorized or motorized with capacity between 20 to 90 CV allowed to operate in the nearshore areas. The nearshore fishing vessels are not allowed to operate in the inshore and offshore areas, except the motorized fishing vessels from 50 CV using fishing gears such as hook and line, gill net, purse seine, stick-held falling net.

The fishing vessels with capacity from 90 CV above, the motorized fishing vessels from 50 CV using fishing gears such as hook and line, gill net, purse seine, stick-held falling net are allowed to operate in offshore. Offshore fishing vessels are not allowed to operate in inshore waters.

Protection of endangered and rare species

Setting minimum catch size of aquatic species, to ensure fish breed before being caught, is an important methods of ensuring sustainable management of aquatic populations. 3 methods are used in Vietnam to control the allowable size of fish species:

- Regulation of allowable mesh size (annex 2 and 3 of Circular No. 02/TT-BTS dated 20 March 2006), in which, the smallest mesh size for anchovies is set at 10 mm.
- Regulation of the minimum size of fish species allowed to be taken (annex 7 of Circular No. 02/TT-BTS dated 20 March 2006), set minimum sizes for 31 species of marine fish, 16 species of marine shrimp, 21 species of other fish and 40 species of fresh fish).
- Regulation of the proportion of by-catch. By-catch should be less than 15% of total capture fish production (calculated by taking 3 random samples to calculate the average rate – Circular 02/TT-BTS dated 20 March 2006).

Paragraph 2 of Article 6 of the Fisheries Law states that “it is strictly prohibited to exploit fish species which are prohibited from capture and capturing species. Circular No. 02/TT-BTS dated 20 March 2006, annex 5, lists 19 fish species, 3 families of corals, 9 fresh fish species, 4 marine turtle species, 3 mammal species, 3 coral species and 3 amphibian species) which cannot be captured or taken. Annex 6 gives close season bans for 27 species (including 5 lobster species, 7 marine fish species, 7 mollusc species, and 8 fresh fish species).

The Red Book of Vietnam (2000) lists 143 fish species including 4 marine turtle species, 7 amphibian species, 33 fresh fish species, 36 marine fish species, 23 freshwater invertebrate species and 40 marine invertebrate species which are endangered and under threat.

Article 34 of the Fisheries Law 2003 regulates the import and export of fish seed and requires Ministry of Fisheries’ approval for the import and export of fish seed which is also subject to quarantine restrictions.

Decision No. 485/QD-TTg dated 02 May 2008 approved the project on the Protection of rare, precious fish that are in danger of extinction to the year 2015, with a vision to 2020. The project includes the establishment of protected areas for endangered endemic species; the establishment of a protected breeding area for turtles in Con Dao; the rehabilitation and protect

of 20 rare aquatic species, that are seriously in danger of extinction during the period 2008 to 2010. The objectives from 2011 to 2015 are to: establish 15 protected areas for aquatic species in coastal, and estuary areas under community management; to protect 18 rare aquatic species, and later to increase the total number of protected species to 38 species (50% of the total species in danger of extinction). One of objectives from 2011 to 2020 is to establish to establish a network of protected areas countrywide for an additional 22-30 endangered and rare aquatic species.

Decision No. 1479 QD-TTg dated 13 October 2008 approved a project on planning for inland waters protection to 2020”.

Decision No. 27 QD-TTg dated 01 February 2008 approved a project to survey biodiversity, and aquatic resources in Vietnam’s sea, and the planning and establishment of a sustainably managed system of marine protected areas.

Decision No. 82 QD-BNN dated 17 July 2008 gives a detailed list of endangered and threatened species that are in danger of extinction.

In addition to the above mentioned projects, plans for the creation of several marine protected areas will be submitted to the Government in near future. The above policies all contribute to the protection and management of the natural resources of Vietnam.

Control of destructive fishing gear and fishing methods

Paragraph 6 of Article 6 of the Fisheries Law states that “it is prohibited to produce, to distribute, or use prohibited fishing gear; use of prohibited fishing methods include explosives, poisons, electric and other destructive means”.

