

Production in Aquatic Peri-Urban Systems in Southeast Asia

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Marketing Channels of Fish and Aquatic plants in Ho Chi Minh City

by

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MARKET ANALYSIS

1. Objectives:

To study the present status of marketing channels of freshwater fish and aquatic plants in peri urban areas of Ho Chi Minh City.

To gather information about price, yield, production source, labour composition, means of conveyance, demand and consumer preference... from producer to consumer.

To analyse many factors impacted to maintain ability and enlargement of fish and aquatic plant markets in Ho Chi Minh City.

2. Methodology:

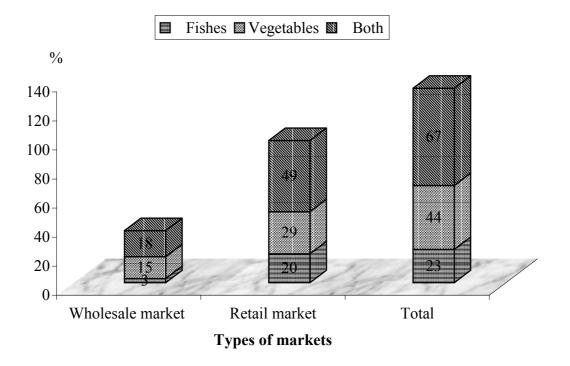


Figure 1: Number of markets surveyed

67 markets in HCMC were surveyed, included: 18 wholesale and 49 retail markets. (Figure 1).

A questionnaire was used to directly interview 43 traders (15 fish traders, 28 plants traders); 46 wholesalers (20 fish wholesalers, 26 plant wholesalers) and 100 consumers (50 fish consumers, 50 aquatic plant consumers) in 22 district of peri-urban HCMC (Figure 2).

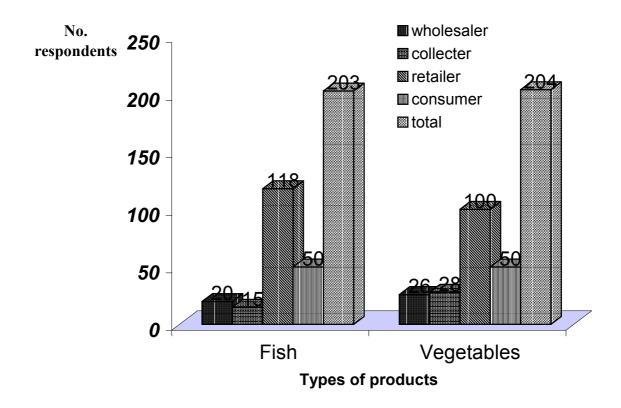


Figure 2 Sample size of survey respondents

3. General information about market actors

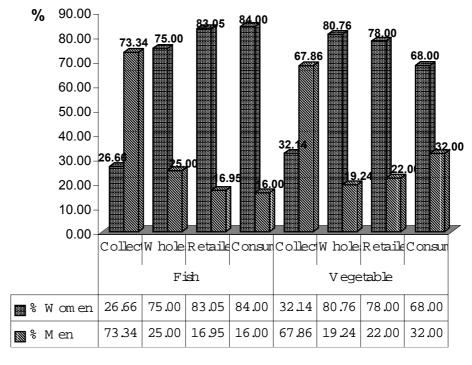


Figure 3 Gender of market actors

The majority of collectors (people who transport the produce to market) are men because of the physical nature of the work (fish collectors: 73.34% male; plant collectors: 67.85% male). (Figure 3)

However this work requires much background experience, so collectors tend to be between 35 - 55 years old. People from 15 to 35 years old are mainly primary helpers who don't participate officially in the transport.

For aquatic plants, their collection and transport dont require much experience, so participants are from different age groups.

Wholesalers must have experience in business and good communication skills with customers, therefore the majority of them are women (75%) and primarily from 36 - 55 years old (100%) (Table 4). Womens labour is primarily involved in the trading of aquatic plants (83.26%), however this business doesn't require as much experience as for fish wholesalers so the age range is relatively homogeneous from 15-55 years old (Table 5).

