

**ROLE OF THE MIDDLEMEN IN THE SUPPLY OF THE PROCESSING INDUSTRY.
CASE STUDY: THE CENTRAL SOUTH REGION IN VIETNAM**

DO THI THANH VINH
Faculty of Economics
Nha Trang University - Vietnam
Email : vinh.dothithanh@univ-nc.nc
Tel : (84) 58 872094
Fax : (84) 58 872094

ABSTRACT

The processing industry is playing an increasingly important role in Vietnam's overall economy. A study on the restructure in this sector across the Coastal Central South has demonstrated the dominating part that middlemen are taking in connecting the supply, represented by fishers and farmers, to demand, represented by processing enterprises. Still, middlemen have gone further in establishing their influences on both, via assisting small producers in inputs for production while intervening the price fixation traditionally practiced by processing enterprises. In deed, their leveraged position has come to the detriment of small-scale producers and processing enterprises.

After examining specific constraints that have hampered potential development of the field, several recommendations are therefore proposed in favor of regulations and policy-marking processes at both business and industry levels. Once the tendency of extending this model is visible, it is hoped that suggested measures can encourage Vietnam, which has so far been witnessing the mainstream of transition from the centrally planned to market-oriented economy, to successfully introduce far-reaching reforms.

Keywords : Supply, raw material, market, fishery resources, transformation, middlemen

I. INTRODUCTION

In an effective supply system for enterprises, middlemen frequently undertake a main role among suppliers. The fisheries processing industry serves as a typical example experienced by Asian nations and other developing countries. For instance, in Nigeria middlemen can be classified into three groups: wholesalers, semi-wholesalers and retailers (Mafimisebi, Okunmadewa, 2006). Their activities in the market consist of: collecting, purchasing, stocking, transporting, standardizing, promoting, supplying and selling fisheries products.

In Bangladesh, the Philippines, India and Thailand, the fisheries trading submit to the control of private sector. There exist four categories of middlemen distributing products from producers to final consumers: brokers, wholesalers, wholesale-retail intermediaries, retailers (Dey, Paraguas, Alam, 2002).

The above mentioned situation also applies to the fisheries processing enterprises in Vietnam, where has not yet set up a consistent operating mechanism. Within the scope of this study, we would like to introduce the case of South Central region of Vietnam, which possesses distinct features compared to other parts of the country.

In almost fisheries processing enterprises in this region, they do not choose the shortest supply channel between producers and enterprises. There has been a dramatic increase in the number of middlemen undertaking the purchasing, transporting of fisheries products to enterprises; but their activities simultaneously put pressure on raw material producers and create disorder, difficulty for managing the raw material supply system. Rearranging the middlemen force has been recognized as a top priority in the development strategy of the fisheries processing industry in the region.

1. Evolution history :

Middlemen (intermediary merchants) took their first appearance with the foundation and development of the fisheries in the South Central region, Vietnam.



Figure 1. Map of the South-Central region, Vietnam

Prior to 1980, they operated as those collecting fisheries materials to sell in local fish markets. During this period of time, exporting was not developed; fisheries processing enterprises were limited in number. The State strictly took control over fisheries supplying and consuming of enterprises.

Since 1986, thanks to the economic renovation policies, Vietnam has changed direction to socialist oriented market economy. Export activities were promoted, which in turn stimulated raw material production.

The annual growth rate in the number of enterprises in the region reached 17,6 % between 1996-1999 (Thai Thanh, 2005). This implies an increase in the number of middlemen – a force undertook the role of purchasing staff for enterprises. During this period, raw material producers did not obtain adequate market information, particularly the raw material purchasing price by enterprises. As a result, they had to undersell to middlemen.

In the first years of 21st century, the mass media advancement has allowed fishermen to acquire easy access and keep track of price movement of raw materials in the market. However, due to the ineffectiveness of the purchasing line, most of enterprises have to concede this work to middlemen while playing merely the role of managing raw material quality. Today, middlemen's activities have been stabilized and specialized.