Annex 2 of Circular No. 02/TT-BTS dated 20 March 2006 regulates the minimum mesh size of marine fishing gear including 13 minimum mesh sizes for different fish species including 10 mm for anchovy fishing and 120 mm for lobster gillnet fishing. This Circular also prohibits the use of dynamite, electric fishing gears, and poisons for fishing

Circular No. 02/TT-BTS dated 20 March 2006 regulates the fishing with light as: the total light capacity of each fishing unit is not allowed to exceed 200 W for *nghe ro* and 500 W for flying squid jigging in near-shore area. Total light capacity of each fishing unit for purse seine, lift net, flying squid jigging are not allowed to exceed 5000 W; the capacity of one light using for fishing with light (*Pha xuc*) is not allowed over 2000 W in inshore area, and position of light must be 1.2 m above water surface. This circular also regulate the distance from the light to the fixed fishing gears or fish aggregation device is not less than 500 m.

The Ministry of Fisheries (now MARD) prohibits the development of the fishing with light in near shore and inshore; the powered push net in river, in seabed; the motorized vessels less than 90 CV involve in fish trawl; the motorized vessels less than 30 CV involve in others.

Protection of aquatic habitat

The Fisheries Law (2003) includes several provisions on the protection of aquatic habitat. Article 7 regulates that “organizations and individuals shall be responsible for protection of aquatic habitats”.

Article 32, of the Fisheries Law (2003) specifies that aquaculture sites should be concentrated in specific areas and includes requirements for the establishment of environmental monitoring stations and fish disease control. The Ministry of Fisheries has issued many regulations on fish farming areas including Decision No. 04/2002/QD-BTS on the management of concentrated shrimp farming areas.

Decision No. 131 QD-TTg dated 16 July 2004 approved a government program for the protection and development fisheries resources.

Rehabilitation and protection of fisheries resources

Article 8, of the Fisheries Law (2003) regulates the protection and rehabilitation of fisheries resources, and assigns the Ministry of Fisheries the duty to regularly announce the list of fish species listed in Red book of Vietnam, prohibited fish species, and closed season for species fish species during which time the species cannot be captured or taken, etc.

Article 9, of the Fisheries Law requires the production of a master plan and protection of inland and marine protected areas.

Article 10, of the Fisheries Law sets regulation of funding for the rehabilitation of fisheries resources, and provided for the establishment of a fund for the rehabilitation of fisheries resources. The fund was established according to Decision No. 29/QD-TTg, dated 28 February 2007.

Decision No. 145 QD-BTS dated 01 February 2007 gives guidelines on the establishment and management of MPA's.

Decree No. 57/ND-CP dated 02 May 2008 lists Government Regulations for the management of marine protected areas.

The Government of Vietnam plan for development of MPAs proposes an MPA network covering about 10% of Vietnamese EEZ along the coast of Vietnam and its islands. However, to date only 4 MPAs have been official designated.

Punishment

Decree No. 128 ND-CP dated 11 October 2005 cites regulated punishment for violating fisheries sector, and fisheries protection laws, regulations and circulars. Circular 02/TT-BNN dated 2008 provides guidance on the implementation of Decree 128.

Co-management for the sustainable utilization of fisheries resources

The 2003 Fisheries Law provides the potential for co-management under Clause 9, if provincial authorities develop co-management systems in cooperation with local communities. Some provinces have already started such developments, e.g. the island MPA's involving co-management at Cu Lao Cham, Hon Mun and Con Dao and the mainland inshore waters of Quang Ninh, Khanh Hoa, Binh Thuan and Yen Bai provinces.

Decision No 131/2004/QĐ-TTg dated 16 July 2004 on Approving Programs on Fisheries Resource Protection and Development to 2010 proposes "...Building organization models for the management of coastal areas that are suitable for customary and traditional local fishers. At the same time to promote and increase the role of the fishing community in the management and protection resources and habitats of aquatic species...". And decision 691/QĐ-BTS dated 07 June 2007 approved a framework, estimated survey expenditure, and the development of projects to promote the establishment of co-management pilots on resource protection.

There are many co-management pilots in operation in Vietnam with varying degrees success. The project to review and assess co-management models in Vietnam concluded that "the studied models vary both in form of organization, content of co-management and participation of stake-holders. Several pilots have been established and are operating sustainably; others are at the beginning stage... in general, these pilots show positive results in aspects of production management, and protection resources and environment". Successful models include the Rang Dong cooperative, Thoi Thuan Commune, Binh Dai District, Ben Tre Province on the protection and exploitation of the Ben Tre Clam, the model of the local shrimp culture association in Hoai My commune, Hoai Nhon district, Binh Dinh province, the model management board for the aquaculture area in Thanh Phuoc commune, Binh Dai district, Ben Tre, Ran Trao, etc.