The Retailer is the final link in the consumption chain between producer and consumer. Retailers buy a variety of products to supply to the consumer. Most retailers are women because of tradition in Vietnam (fish retailers: 83,05% female; aquatic plants: 78% female). The range of labor age is large.

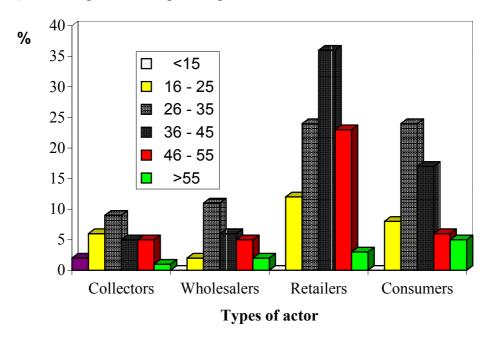


Figure 4: Age of people involved in marketing activities of aquatic plants

4. Marketing channels of fish and aquatic plants

+ For fish markets, collectors buy directly from the producers,, in order to supply wholesaler or retailers in HCMC (60% sold to wholesalers ,23% to retailers and 19% directly to canteens or larger restaurants).

- + For aquatic plants, collectors sell to wholesalers and retailers, but not directly to the consumer. The collectors who transport the plants tend to live and work in the areas where the aquatic plants are grown, so that they purchase plants from the producer, then transport to the market at night in order to distribute to wholesalers and retailers. Because they work through the night, they generally rest during the daylight hours.
- + The Wholesaler is a major link in consumption channel, trading goods in large volumes and monitoring and maintaining important rules and regulations with the producers and retailers.
- + The Retailer is the final link in chain from producer to consumer. Retailers can sell goods to other retailers although this is not common. The majority of fish and aquatic plants (66%) are sold directly to the consumer by retailers with retailers sales to restaurants accounting for 33%. (Figure 6)

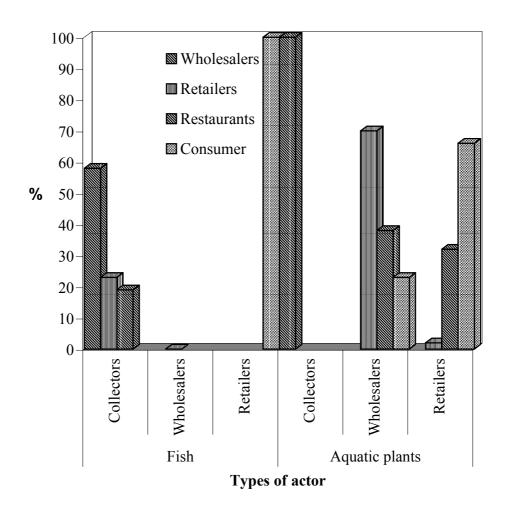
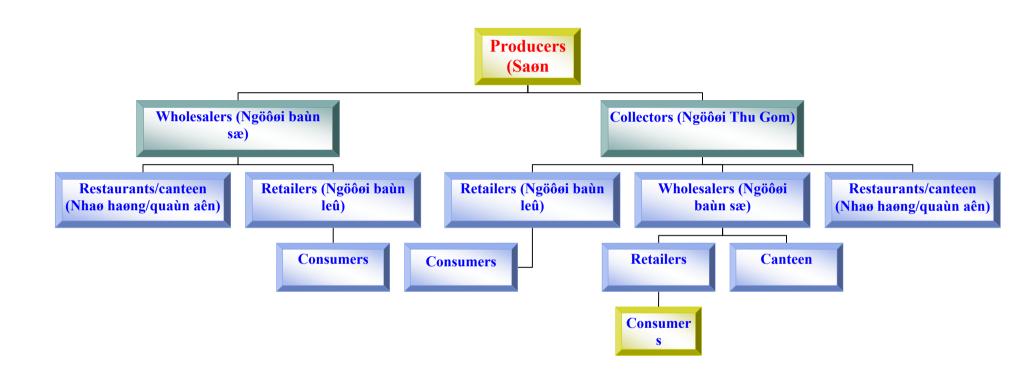