2. Development facts

The South Central region of Vietnam stretches across 7 provinces and one coastal city, from Da Nang city to Binh Thuan province. This is the area where fisheries are most developed: coastal fishing with seining, long-lining fisheries; offshore fisheries...

Table I: Number of offshore fishing boats in the South-Central region of Vietnam

	2000	2001	2002	2003	2004	2005	2006
In the Country	9766	14326	15988	17303	20071	20537	20807
Central South Region	5164	6837	7780	8258	9764	9662	9814
DaNang city	46	61	74	118	225	276	184
QuangNam Province	462	478	490	520	538	540	543
QuangNgai Province	540	1320	1452	1608	2393	1897	1993
BinhDinh Province	2795	2976	3431	3568	3656	3784	3903
PhuYen Province	82	375	402	420	650	755	911
KhanhHoa Province	415	430	430	458	609	665	620
NinhThuan Province	182	187	314	338	650	1055	1071
BinhThuan Province	642	1010	1187	1228	1043	690	589

Source : Vietnam General Statistics Office (<http://www.gso.gov.vn>)

Table II: Aquaculture statistics in the South-Central region of Vietnam

Année	Production total (tones)	Production aquacole (tonnes)	Percentage of production aquacole (%)	Surface aquatique exploitation (hectares)
1995	339377	7873	2.31	14.5
1996	349668	8911	2.54	14.0
1997	381232	9674	2.53	14.7
1998	384548	13290	3.46	18.8
1999	441104	12832	2.90	20.3
2000	462938	20031	4.32	19.0
2001	484152	26054	5.38	22.1
2002	520972	27561	5.29	23.9
2003	546709	31493	5.76	26.4
2004	582785	35811	6.14	27.1
2005	623845	48914	7.84	25.2
2006	628242	50009	7.96	27.2

Source: Vietnam General Statistics Office (<http://www.gso.gov.vn>)

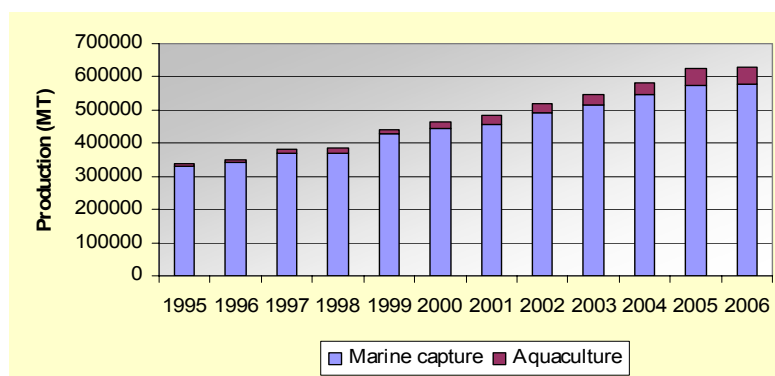


Figure 2: Aquaculture and capture marine production in the region

This is also the area where concentrates many fisheries processing enterprises of Vietnam. One of the basic factors stimulating the growth is the participation of middlemen in the raw material supply channel of these enterprises.

In the system of distributing, consuming fisheries harvests, middlemen play a crucial part. Our surveys conducted between 2006-2007 reveal surprising statistics: approximately 90% of fisheries purchasers are middlemen. They acquire control over the raw material market through purchasing fisheries products harvested by fishermen and aquaculture enterprises then selling back to enterprises in local fisheries markets for consumption.

The objective of our study is to examine the middlemen's fisheries product supply to processing enterprises and on this basis to improve the activity.

II. RESEARCH METHODOLOGY

During researching, we utilized quantitative methodology based on available statistics; we also applied qualitative analyzing method based on survey and interview results conducted on stakeholders in fisheries processing industry to determine the contribution of middlemen in fisheries product supply channel and to identify the real state of raw material purchasing and pricing behaviors among those involved. To come to a conclusion, a synthesized analysis will focus on recommending proposals to improve the interaction between intermediaries and other stakeholders engaged in the supply channel in the region.