Co-management pilots are being conducted by DECAFIREP in 8 provinces of Son La, Quang Ninh, Nghe An, Thua Thien Hue, Binh Dinh, Dac Lac, An Giang, and Ben Tre. The lessons learned from these pilots are: it is necessary to:

- Clearly define the scope, objectives and stakeholders for co-management;
- Improve the awareness of stakeholders;
- Improve management capacity and to select a core group of people from the local communities;
- Establish a suitable management mechanism;
- Develop a good legal framework for implementing pilots;
- Developing alternative livelihoods for local communities;
- Finding support from international organizations and to properly use funds.

The best pilot co-managed fisheries have taken the existing laws and adapted them to form fishing groups, assign fishing rights and apply locally agreed rules and regulations with fines for rule-breaking e.g. areas at commune level within Tam Giang Lagoon, ThuaThien Hue. Decision 942/2009 of District Peoples' Committee of Phu Loc district have assigned fishing rights to nearly 1,000 hectares of lagoon to a local fishing group. This is first pilot in Vietnam which has assigned fishing rights to a local fishing association.

The Vice Minister issued Instruction No. 1700 /BNN-KTBVNL dated 16 June 2009 on the implementation of small-scale fisheries co-management to stimulate the promotion of co-managed fisheries. This instruction was sent to all 63 Provinces. The text defines co-managed fisheries, outlines the legal provision already in existence for co-managed fisheries, cites examples and empowers Provincial Peoples' Committee (PPCs) to promote this management tool.

Work is on-going with the revision of Decree 123 which legalizes fishing area demarcation. It has been sent to the provinces for their feedback. This will be approved in 2010.

National fisheries co-management guidelines are now in the final drafting stage before approval in 2010. This document aims to guide relevant organizations on the establishment of co-management, implementation, consultation, assessment, control and decision making and adjustment for Vietnam nationwide. This document will also support the implementation of small-scale fisheries co-management in Vietnam; it will also be the basis for implementing co-management pilots in all provinces.

Improved safety and reduced vulnerability for fisher communities

The geography and topography of Vietnam makes the country highly vulnerable to natural hazards. Every year, natural disasters such as typhoons, storms, and floods severely impact people, their livelihoods, and their infrastructure. People engaged in the fisheries sector are particularly vulnerable to such event and are some of the poorest and most vulnerable people in the country. In 2006, 10 storms occurred in the Dong Sea, of which 3 storms (No 1,6,9) killed or resulted in 298 people going missing, damaged 20 offshore vessels and sank nearly 1,000 fishing vessels.

Over the last 20 years, the Government of Vietnam has enacted many policies to improve safety and to reduce vulnerability for fishing communities, including: Resolution No. 66 ND-CP dated 19 May 2005 entitled Ensuring Safety for Fishers and Fishing Boats; Instruction No. 22 CT-TTg dated 30 June 2006 on improving safety for fishing activities on the sea, especially for offshore-fishing; Circular letter No. 02 TT-BTS dated 13 July 2007 guidelines for the implementation of Decree 66 ND-CP dated 19 May 2005 on ensuring safety for fishers and fishing boats. Annex 1 of the circular letter regulates safety equipment for use on fishing boats. The safety requirements for fishing boats in each region are different.

Decree No. 08 ND-CP dated 16 January 2006 provides revised regulations and supplementary ordinance on precautions to be taken during floods and storms.

Decision No. 74 QD-TTg dated 26 December 2006 approved a program for marine public telecommunication service. It provides support to purchase radio communication devices for owners of fishing boats with an engine capacity above 50 HP .

Decision No. 118 QD-TTg dated 25 July 2007 is entitled Support to Fishermen to Overcome Natural Risks on the Sea. It provides support for damage to property and people including 100% of return ticket costs, full coverage of costs to transport victims from sea to the land, etc., support for telecommunication devices, and full cost support for life vests lost by offshore fishing boats during storms.

Decision No. 137 QD-TTg dated 21 August 2007 approved a project on organizing information to support protection against and to reduce the affects of natural calamity on the sea.

Decision No. 172 QD-TTg dated 16 November 2007 approved a national strategy on preventing and reducing the affects of natural calamities to 2020.

Circular letter No. 11 TT-BTTTT dated 26 December 2008, gives guidelines on supporting public communication for fishermen.