Figure 5 Types of buyers for market actors

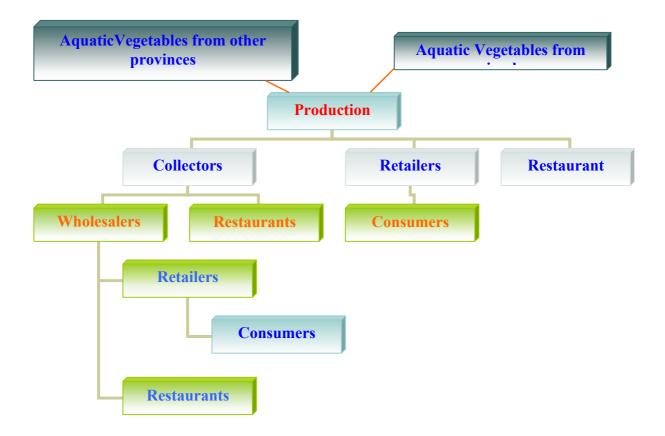
Figure 6 shows types of buyer for different market actors. Fish collectors can sell their product to three kinds of customers including wholesalers, retailers and restaurants out of which wholesaler is the most popular customer. 100% of fish retailers sell products directly to consumers.

Regarding vegetables, 100% of aquatic vegetable collectors are doing their business with wholesalers while wholesalers may have many kinds of customers including retailers, restaurants and consumers. However, retailers are the most common customers of wholesalers. Some aquatic vegetable retailers can do their business with some other retailers but this is not commonly seen. The most popular customers of retailers are consumers who buy food for family consumption.

Flowchart of fish marketing channel



Flowchart of Aquatic Vegetable Marketing Channels



5 Categories of products sold:

Most aquatic products are sold fresh in the market. 86% of all fish is sold fresh from the wholesaler whilst retailers sell 80% fresh/live from their stalls. Fish such as snakehead, giant gourami and red tilapia are more difficult to keep alive in the market even though traders keep them in specially aerated tanks therefore when they die traders sell them off at reduced prices. With lower value fish such as silver carp, grass carp and tilapia traders also sell at lower price when they have died.

Aquatic plants such as morning glory always has to be sold in its fresh form. So, the majority of aquatic plants are cut, collected, supplied to HCMC's peri-urban markets and then on to the consumer all within 24 hours.

There is also a distinction in the quality of both aquatic plants and fish amongst the various retail markets in HCMC. For the central markets such as Ben Thanh An Dong etc the quality of goods is usually good and prices generally higher than at Go Vap, Binh Chanh, and Hoc Mon markets. However, these latter markets are near to the areas of production for fish, so fish farmers can directly transport their produce to the market, and there is no intermediate stage.



Figure 6 Types of sold products

6 Transportation

There is clear difference between transportation of fish and aquatic plants from peri urban HCMC by collectors. For fish trucks are almost always used whereas it is mainly motorbikes (88.46%) for aquatic plants.

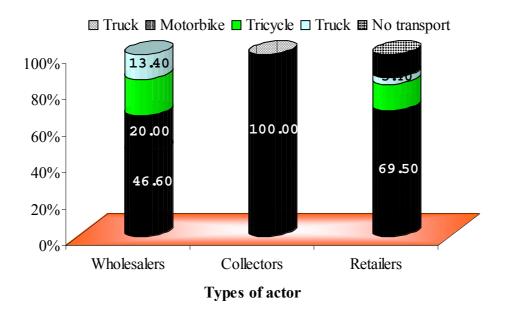


Figure 7 Transportation means to peri-urban fish markets

Because fish need to be kept fresh, therefore it is necessary to transport them by truck when the distance from the producers to wholesale, retail market and restaurants is far (5-20 Km).

Aquatic plants are mainly transported by motorbike because distances from the producers to the markets is far nearer (3-10 km). During the transport process aquatic plants are heaped together by many collectors in one place allowing larger vehicles to transport bigger loads.

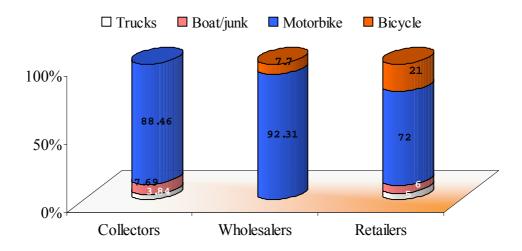


Figure 8 Transportation means for peri-urban vegetables

The means of conveyance of fish from wholesalers to retailer are mostly truck, motorbike and box-tricycles. Wholesalers must either come to the farms of the producers or the collectors go to collect the fish, so the truck is an essential means of conveyance.