In the first place, our research group started to examine 9 major enterprises distributed in different localities in the region. Criteria for choosing surveyed enterprises were the scale, export turnover and evaluation by experts in the industry.

A major difficulty has arisen during the research process: the inadequacy and poor quality of detailed and official statistics provided by the Vietnam General Statistical Office and the statistical department of the former Ministry of Fisheries. To overcome the above shortcoming, we have supplemented the statistics by directly examining the stakeholders involved in the raw material supply channel.

The collected information based on questionnaires allowed us to determine the relation between middlemen and enterprises in the raw material supply channel. Apart from this, direct interviews with other stakeholders (fishermen, farmers, middlemen) through three complementary questionnaires in order to clarify the situation and offer solid proposals.

III. RESULTS AND DISCUSSIONS

The middlemen in the South Central Vietnam have been established spontaneously. In fact, they represent as:

- Capital providers for fishers
- Intermediary traders in the input supply chain
- Important agents influencing prices on the input market

In fishing ports, middlemen collect and classify various fish harvested, supply to local fish markets and enterprises. There are about 7 – 12 middlemen operating in each fishing port. We can divide them into three categories: retailers, semi-wholesalers and wholesalers. The last ones distribute supplies to direct exporting or major enterprises in other localities.

Table III: Characteristics of suppliers for fisheries processing enterprises

Categories		Suppliers							
		Middlemen		Purchasing agents		Farmers		Fishermen	
		30 pers.		13 pers.		20 pers.		20 pers.	
		quantity	%	quantity	%	quantity	%	quantity	%
Owner capital	≥ 100 (million VND)	30	100	13	100	-	-	-	-
	< 100 (million VND)	-	-	-	-	20	100	20	100
Educational level	<i>Specialized</i>	1	3.3	7	53	5	25	-	-
	<i>Upper Secondary</i>	7	23.4	6	47	6	30	1	5
	<i>Lower Secondary</i>	3	10.0	-	-	4	20	4	20
	<i>Primary</i>	10	33.3	-	-	2	10	6	30
	<i>No formal</i>	9	30.0	-	-	3	15	9	45
Number of labors	≥ 10 persons	22	73	-	-	-	-	-	-
	< 10 persons	8	27	13	100	20	100	20	100
Advanced payment	<i>Cash</i>	30	100	-	-	-	-	-	-
	<i>Material</i>	5	45	-	-	-	-	-	-
Payments	<i>Cash</i>	30	100	13	100	-	-	-	-
	<i>Others</i>	8	27	-	-	-	-	-	-
Sold to	<i>Enterprises</i>	30	100	13	100	8	40	4	20
	<i>Purchasing agents</i>	-	-	-	-	12	60	16	80
	<i>Exporting</i>	-	-	-	-	-	-	-	-
Market	<i>Domestic</i>	30	100	13	100	-	-	-	-
	<i>Oversea</i>	-	-	-	-	20	100	20	100

Preserving means	200 litre - large barrel	200 litre - large barrel	Bamboo made baskets	- Large barrel - Vivier equipped vessels
Preserving methods	Frozen with ground ice	Frozen with ground ice	Frozen with ground ice	Frozen with ground ice
Difficulties in preservation	Material quality	Easy spoilage of fisheries products	Easy spoilage of fisheries products	Easy spoilage of fisheries products

Source: Statistics from questionnaires conducted on stakeholders supplying raw materials to enterprises in the region

The results interpreted from surveys show that the middlemen in the region play an important role in fisheries product supply though they are not specialized. Their average education standard is primary level. They develop a close relation with fisheries producers through advanced paying (100% middlemen interviewed prepay fishermen in cash and 45% of them prepay by objects). They rarely possess frozen trucks for transporting fisheries products.