Decision No. 289/QD-TTg entitled Insurance Support for Vessels and Fishers provides regulations for supporting 30% of vessel insurance and 100% of accident insurance costs in respectively. This policy will run from 2008 to 2010. In 2008, nearly 17,000 vessels/boats gained support and over 260,400 fishermen benefitted from accident insurance (MARD annual report, 2008).

The Policy on Calamity Support, provides support to overcome the consequences of natural catastrophes, mainly storms, including sanitary care and credit at preferential interest rates for boat repair.

Decision 288/QD-TTG dated 08 November 2005 on adjusted planning for anchorages and storm shelters to 2010 with a vision to 2020 requires that between 2006 to 2010 75 anchorage and storm shelters will be established, of which 13 will be regional and 62 will be provincial shelters. By 2020 the Government plans that a total 98 anchorage and storm shelters will be established. The report on the 5-year plan 2006-2010 states that 54% of the regional and 100% of the smaller local level storm shelters were built. Up to 2007, 66 fishing ports with a total length of 6,028 m were constructed and/or upgraded and became operational in 27 coastal provinces. 6 regional storm shelters were established and 9 provincial storm shelters also became operational. In addition 10 harbours and fishing ports were completed and are ready for operation with a capacity for 12,000 vessels.

Decision No. 1041 QD-TTg dated 22 July 2009 approved a project to establish an information network for the sea and islands. This decision assigns MARD the following responsibilities: conduct a project to support the installation of telecommunication devices on fishing vessels; to implement the tasks specified in decision No. 137 dated 21 August 2007; to provide guidelines for the registration of fishing boats in the provinces, and ensuring that all fishing boats have telecommunication devices.

To strengthen management of sea fishing, DECAFIREP is implementing the project called "Establishing an information system for the management of on sea fishing". The purpose of phase 1 to the end of 2009 was to provide general information on weather, hydrometeorology, oceanography, etc. and to assist local authorities, and businessmen to keep track of vessel location at sea in order to provide timely solutions, to ensure safety for fishermen and sea vessels and facilities. The second project phase (2010-2012) will focus on establishing and bringing a fishing vessel surveillance system into operation. The system will use GIS technology and will provide 2-way information transfer between vessels and management units, and will build a database on fishing grounds, and fisheries hydrometeorology forecasting.

In 2009 only approximately 10% of fishing vessels had radio communication devices. MARD has started a credit scheme to provide boats with two-way radios. Other activities such as awareness raising / training about safety at sea are on-going.

Recognizing the severe affects of climate change in Vietnam, the Government have enacted decision No. 158 QD-TTg dated 02 December 2008 approved The National Target Program for adaptation to climate change. This program is conducting in whole country and being divided into 3 stages: warm-up, implementation and development stages. The objectives of this program are assessment affects of climate change on sectors, provinces in each stages and

establish action framework for adaptation and mitigation of climate change to ensure the sustainable development.

Decision No.2730/QĐ-BNN-KHCN dated 5 September 2008 approved the Action plan Framework for adaptation and Mitigation of climate change in the Agricultural and Rural Development Sector 2008-2020. One of the objectives mentioned to “Ensuring the stability and safety of residents in cities and different zones and regions, especially the Cuu Long and Red River deltas and the central and mountainous areas; Ensuring the maintenance of dyke and infrastructure systems, as meets disaster prevention and mitigation requirements”.

Improved quality of fishery products and market chains

Vietnam has established and is continuously improving its laws, regulations and standards for food safety, the environment and animal health protection, which meet most of the provisions and articles of TBT and SPS on food quality and safety of fish and fishery products, from aquaculture to processing and trading of fish and fishery products. The assurance of food safety requires the use of a systematic approach from raw material production, handling, processing, preservation and distribution of fish and fishery product to the end customer. It has been found that when food safety control is only focussed on post harvest, fish and fishery products are often rejected because are contaminated by harmful substances. The competent authorities within MARD responsible for food safety now require quality control monitoring for all the inputs of fish raw material production including feed, bio-products, chemicals etc., used in aquaculture.