The collectors or producers who come to the wholesalers or retailers to supply goods use motorbike, box-tricycle, Dasu car (mini- truck) For aquatic plants motorbike and bicycle is still the commonest and most advantageous means of conveyance.

7 Price

Price is one of the decisive factors for producers In allowing them to make profit and continue culturing fish or aquatic plants.

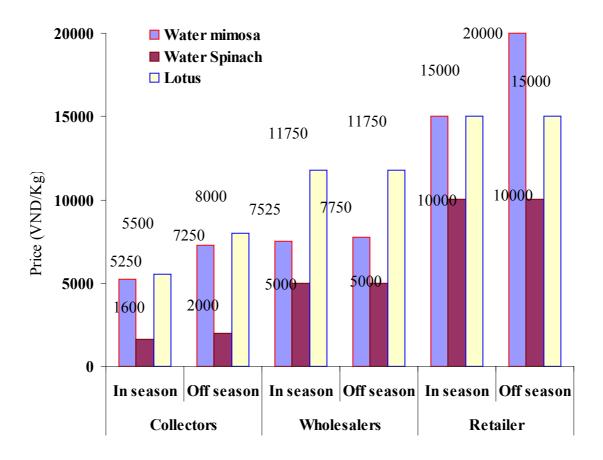


Figure 9 Seasonal price fluctuation of aquatic plants

From the results of our survey there is clearly a price fluctuation for aquatic plants by season and weather. Prices fluctuate from 400 to 3000 VND/Kg. The main growing season for aquatic plants is the rainy season from June to October, with the off season from November to April due to water insufficiency. However, within the same season prices can also change. In the rainy season, if it rains a lot, plants can become waterlogged so prices can increase. In the dry season for the farmer it is difficult to culture aquatic plants because of insufficiency of water, therefore the price of aquatic plants can be much higher although quality of the product is sometimes inferior compared to that produced in the rainy season.

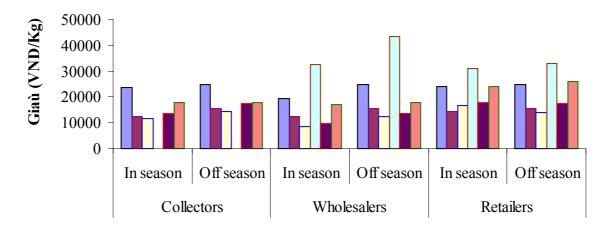


Figure 10 Seasonal price fluctuation of fish products

Different from aquatic plants, the price of fish does not fluctuate seasonally as much as aquatic plants. The price gap between actors is also not as big as for aquatic plants. This can easily understood as fish production is not affected severely by seasonal factors.

8 Administration of marketing channels

The majority of wholesalers and retailers have business licenses. All of the fish wholesaler register for business licenses because this is a regulation of working in the fish wholesale markets such as San Ca 50, Ong Lanh Bridge, and Xom Cui markets. The majority of wholesalers belong to Fishery Business Company HCMC. Besides, wholesalers, in retail markets also traders must also have business license to trade.

Conversely 69% of HCMC's traders of aquatic plants such as morning glory, lotus, and water spinach have business licenses. The majority of collectors or producers come to the wholesale plant markets without any licence or regulatory permit - some of these wholesale markets have no formal or regulatory structure where it is possible for any outside person to trade.

Collectors supply products to retail markets. They usually go around different markets so all of them don't have business licenses.

Table 1: Registration of wholesalers and retailers

Type of market trader –	Fis	sh	Vegetable		
	Yes	No	Yes	No	
Wholesalers	100	0	69	31	
Retailers	78.8	21.2	89	11	

Most retailers must trade in the market so they need a business license (78.8-89%). At the same time, some retailers trade outside of the market, in roadside and mobile markets and therefore don't need business licenses (11-21.2%). The business licenses are normally registered by traders to their respective market adminsitrative committee before they can legally do their business. Some retailers who don't have business licenses would face troubles with their trading activites as they may be fined by market controllers. The registration fee for business license is different dependent on market and the scale of traders businesses.