Our surveys allow the examination of special relation between 3 groups of stakeholders: «fishermen – middlemen – enterprises». This relation can be reflected in following figure:

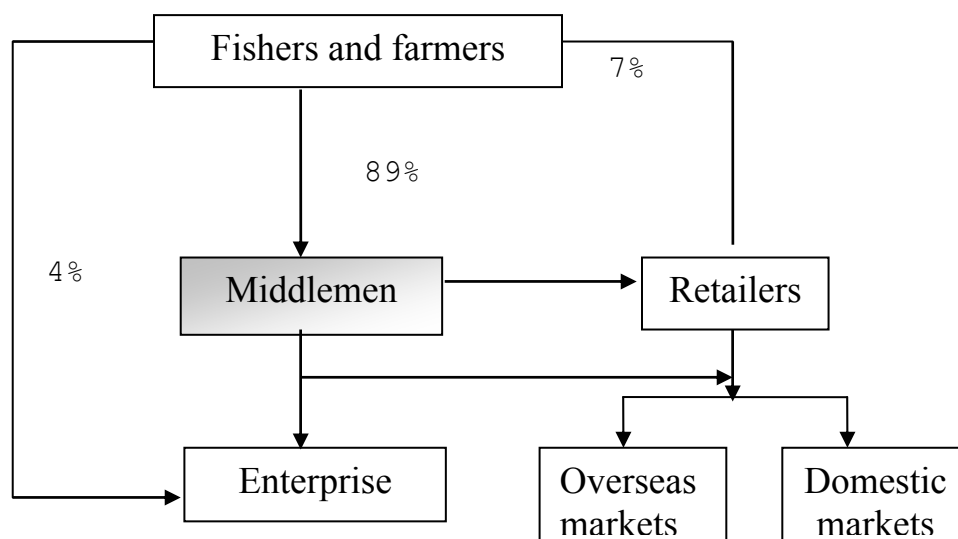


Figure 3: Input supply channels in the South Central Region of Vietnam

Source: Figures compiled from surveys conducted in the South Central Region

1. Fishermen – middlemen relation:

Middlemen grant loans to fishers for building vessels, equipping engine and fishing gears. The amount of loans granted depends on scale of vessels or fishing capacity as well as prestige of vessel owners. According to our survey results in Phu Yen Province, only with 40 – 60 million VND, middlemen may take control over almost fisheries products harvested. And this amount of loan does not require any legal procedures: merely a hand written paper signed by vessel owner

and creditor. Loans without interest enable middlemen to purchase fisheries harvests and enjoy commissions. Fishermen are obliged to sell them products at market price. Nonetheless, middlemen do not necessarily receive commissions: if fishermen are unable to cover expenses, the commissions can be excluded and if enjoying a bumper harvest, they have to pay commission at a high rate. The flexibility in fixing commission rate depends on post-sale negotiations. In return, middlemen are obligatory to ensure fish purchasing in high season. In this case, middlemen have to persuade enterprises for repurchasing harvests.

If they fail to reach an agreement, fishermen have rights to sell fish to other middleman and return commission to initial middleman.

If this case repeatedly occurs, fishermen will seek for other middlemen for sale and return initial loans granted in advance.

Middlemen also take responsibilities to ask for money from enterprises to pay fishermen. Because enterprises frequently make post-sale payment, middlemen have to prepay fishermen. This is necessary since fishermen need money to cover labor cost, repair vessels and prepare for a new fishing route.

For vessels without prepayment, they purchase fish at an equivalent price with that of pre-invested vessels. However, they will not enjoy commissions and take no responsibilities to consume fish for fishers.

Consequently, the middlemen – fishermen relation is established on the basis of the proximity among fishing community. Advanced payment for fishermen makes purchasing price set by middlemen more competitive than that of processing enterprises.

2. Middlemen – Enterprise relation

Vessel owners may not accept the limited investment offered by middlemen, they will sell their harvests directly to enterprises. However, they are faced up with complicated administrative procedures set by enterprises. Apart from this, many enterprises want to keep long term relationship with middlemen, thus they reject direct purchasing with fishermen, which worsens the situation.

