

Policy Research – Implications of Liberalization of Fish Trade for Developing Countries

A Case Study of Vietnam



Nguyen Thanh Tung, Nguyen Van Thanh and Michael Phillips

Project PR 26109

July 2004



Bundesministerium für
wirtschaftliche Zusammenarbeit
und Entwicklung



Deutsche Gesellschaft für
Technische Zusammenarbeit (GTZ) GmbH



Natural
Resources
Institute

Support unit
International
Fisheries &
Aquatic
Research -
SIFAR



DFID Department for
International
Development

Food and Agriculture Organization (FAO) of the United Nations, Rome

This report forms part of a wider study on “Policy Research – Implications of Liberalization of Fish Trade for Developing Countries”, comprising five trade issues background papers and five country case studies.

The trade issues background papers are dealing with the following topics:

- Sanitary and Phyto-Sanitary (SPS) Measures and Technical Barriers to Trade (TBT)
- Ethical/Social/Eco Certification, Labelling and Guidelines
- The Impact of Subsidies on Trade in Fisheries Products
- The Impact of Dumping on Trade in Fisheries Products
- Fiscal Reforms and Trade in Fisheries Products

The case studies cover the following countries:

- Bangladesh
- Guinea
- India
- Uganda
- Vietnam

For a synthesis of the entire study including policy recommendations, see: Bostock, T., Greenhalgh, P. and Kleih, U. (2004), Policy Research – Implications of Liberalization of Fish Trade for Developing Countries – Synthesis Report. Chatham, UK: Natural Resources Institute. ISBN 0 85954 560-1.

Copies of the various reports are available on the following websites:

- www.onefish.org/id/225570
- www.nri.org/projects/projects/htm

The study was funded by the German Ministry for Economic Cooperation and Development (BMZ), and the UK’s Department for International Development (DFID).

The views expressed in this report are solely those of the authors and do not necessarily represent the views of BMZ, DFID, FAO or GTZ.

Table of Contents

EXECUTIVE SUMMARY	4
<i>Background.....</i>	4
<i>Catfish farming and poor people</i>	4
<i>The US anti-dumping decision.....</i>	5
<i>Impacts of the anti-dumping decision.....</i>	5
<i>Coping strategies</i>	6
<i>Lessons learned.....</i>	6
<i>Shrimp anti-dumping case</i>	7
PART 1: BACKGROUND	9
INTRODUCTION	9
POVERTY AND TRADE IN VIETNAM	9
<i>Context.....</i>	9
<i>Aquaculture and poverty reduction</i>	11
<i>Institutions.....</i>	14
<i>Trade Liberalization</i>	15
PART 2: CATFISH STUDY	19
STUDY ORGANISATION	19
<i>Objectives and Methods.....</i>	19
HISTORY OF THE CATFISH ANTIDUMPING CASE.....	20
<i>Development of catfish farming for export.....</i>	20
<i>History of the USA-Vietnam catfish anti-dumping case</i>	22
CATFISH FARMING AND POOR PEOPLE IN AN GIANG PROVINCE.....	24
<i>Market chain description</i>	24
<i>Stakeholder descriptions and activities</i>	27
<i>Poor people in the catfish farming and market chain.....</i>	35
<i>Development trends in the export chain</i>	36
IMPACTS OF THE US ANTI-DUMPING DECISION ON POOR PEOPLE	38
<i>Impacts on livelihoods</i>	40
<i>Coping with the anti-dumping tariff.....</i>	44
<i>Government policies</i>	44
CONCLUSIONS AND RECOMMENDATIONS.....	46
<i>Conclusions.....</i>	46
<i>Recommendations</i>	48
PART 3: SHRIMP	50
INTRODUCTION	50
SHRIMP AQUACULTURE AND TRADE LIBERALIZATION IN VIETNAM.....	50
<i>Policy for shrimp aquaculture</i>	51
<i>Shrimp trade liberalization.....</i>	52
<i>Environmental and social issues.....</i>	53
ANALYSIS OF STAKEHOLDERS IN SHRIMP FARMING AND TRADE.....	54
KEY TRADE ISSUES AND LIVELIHOOD IMPLICATIONS OF SHRIMP TRADE.....	59
SUMMARY	63
REFERENCES.....	65

Acknowledgements

The researchers are grateful to the Network of Aquaculture Centres in Asia-Pacific (NACA) for its support to the study team. We would also like to thank very much the Ministry of Fisheries, the Ministry of Trade, the Vietnam Association of Fisheries, the Department of Trade in An Giang province, the An Giang Fisheries Association and all the other agencies, individuals and companies in An Giang province. We would like to express our sincere thanks to all the poor households - the men and women in Vinh Hoa village, Vinh Thanh Trung commune, Chau Phu district and Phuoc Tho village, Da Phuoc commune, An Phu district, both in An Giang province – who shared their valuable time and experiences to contribute to this research study.

Mr. Nguyen Thanh Tung and Mr. Nguyen Van Thanh of GlobConsult Company, Hanoi, Vietnam, coordinated and managed the research team for the catfish study.