Table 2 Taxes paid by wholesalers and retailers

					Unit: V	ND/month_
Type of market trader	Fish			Vegetable		
	min.	max.	mean	min.	max.	mean
Wholesalers	450000	1000000	738000	80000	300000	150653
Retailers	15000	72000	45881	30000	380000	162270

The tax expenses wholesalers must pay are very much higher than for retailers. Except for the rental fee wholesalers must pay security guards, hygiene, electricity and water expenses. These costs range from 450,000 to 1 million VND/month for fish wholesalers, and from 80,000 to 300,000 VND/month for plant wholesalers. Otherwise the tax expenses of retailers are much lower because they rent relatively smaller areas for trading (1 - 1.5m) so their tax expenses are lower from 15,000 to 72,000 VND/month. They also don't have to pay so much for electricity,

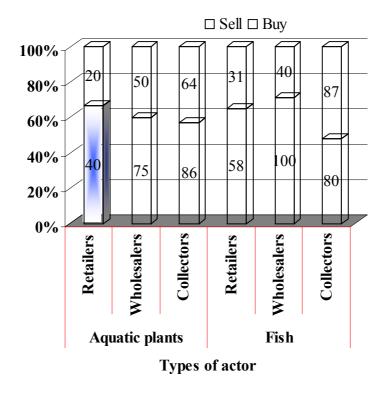


Figure 11 Trading contacts between buyers and sellers

Fish traders usually have permanent contracts with their customers for the reasons of: (1) prestige (2) trade professionally any goods which the retailer needs and (3) support from supplier (wholesalers and retailers can receive fish and pay at a later date ie credit)

In general, agreement between buyer and seller for fish and aquatic plants is mainly by mouth, without official papers.

9. Labor requirements

Most of traders need hired laor for helping in their business. Demand for hired labor changes and is largely dependent on the traders themselves.

Table 3. Number of labourers and wages paid by wholesalers and retailers

	Wholesa	Wholesalers		Retailers			
	min	max	mean	min	max	mean	
Fish							
Labour (person)	3	5	4,1	1	2	1,21186	
Wage (VND/month)	375000	750000	595000	600000	800000	640678	
Aquatic Vegetables							
Labour (person)	0	1	0,423	1	3	0,38	
Wage (VND/month)	300000	600000	445455	100000	180000	154550	

The wholesale traders carry out a large quantity of business (around 1-5 tons per day most of which is fisheries products) therefore they need many labourers. The

number of labourers is normally 3-10 persons per trader with their average salary being between 445-595,000 VND per month.

For aquatic plant wholesalers the cost of hiring extra labour (154 - 550,000 VND) per month) is lower than that for fish retailers (640 - 678,000 VND) per month). On average the number of extra labourers is few, from between 1-2 persons.

10 Consumers' preferences

Nowadays, with the fast development of the economy, the standard of living of people is fairly stable and enhanced. Because incomes are increasing, the consumers' demand has also changed. Consumers are careful to chose goods, they tend to buy more and of higher quality products.

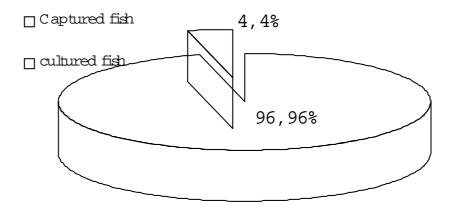


Figure 12: Consumers' preferences for captured and cultured fish

Also the consumer is increasingly interested and aware of their time, work and health. As their knowledge about their diet and nutrition is increasing, they are increasingly demanding more healthy and nutritious products.

Pork, beef and chicken keep an important role in the everyday meals of Vietnamese people. However the consumer is also interested in diet related food disease such as high fat content foods and overweight in relation to heart disease, high blood pressure and cholesterol in the blood. Therefore fish consumption is a new consumer tendency, with fish being a popular product because of price and there are many kinds of species to chose. Consumers prefer wild (caught) fish (96.96%), the ratio for preference of marine to freshwater fish is similar.