Table IV: Raw material supplying to enterprises

	2003		2004		2005	
	Quantity (kg)	%	Quantity (kg)	%	Quantity (kg)	%
1. Middlemen	1 763 255	81,23	2 143 920	82,07	2 600 398	81,12
2. Fishermen	11 070	0,51	4 506	0,17	20 515	0,64
3. Purchasing agent	354 908	16,35	438 345	16,78	520 272	16,23
4. Farmers	41 460	1,91	25 535	0,98	64 432	2,01

Source : Statistics on raw materials in Long Sinh Co., Ltd, - a typical enterprise engaged in mid-scale fisheries processing in South Central region, Vietnam

After purchasing fish harvests at the port, middlemen then classify fish basing on enterprises' demand. Qualified fish will be transported to enterprises; the remaining will be sold at local markets or trash fish traders.

In some cases, according to agreed contract between fishermen and middlemen, fish will be directly sold to retailers or buyers in local markets. Middlemen will receive commission on each kg of fish sold. The average commission per kg of sardines fish was 500 - 700 VND and 200 - 400 VND for trash fish (Nguyen Phong, 2006). Enterprises will decide their purchasing with one or more middlemen.

Enterprises have to provide middlemen with information regarding raw material prices set by purchasing quality and quantity standards. In case of changes incurred in pricing, enterprises must inform middlemen immediately.

If purchasing prices offered by one enterprise is lower than that of other competitors, middlemen will have to renegotiate with that enterprise. Middlemen are responsible for supplying raw materials satisfying processing standards of enterprises. In return, enterprises have to pay them in a timely and fair manner.



Figure 3 : Trading activities of the middlemen in the region

Enterprises have to provide middlemen with information regarding raw material prices set by purchasing quality and quantity standards. In case of changes incurred in pricing, enterprises must inform middlemen immediately.

If purchasing prices offered by one enterprise is lower than that of other competitors, middlemen will have to renegotiate with that enterprise. Middlemen are responsible for supplying raw materials satisfying processing standards of enterprises. In return, enterprises have to pay them in a timely and fair manner.

The cooperation between two parties is based on the prestige of middlemen and enterprises, there is no agreed contract between them; if such contracts exist, they are normally very simple and there is merely the mutual trust in their business collaboration.

IV. RECOMMENDATIONS:

It can be concluded that the middlemen play a crucial role in the raw material supply system for fisheries processing enterprises in the South Central region, which is similar with the case of some Northern provinces in Vietnam (Mc Cullough and Phung Giang, 2001) and the Province of Hubey in China (Wang, 1999).

Middlemen have penetrated and played a crucial role in the raw material supply system of enterprises. In fact, thanks to them, fishermen can have access to capital source for production. This is significant since Banks are frequently uninterested in investing in this risky area.

Purchasing activities of middlemen are not deeply involved in administrative procedures and negotiation. They make payment immediately and contribute to reducing duration for transporting products to enterprises, ensuring raw material quality.

However, in the “purchasing-selling” operation of the raw material market of enterprises, middlemen’s activities have more or less negative effects. With a modest investment, middlemen can benefit considerable commission when there are huge harvest outputs until vessel owners are able to repay this loan. Middlemen become rich rapidly while fishermen have to face with lots of difficulties because they do not have direct relation with enterprises thus have to sell to middlemen at low price.

Despite of the highly effective business, middlemen still face risk of losing all of their invested capital. However, they also take precautions against this risk: the modest invested money is not sufficient for vessels owners to improve fishing capacity.

Though middlemen do not participate in production, they have power to determine prices of fisheries products. This makes raw material prices unstable, importantly affecting production effectiveness of fishermen as well as operation of enterprises. Therefore, in spite of increasing fisheries production, enterprises still face with a shortage of raw material for their operation.

Furthermore, due to middlemen’s intervention, enterprises can not take control of supplied raw material quality. Tracing origin of raw material is a questionable matter for fisheries processing enterprises in the region as well as in Vietnam.