For further information please contact:

Network of Aquaculture Centres in Asia-Pacific
Suraswadi Building, Department of Fisheries
Kasetsart University Campus
Ladyao, Jatujak
Bangkok 10900
Thailand
Email: naca@enaca.org
Web: www.enaca.org

Exchange rate (July 2003):

1 \$US = 15,500 VND (*Vietnamese Dong*)

Abbreviations and Acronms

AIA	ASEAN Investment Area
AFTA	Asian Free Trade Agreement
ASEAN	Association of Southeast Asian Nations
AusAid	Australian Development Aid Agency
BTA	Vietnam – United States Bilateral Trade Agreement
CEPT	Agreement on Common Effective Preferential Tariff
CFA	American Catfish Farmers Association
CPRGS	Comprehensive Poverty Reduction and Growth Strategy
CRP	Centre for Rural Progress
DARD	Department of Agriculture and Rural Development in An Giang Province
DFID	Department for International Development
DOLISA	Department of Labour, Invalid and Social Affairs in An Giang Province
DOT	Department of Trade in An Giang Province
DOC	United States Department of Commerce
FAO	United Nations Food and Agriculture Organization
FDA	United States Food and Drug Administration
GEL	General Exception List
GSO	General Statistic Office of Vietnam
GTZ	German Development Cooperation Agency
Ha	Hectare
HEPR	Hunger Eradication and Poverty Reduction
ITC	United States International Trade Committee
MOF	Ministry of Fishery
MOHA	Ministry of Home Affairs
MOLISA	Ministry of Labour, Invalid and Social Affairs
MOT	Ministry of Trade
NACA	Network of Aquaculture Centres in Asia
PRS	Poverty Reduction Strategy
PPA	Participatory Poverty Assessment
SAPA	Sustainable Aquaculture for Poverty Alleviation
SIFAR	Strategy for International Fisheries Research
UN	United Nations
UNDP	United Nations Development Programme
USA	United States of America
VASEP	Vietnam Association of Seafood Exporters and Producers
VINAFA	Vietnam Fishery Association est. in 1982
VINAFIS	Vietnam Fishery Association est. in 2000

EXECUTIVE SUMMARY

Background

Since the end of the 1980s, when Viet Nam launched the *doi moi* policy of renovation, economic and social conditions have remarkably improved for the majority of the population. Poverty levels have been reduced by half over the past ten years. Social services have been improved and the economy in general continues to grow at a high rate. Vietnam is a country that has made significant strides in poverty reduction. Using the international poverty line, poverty incidence in Vietnam has been reduced from 37.4% in 1998 to 28.9% in 2002, or a 2% decline annually. Indicators such as access to basic services like electricity, clean water, health care and education show substantial improvement, especially in rural and remote mountainous areas. However, poverty still remains at a high level and the disparity among regions and ethnic groups is increasing. Poverty is still mainly concentrated in rural areas, where 90% of poor people live.

In Vietnam the fisheries sector, especially coastal and inland aquaculture, is a prioritized sector for development. It is important not only for national income through exports but also as a subsistence activity for poverty reduction among the large rural population. Several million people depend on aquatic resources, directly or indirectly, for their livelihoods in inland and coastal areas. According to official employment statistics, one in every twenty-five persons in Vietnam is engaged in a fisheries activity. This means that there is a considerable labour force of around 3 million people is directly employed in the country's fisheries sector.

Farming of catfish is an important freshwater aquaculture activity in Vietnam, reared in floating cages and ponds. "Tra" (*Pangasius hypophthalmus*¹) and "basa" (*Pangasius bocourti*) farming is a traditional occupation and a means of livelihood for farmers in the Mekong Delta in the south of Vietnam (Trong et al, 2002). Thanks to the Government's trade liberalization reforms catfish production increased substantially in recent years to catering to increased international demand and market opportunities. Volumes of catfish fillet exported by Vietnamese export companies increased from 5,000 tonnes in 1996 to 10,000 tonnes in 2001 (90% of which was the tra species), with half exported to the United States.

Catfish farming and poor people

There are a large number and diversity of stakeholders involved in catfish farming and exporting in the Mekong delta, including significant numbers of poor people. An Giang is the most important catfish farming province in the Mekong delta. Here, there were 3,178 floating cages for catfish farming and several thousand ponds with a total water surface of 1,560 ha. These cages and ponds provided employment for 11,058 households raising the catfish either by cage or pond, producing 136,800 tonnes of tra and basa fish in 2003 (111,599 tonnes in 2002). Dong Thap and other provinces in Mekong Delta also produce about half of the catfish output from An Giang province with about 5,000 households involved. Taking into account each household hired two labourer to work for fish feeding, it is estimated that about 30,000 poor landless people were working in catfish farming. On average, each hired labourer working on fish cages and ponds

¹ The species is also referred to as *Pangasianodon hypophthalmus* - Van Zalinge et al (2002)

earns about VND 550,000-600,000 (US\$36- 40) per month or less than US\$ 2 per day. In 2003 there were 5,300 workers with salary income less than US\$ 2 per day in the five catfish export-processing factories in An Giang province. The number of workers in the fish processing in Dong Thap, Vinh Long and other Mekong Delta is about 3,000. Poor women make up a particularly high proportion of workers in the processing factors (>70%). There are also several thousand people who provide services (finance and credit, fish feed and fish seed, traders, veterinary services, storing and transportation).