Laws and Ordinance relating to food safety of fish and fishery products (F&FP)

- The Law of Fisheries, which came into force on 01/7/2004;
- Law of Quality of Products and Commodities, which came into force on 01/7/2008;
- Law of Technical Standards and Regulations, which came into force on 01/1 /2007;
- Ordinance on Food Hygiene and Safety, which was enacted on 01/11/2003;
- Ordinance on Veterinary, was enacted on 01/10/2004;

Decisions and decrees issued by the Government relating to food safety of F&FP

The Government of Vietnam is responsible for the development and issue of decisions or decrees which provide guidelines on the implementation of the Law and Ordinances of the Parliament, in particular:

- Decree No. 27/2005/ND-CP dated 18/3/2005 of the Government rules the details and guidelines for the implementation of the Fisheries Law’s several articles.
- Decree No. 128/2005/ND-CP dated 11/10/2005 of the Government provides rules for administering the imposition of sanctions and fines in fisheries.
- Decree No. 79/2008/ND-CP dated 18/7/2008 of the Government provides regulations for a management organization system to oversee the inspection and analysis on food safety.

Under this Decree, MARD has been assigned responsibility to preside over food safety of agro-forestry, fishery products and salt products from the agriculture/aquaculture, harvesting, capture, slaughtering, handling, processing, packaging, preservation, transportation until the food is placed on the domestic or export markets; food safety of imported animals, plants, raw materials for use in aquaculture, planting and processing.

- Decree No. 33/2005/ND-CP dated 31/12/2008 of the Government gives detailed rules for the implementation of several of the above articles.
- Decree No. 132/2008/ND-CP dated 18/3/2005 of the Government gives detailed rules for the implementation of several Law of Food and Commodities Quality articles.
- Decree No. 163/2004/ND-CP dated 07/9/2005 of the Government gives detailed rules for the implementation of several Veterinary Ordinance articles.

Legal Document on the State management system on Food safety of F&FP

In line with the legal documents issued by the Parliament and the Government of Vietnam on food safety, MARD has issued several legal documents including:

- Decision No. 03/2002/QD-BTS dated 22/1/2002 on the Regulation of Veterinary Drugs Management Use in Aquaculture.
- Circular letter No 15/2009/TT-BNN dated 17/3/2009 on the List of drugs, chemicals and antibiotics which are banned or have restricted use.
- Decision No. 56/2008/QD-BNN dated 29/04/2008 on the Regulation of inspection, and certification of sustainable aquaculture.
- Decision No. 70/2008/QD-BNN dated 05/06/2008 on the Regulation of management of Pangasius aquaculture units and areas.
- Decision No. 115/2008/QD-BNN dated 03/12/2008 on the Temporary Requirements for laboratories used for Agricultural, Forest and Aquatic product quality control.
- Decision No. 116/2008/QD-BNN dated 03/12/2008 gives regulations on auditing and assignment of the laboratories serving the analysis of food quality, safety and hygienic criteria of fishery products.
- Decision No.117/2008/QD-BNN dated 11/12/2008 gives regulations for the inspection and approval of production, processing and trading of fish and fishery products that meet conditions for food safety.
- Decision No. 118/2008/QD-BNN dated 11/12/2008 gives regulations on food quality and safety inspection and certification for fishery products.
- Decision No. 130/2008/QD-BNN dated 31/12/2008 provides regulations for the Control of harmful substances in aquaculture animals and their products.
- Decision No. 131/2008/QD-BNN dated 31/12/2008 gives Regulations for a Food Hygiene and Safety controlling program during the harvesting of bivalve mollusks.

The former Ministry of Fisheries (which is now under MARD) issued a set of standards on the conditions for the assurance of food safety in fisheries enterprises (16 sectional standards). These sectional standards were replaced by Circular letter No 47/2009/TT-BNNPTNT dated 31 July 2009 which enacted the National Technical Regulation (NTR) on the conditions for food safety in fisheries production. There are 13 NTRs on conditions for food safety in the fisheries sector: fisheries production and trading units - general conditions for food safety QCVN 02 - 01: 2009/BNNPTNT; Fisheries production and trading units - Food quality and safety management program based on HACCP QCVN 02 - 02: 2009/BNNPTNT; Processing establishment for ready to eat aquatic products - Conditions for food safety QCVN 02 - 03: 2009/BNNPTNT; Fish cannery - Conditions for food safety QCVN 02 - 04: 2009/BNNPTNT; Dried fish processing establishment - Conditions for food safety QCVN 02 - 05: 2009/BNNPTNT; Fish sauce processing establishments - Conditions for food safety QCVN 02 - 06: 2009/BNNPTNT; Bivalve mollusk enterprises - Conditions for food safety QCVN 02-07: 2009/BNNPTNT; Ice-making plants - Conditions for food safety QCVN 02 - 08: 2009/BNNPTNT; Frozen storage - Conditions for food safety QCVN 02 - 09: 2009/BNNPTNT; Trading units - Conditions for food safety QCVN 02 - 10: 2009/BNNPTNT; Fish markets - Conditions for food safety QCVN 02-11: 2009/BNNPTNT; Fishing ports -

Conditions for food safety QCVN 02 - 12: 2009/BNNPTNT; and, Fishing boats - Conditions for food safety QCVN 02 - 13: 2009/BNNPTNT.