In order to improve the situation, we come up with some policy recommendations in the short term:

1. Implementing sustainable development guidelines in raw material supply:

To promote sustainable development in the fisheries processing sector, there should be synchronous coordination among concerned sectors basing on resource evaluation and harvest stock so as to deliver optimal management of them. Taking control of fishing ports in the region is absolutely important, even the first priority.

Apart from this, due to rather long distance between fishing ports and enterprises, localities should finance to build frozen store houses located nearby fishing ports to preserve harvested material.

In the long run, some raw material markets should be built in the region in order to eliminate unhealthy competition among middlemen.

It is absolutely necessary to adjust middlemen’s activities by the following methods:

- Persuading them to register commercial business to control price fixing and tax payment of middlemen.
- Demanding them to improve equipment, transport means as well as raw material preservation.

In the supply system, enterprises should choose middlemen best satisfying business objectives and interests of enterprises as well as fishermen. Although there are different methods used to select suppliers, multi-criteria based analysis theory has many advantages in terms of strictness and flexibility. It consists of identifying input market; studying demand and selling; evaluating and selecting middlemen; negotiating with them, ordering; following up purchasing progress and performing orders of middlemen.

According to penetrating logics, supply system is only a link in the product line from suppliers to consumers. According to this definition, effectively organizing raw material system of enterprises prohibits any closing (Régis B., Phillippe V., 1995). The comprehensive perspective of the chain flow allows an approach to the theory of cooperation with suppliers...The

cooperation with middlemen requires concrete plans, regular checking and reevaluation of shortcomings.

2. Encouraging middlemen to participate in vertical integration in the fisheries material supply:

Many research outcomes allow a conclusion on the multi-facetedness of a vertical relation in the agriculture sector. This trend started with the Anglo-Saxons expression on Raising Rivals' Costs (RRC) theory ((Salop et Scheffman, 1983, 1987; Krattenmaker et Salop, 1986, 1987).

The canned food industry in France used to be a legislative and economic confronting objective for one major supplier to take control, and controlling this supplier by another competitor led to the decreased supply for other enterprises in the industry (P. Guillotreau, 1999)..

Vertical link is not effective in case of enterprises without integration. There can be at least 6 types of strategies posing difficulties to enterprises (Glais, 1995).

Within the article, we want to introduce one vertical link mechanism with the mode of cooperatives which seems to be the most suitable for studying to improve the influence of middlemen in raw material system of fisheries processing enterprises.

The cooperative mode allows the connection of actors in the raw material system of fisheries processing enterprises in developing countries. If raw material producers, suppliers and enterprises can participate in cooperatives, they have to cooperate with one another. The sustainability in their business relation will be assured, eliminating the ignorance and indefiniteness of this relationship.

The cooperative mode suitable for production conditions of Vietnam can be based on the definition of the International Cooperative Union: "*A cooperative is self-control association of individuals voluntary to gather in order to satisfy common economic, social and cultural aspirations, needs under the form of a collective owned enterprise and power implemented democratically*" (Bidet, 1998).

We should identify cooperative as a legal entity assembling individuals in different fields (commerce, product, service consumption). In other words, economic, social, cultural activities set up a foundation of cooperatives. Cooperatives do not satisfy every need of all members but only those sharing capital and will operate more effectively thanks to the support of cooperatives. Cooperative and its members will create a market in which they become customers of one another.

From real world experience, we think of a dynamic cooperative mode better suiting the fisheries. The mechanism of assuring the sustainability of cooperatives is collaboration mode of joint stock form. In fact, the joint-stock collaboration mode will promote collaboration economics in the value chain. However, due to features of reform process, to establish such a cooperative mode can only be implemented in the long run.

Simultaneously with the development of vertical link relation, middlemen will decrease in number and business legal entities but will become more professional in their fisheries supplying activities.

V. CONCLUSION

After studying effects of commercial operation conducted by middlemen in the raw material market of fisheries processing industry, an obvious reality was put forward: due to poor infrastructure, middlemen have to identify an optimal management policy.

Conversely, the limited number of fisheries wholesalers (leading to monopoly), activities related to their price fixing will stimulate illegal agreements, as well as violate regulations founding competition mechanism of market.