Table 4 Freshwater Fish and Aquatic plants: HCMC's consumers' preferences

Types	Percentage
Fish	
Snakehead	46
Tilapia	20
Giant gourami	20
Red tilapia	18
Hybrid catfish	14
Carps	14
Climbing perch	8
Aquatic plants	
Water mimosa	34
Water spinach	36
Lotus	4
Others	26

As regards to freshwater fish, snakehead is liked best (46%) because it doesn't cause any allergic reactions in those who eat it unlike tuna which when eaten often causes skin allergies, it has few bones, is easy to process, and has a relatively good price. Consumers usually pay from 40,000-400,000 VND per month on fish.

For aquatic plants, mimosa, and water morning glory are products which are liked best. However the price of water mimosa is high (10,000 to 30,000 VND/Kg), other aquatic plants range from 3,000 to 6,000 VND/Kg), so consumers occassionally might buy water mimosa although overall consumption very much depends on consumers incomes

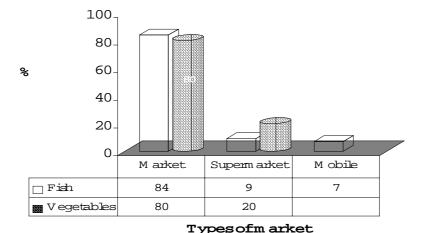


Figure 12 Market places for the HCMC consumers – where do they buy their fish and aquatic vegetables

Consumers usually buy their food at the local street market (80-88%), because the distance from their house to the market is normally less than 1km and there they have competitive prices. Some people buy food at the supermarket because they are interested in food safety (9-20%), particularly as regards to vegetables. Howeve, people who live in further out peri urban areas of HCMC such as Cu Chi, Hoc Mon, and Can Gio can usually buy food directly from mobile traders with trucks or from small stores near their house since the distance from their house to the nearest market is far (up to 5 km and the market is few in this village.

Aquatic plant consumption in HCMC and Vietnam as a whole is very popular, 50% of consumers surveyed in HCMC regularly eat aquatic plants between 11-20 times per month. The majority of consumers don't seem to worry about eating aquatic plants grown in waste water (80%), but are more interested in the price of product for making their choice.

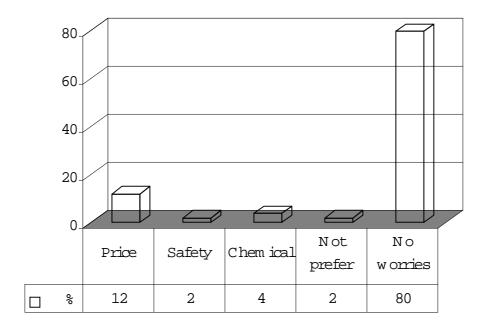


Figure 13 Criteria for choosing aquatic plants for food

11 City plans for market development:

At present, 100% of marine fish and aquatic plants are located in urban areas of HCMC that somehow facilitate convenient trading activities as wholesalers and retailers from markets can buy their products easily within short distances. However there are some problems attached with this situation such as traffic jams at marketing sites, affecting the beauty landscape of the city, and also pollution of the surrounding environment.

With those problems, HCMC Authority and the Department of Trade have issued the decision 02_QL CHO (31/12/2002) emphasizing on planning and reconstruction for development of the market system in HCMC until 2010. The decision clearly states that until 2010, there will be only 271 formal markets including 207 traditional markets and 64 vegetable markets). Besides the supermarket system will also be expanded. Two wholesale markets for agricultural products and 1 wholesale market for sea foods will be established at 3 main entrances of the city including Thu Duc, Hoc Mon and Binh Dien.

The Thu Duc wholesale market for agricultural products has been operating since October 2003. With the new constructed infrastructure, the market has proved to satisfy the minimum requirements on area, car parking, and goods storage facilities. Goods quality is also controlled by the Quarantine Station of Department of Agriculture and Rural Development of HCMC. Therefore the city landscape has been improved. However, long distance from the city has increased traders and producers transportation costs. On the other hand, some wholesalers have lost their long term customers when they have moved to the new market. As a result, only 50% number of stalls in the markets have presently been occupied.