In addition to the development and issuance of sectional standards on Conditions for food safety in fisheries, the former Ministry of Fisheries in coordination with the Ministry of Science and Technology issued other relevant standards for fisheries.

A total of 120 national standards and sectional standards that were issued to 1996. Among these, there are 02 standards on Conditions for food safety; 04 standards on the quality of raw fish materials, 35 standards on fishery products (crustacean, fish, bivalve mollusks and other fishery products); 04 standards on food additives; 13 standards on labeling, packaging, transportation and preservation of fish and fishery products; 66 standards on testing methods (sampling and sample preparation; sensory, physical, chemical and microbiological analysis, packaging test). During the period 1998-2007, the Ministry of Fisheries issued 03 standards on fish and fishery products, 20 standards on testing methods for chemical criteria (including chemical residues in F&FP) and 02 standards on testing methods for micro-biological pathogens in fishery products.

The above Fisheries sector standards were developed with reference to the Codex and import market standards from countries and country blocks such as the EU, USA, Japan, etc., and in conformity with Vietnamese national laws.

The legal documents (laws, ordinances, decrees, decisions, circular letters, technical regulations and standards) issued and the fisheries sector has a strong legal basis for the state management of institutions and fisheries operators referred to in their activities. The Fisheries legal framework system is periodically or when required being reviewed and amended to bring it in line with changes in state and international organization or F&FP import markets rules on food hygiene and safety. The Vietnam legal framework on food safety assurance in fisheries has been approved/recognized by the EU, US FDA, KFDA, Chinese and Russian competent authorities and Vietnamese F&FP can be exported to their markets.

Diversified income opportunities for fisher families

The increase in the population rate in fisheries communities is around 2.6-2.8%, much higher than the national average (1.3%), with an average fishery household of 6-7 people. High population densities in coastal areas and the high rates of population growth in fisheries communities have exacerbated the unemployment concerns for Vietnam.

Government interventions such as the Sustainable Aquaculture Poverty Alleviation (2001) and Vietnam's Comprehensive Poverty Reduction and Growth strategy (2002) provide the basis for implementation of targeted actions aimed at poverty reduction and livelihood generation in the fishery sector.

Targeted actions include providing poor fishery households with more access to education, the means of production, information, extension services, credit and markets, and to improve infrastructure for the fisheries sector.

Resolution No. 09 NQ-CP dated on 15 June 2000 deal with policy on re-structure and consumption of agricultural products. It defined "maintain 4 millions hectares for producing

rice. Other lands, which have low value on producing rice should move to produce other products such as lowlands or coastal areas...change to aquaculture...”. The re-structure process had changed remarkably in whole country, especially in Mekong river delta. The report on results of program of aquaculture development period 2000 to 2005 and implementing methods to 2015 showed that total areas changed to aquaculture from 1999 to 2005 was 310,841 hectares (82.4% of total areas in whole country); of which areas from rice producing was 297,187 hectares. The main cultured species were catfish, giant prawn shrimp in freshwater, tiger shrimp, and molluscs in brackish water. This program had created many employments.

To support for development of aquaculture and encourage the changing to aquaculture in the last years Government had promulgated many policies as follow:

- Resolution No. 03 NQ-CP dated on 02 February 2000 on the farming economics;
- Decision No. 103 QD-TTG dated 25 August 2000 encourage the development of aquaculture seedings;
- Decision 132 QD-TTg dated on 07 September 2001 on investment for building infrastructure for trade villages, rural transportation and infrastructure for aquaculture;
- Decision 112 QD-TTg dated on 23 June 2004 approved the programe for development of aquaculture seedings to 2010;
- Decision 126 QD-TTg dated on 01 June 2005 regulates policies to encourage the development of aquaculture on sea and islands.