Finally, it is suggested that with the growth of fisheries industry, a new mode has been developing in the commercial chain (Alam, 2000). This mode may considerably change concepts on material zone, initial material assembling place in the market, intermediary market, consuming place and retail market.

REFERENCES

1. Alam S. (2000) "Production, accessibility and consumption patterns of aquaculture products in Bangladesh". *Report submitted to ICLARM*, Penang, Malaysia.
2. Ansoff HI. (1965) *Corporate strategy*, Mc Graw Hill.
3. Bidet, E. (1998), « L'économie sociale: un secteur d'avenir ? », *Problèmes politiques et sociaux*, n°798, French documentation, Paris.
4. Dey MM. (2000); "Analysis of demand for fish in Bangladesh". *Aquaculture Economics and Management* 4; p.p.63-82.
5. Dey MM, Paraguas FJ, Alam MDF, Cross-Country synthesis. *FAO corporate document repository*, No 1, Vol 6 Fish marketing practices.
6. Do Thi Thanh V., (2006) "Aquaculture in Vietnam : Development perspectives", *Development in Practice*, Vol.16, number 5, Oxfam GB, UK.
7. Filser M. « Canaux de distribution » . Paris : Vuibert Gestion, 1989.
8. Glais M. (1995), « Les relations discriminatoires dans les relations fournisseurs-distributeurs », *Revue d'Economie Industrielle*, n°72, p.p. 81-97.
9. Krattenmaker T.G., Salop S.C. (1987), "Analyzing anticompetitive exclusion", *Antitrust Law Journal*, 56, p.p. 71-89.
10. Krattenmaker T.G., Salop S.C. (1986), "Competition and Cooperation in the Market for Exclusionary Rights", *American Economic Review*, 76, p.p.109-113
11. Le Anh T, Hambrey J. (2005) "Seed supply for grouper cage culture in Khanh Hoa, Vietnam. *Aquaculture Asia*; 2 ; p.p.39-41
12. Mc.Cullough B, Phung Giang H. (2001), "The live reef fish trade in Vietnam: a preliminary report from the field". *SPC live reef fish information Bulletin*; issue 5; p.p.12-16; New Caledonia.
13. Muldoon G, Johnston B. (2006) "Market chain analysis for the trade in live reef food fish",. (http://www.aares.info/files/2006_muldoon.pdf)
14. Nguyen Phong Hai. Projec ALMRV. (2006), "Final Report on the role of middlemen in the fisheries purchasing activities of off-shore fleets in Khanh Hoa" , National workshop 1-2 Août 2006, NhaTrang, *Notes and Documents*.

15. Mafimisebi TE, OKUNMADEWA FY., (2006) “Are middlemen really exploitative ? Empirical evidence from the sun dried fish market in Southwest, Nigeria”, in electronic Proceedings of the 13th *Biennial international Conference of the IIFET 2006*, Portsmouth (UK).
16. P. Guillotreau et F. Le Roy, (1999) « Les comportements concurrentiels comme objet d'étude », *Les cahiers de l'Artemis*, p.p. 46-66.
17. Perry , M.K., (1978) “Vertical Integration : The monopsony case”, *American Economic Review*, 68, p.p 561.
18. Régis B., Philippe V., (1995), « Comment optimiser les approvisionnements », *Economica*.
19. Salop S.C., Scheffman D.T. (1987), “Cost-Raising Strategies”, *Journal of Industrial Economics*, vol. XXXVI(1), p.p. 19-34.
20. Salop S.C., Scheffman D.T. (1983), “Raising Rivals' Costs”, *American Economic Review*, 73, p.p. 267-71.
21. Thai Thanh D., (2005) “Thuy san Viet Nam – Nhung chang duong phat trien”. *Document online of the Ministry of fisheries*.
22. Wang N. (1999), “Transaction Costs and the Structure of the Market: A Case Study”. *Am J Econ Social*, 58(4) : p.p.783-806.