Aquaculture can provide a wide diversity of livelihood activities. People may involve in the supply of inputs, such as fish seed, feed, chemical and other services and in post-harvest activities such as trading and processing. Changing to aquaculture contributed to poverty reduction in Mekong river delta. The percentage of poor households have decreased from 37% to 15% in 2005, 13% in 2006 and 12.4% in 2007. The fish-rice model is seen as effective solution for poverty reduction in Mekong river delta in specially and in whole country in general (Assess effects of pilots changing to aquaculture in Mekong River Delta).

Beside the national policies, provinces have established their own policies. For example, provinces in Mekong river delta had promulgated many policies to encourage developing aquaculture in their provinces such as the policy of handing land, reducing tax for using land or reducing cost for renting land in the first years....).

Supplementary income options are in high demand. Work is ongoing with: employment using boats and navigational skills to: guard aquaculture facilities, maintain aqua structures, transport consumables and harvested product, transport personnel, act as guides for tourists (only if boats re-registered for this purpose with required license).

Microfinance services for fishers, processors and vendors

Fishermen can access to credit or other sources of funds via formal and informal channels. The main formal channels are Vietnam Bank for Agriculture and Rural Development (VBARD), Commercial Investment Bank (CIB) and the Bank for Social Policy (BSP). BSP mainly provides subsidized loans to poor households, while VBARD and CIB make large loans to enterprises.

Banks conducted many activities on loaning for development aquaculture. The VBARD with Ministry of Fisheries (now MARD) to find solutions to access credit for aquaculture, fisheries and processing. Fishermen can loan credit from formal canals such as VBARD, CIB and BSP. These policies had support fishermen on investing building pond, buying equipments, seedings, feeds and others.

01.02.2009 government subsidized interest rate policy came into effect. VBARD second stimulus package made funds available but few could access the loans as old loans have to be repaid before being considered and a positively evaluated business plan has to be drawn up. Following are decrees, decisions, which are issued by Vietnam government, facilitate access to microfinance for fishers, processors and vendors:

- Resolution No. 43 ND-CP dated on 29 June 1999 on preferential credit for development of state. Decision 175 QD-TTg dated on 2 March 2000 guide the implementation of Decree 43 about the reduce preferential rate from 9% per year to 7%;
- Decree 178 ND-CP dated in 1999 and Decree 85 ND-CP dated in 2002 on ensure loans for credit organizations;
- Decree 151 ND-CP dated on 2006 mentions to investment and credit for export. Decision 08 QD-BTC dated on 2007 regulates loan rate for investment credit and export credit;
- Decision 67 QD-TTg dated on 30 March 1999 on bank credit support for agriculture development;
- Decision No. 284 QD-NHNN and Decision 423 dated in 2000 on loaning policy for farming;
- Decision No.193 QD-TTg dated on 20 December 2000 promulgate regulations on establishing, organizing and implementing of the Fund for ensuring of credit for small and medium enterprises;
- Decision No. 423 QD-TTg dated in 2000 regulate on the loaning of 20 millions VND without guarantee for farming;
- Decision No. 58 QD-CP dated on 24 April 2001 on support profit after investment;
- Decision No. 70 BTC-NHNN dated on 28 July 2003 guides the solutions for debts from the offshore fishing program.

Investment policies

The investment Law regulate that fisheries sector (aquaculture, fishing and processing) are objects under preferential investment. The Government give incentive on land for producing (processing enterprises get incentive location in industrial areas, and also incentive land-renting) and reduction on tax after investing. Besides that, Government also support on establish infrastructure for aquaculture, fishing landing, anchorage and storm hidden, seeds for aquaculture.

Decision No. 132 QD-TTg dated on 7 September 2001 regulate financial mechanism to implement program on development system of rural transportation, infrastructure for aquaculture and trade villages.

Investments in fisheries infrastructure: port infrastructure, equipment to transfer catch and load ice, fresh water etc.; anchorages and storm shelters; ports sometimes including communication infrastructure for weather and market conditions; collection of catch data were established in many provinces.

Up to 2007, 66 fishing ports with 6,028 m in length were invested and upgraded and began to operate in 27 coastal provinces. 16 storm shelter places, of which 6 regional shelter places were established in Quang Binh, Da Nang, Binh Dinh, Khanh Hoa, Binh Thuan, Ca Mau and 9 provincial shelter places located in Hai Phong, Quang Tri, Quang Nam, Quang Ngai, Binh Thuan province) were also started to operate. Besides, 10 shelter places and fishing ports had been completed and ready for operations to ensure sufficiency for 12,000 vessels. It can be seen the system of ports built in recent years has contributed to improving infrastructure in coastal areas. Fishermen could conduct to transfer their products easily and and receiving fuel and other necessary materials for fishing trips. Therefore, they can reduce retention time in fishing ports; avoid reductions in quality and quantity of products; ensure hygienic and sanitation. In some ports, there are wholesale central fish markets, where marketing mass of products contributes to promote commercial development.

Fuel cost support: this support policy was carried out in 2008. Objects of this policy were fishermen, who owned offshore fishing vessels or making services for offshore fishing. These fishermen must conduct operating constantly and their income mainly from offshore fishing activities. Fishermen, who want to gain this support must satisfy following conditions: the offshore fishing must be operated at least more than 6 months per year, has registration, being registrated fishing gear under rules, licence to fishing, has address of circulation and has confirm of local goverment for each fishing time.

Building and buying new vessel, renewing machine (decision No. 289/QD-TTg): with objective of changing structure of fishing boat from inshore to offshore fishing, changing old machines (which use large of fuels) to new machine (use less fuel), government support fishermen in for building new vessels (with power from 90 HP) and renewing machine (vessels from 40-90 CV).

Prefferential credit support for building offshore fishing vessels: The Vietnam government advocated prefferential credit support for building offshore fishing vessels to ensure high quality fishing products for consumption, and in the same time maintain the livelihood of fishermen. Beside that, part of inshore fishermen can move to aquaculture activities or fisheries services. This is a resonable policy to gradually stabilize & reduce inshore fishing capacity and to promote offshore fishing activities. By the policy, many fishermen who had experiences and capacity speeded up the investment for larger vessels, changing techniques to improve product quality and to exploit effectively. It also created more jobs not only directly for fishermen, but also for workers involving in fisheries services. Furthermore, it contribute to improve living standard for coastal communities and contribute to the modernize capture fishing.

Other policies

Tax policy: since 2005, no resource and no revenue tax for fishing companies; 50%-cut of registration tax for construction of new vessels & purchase of new machines for offshore fishing; The policy of reduction of 50% for registration tax for new vessel constructions, renewing vessel engine for offshore fishing activities is a very good one, it shows the interest of the government in the development of offshore exploitation and created good conditions for fishers to invest more on offshore fishing vessels. Before 1997, the offshore fishing vessels (with engine power more than 90 CV of machines) mostly belonged to state enterprises and around some hundreds. Up to now there are more than 14,000 vessels with more than 90 CV engine power. Virtually the entire number of vessels is owned by private sectors. However, the

abolishment policy of the fisheries resources tax also has a number of limitations such as unequal issue happened between fisheries and other resources exploitations and even in a fishery community with people who exploit natural resources at different levels, reducing awareness of responsibilities and obligations of fishers in contribution to the development of their communities.

Fisheries training and extension program training for fishermen at the National Centre for Agriculture and Fisheries Extension with regards to technology for efficient exploitation (incl. avoiding young stocks), storage and quality and changing career from inshore to offshore fishing or aquaculture; investment from 2001-2008: 180 billion VND for fisheries sector, of which 18 billion VND for capture fisheries

Regional sharing of knowledge in support of livelihood development and reduced vulnerability for fisher communities and of sustainable fisheries resource management

Donor supported projects provide regional sharing of livelihood development sharing e.g. 26-27.10.2009 ‘Small-scale fisheries co-management Conference’.

Information sharing is poor in Vietnam but the MARD-Danida Fisheries Sector Programm phase II (FSPS II) has upgraded the MARD portal and by January 2010 downloadable pdf texts will be available and links created.

Recommendations

Reform of fisheries information management, including licenses system to ensure input control; strengthening the monitoring, control and surveillance of fisheries activities;

Promotion of fisheries co-management as a means to reduce fishing efforts, improve responsible fisheries while reducing intervention and expenses of the government;

Support the ecosystem based fisheries management including the establishment of Marine Protected Areas;

Provide scientific research to support efficient exploitation and technological modernization, to create a solid basis for regulation, and to promote environmentally friendly technologies (e.g. by-catch reducing gear);

Extend membership of Vietnam to international and regional fisheries management organizations and adjust national policies to their rules;

The Regional Fisheries Livelihood program should be linked to the National Development Program for Agriculture – Rural areas – Farmers just issued by Vietnam Government for period 2010 – 2020. This program focuses on investing infrastructure and re-structuring production for fisheries sector and fishermen communities.

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