The livelihoods of catfish farmers and people involved with the industry are also vulnerable to non-market related factors, including water quality problems and fish disease outbreaks. Water quality is reported by farmers to be a particular problem during the dry season at low water flows and a concern when rice farmers discharge water containing pesticides and fertilizers from their rice fields. Expansion of exports to the US had exposed the farmers and other stakeholders in the catfish industry to vulnerabilities related to market

The US anti-dumping decision

In June 2002 the International Trade Commission (ITC) under the United States Department of Commerce (DOC) received a petition from the Catfish Farmers Association and eight individual catfish processors in the United States demanding an anti-dumping investigation into the imports of certain Vietnamese frozen fish fillets. The petitioners alleged that the Vietnamese frozen fish fillets were sold in the United States at less than its production value, and such imports were materially damaging the US domestic catfish industry. After its investigation in January 2003, the Department of Commerce ruled in favour of the US catfish industry, and levied a series of tariffs against Vietnam's catfish exporters from 37% to 53%.

Impacts of the anti-dumping decision

This study found that the catfish farming households, their hired labourers and workers at processing factories were vulnerable to market influences and suffered the most significant impacts as a result of the US antidumping decision. The most immediate effect of the decision was a decline in the farm-gate price of basa from VND 14,000 to prices around production costs of around VND 7,000. The price of tra (the most commonly produced species) was most affected. The price decline led to several negative impacts on the livelihoods of people involved:

Financial resources: The most obvious influence was reduced income among farmers, labourers and processing factory workers, and in some cases bankruptcy among some farmers. Estimates from An Giang suggest the reduction of farm gate price led to a loss of more than VND 200 billion (US\$ 12 million). Taking into account this province produces half of the total production of catfish in Vietnam, it is estimated the antidumping policy has caused an economic loss of US\$ 24 million to catfish farming households in Vietnam.

Human resources: The effect of the farm gate price decline and reduced export activity led to loss of employment among small-scale farm households, and labourers and people working in processing plants, the majority of latter being young women. The poorest groups (labourers and processing factory workers) appear to have been most significantly affected. The study estimates 8,000 people lost their jobs as laborers in catfish farms and 10% or 500 workers lost their jobs from export-processing enterprises in An Giang province. Women and labourers

returned to previous jobs in rural areas, as they had limited skills to move to other occupations after the decision.

Physical resources: Catfish are farmed on cages and ponds, representing significant investments in physical resources. The US anti-dumping decision led some catfish farming households to sell their property, including houses, vehicles and the cages themselves, to repay bank loans.

Social resources: The US anti-dumping decision impact social resources, both negatively and positively. Farmers reported a loss of trust when individual and organizational trust was broken. On the other hand, the decision eventually stimulate cooperation between farmers and some processors to organise production and catfish supply in relation to market demand. A civil society institution (the An Giang Farmers Association) was strengthened as it brought farmers together to negotiate prices with export/processing companies.

Natural resources: No specific impacts on the environment were reported as a result of the US anti-dumping decision, except possibly short-term postponement of investments in water pollution control measures at processing plants.

Coping strategies

The influence of the US antidumping decision was significant, but farmers, local institutions and government policy addressed the problem with several strategies. Local government agencies, the An Giang Farmers Association (civil society organization) and farmers coped with this decision in several ways:

Cost cutting: This was most noticeably carried out by the farmers and processing enterprises, leading to loss of employment among poorer people working as laborers or as processing factory workers.

Promotion of domestic consumption: Domestic consumption was promoted through marketing campaigns, undertaken with support from the local and national government. These campaigns led to significant increased consumption of catfish in Vietnam, reducing immediate dependence on export markets. This domestic consumption campaign fortunately coincided with an outbreak of avian flu when demand for fish products increased.

Diversification of markets and products: Vietnam was successful in identification of new markets, reducing dependence on the US market, and in diversification of the types of catfish products produced. Government and export businesses invested in marketing of catfish in other countries through international fairs and exhibitions, resulting in significant market diversification.

Although the catfish industry, and people dependant on it, suffered significantly for several months after the US anti-dumping decision, the outcome of these strategies appears to have been successful.

Lessons learned

The study shows the vulnerability of the catfish industry, and particularly poorer labourers and women in processing plants to the anti-dumping decision. Although many farmers and processing business are above the lowest socio-economic strata, the most notable impacts from the case was on some of the poorest groups. This vulnerability was made worse by the absence

of strong social protection policies (“safety nets”) for fish farming households, hired labourers and processing workers. The case provided a valuable lesson for Provincial institutions in An Giang province of the need to help farmers in negotiation with the private sector. The lack of contracts between farmers and the companies caused particular vulnerability to farmers. Local institutions consider they should have been more active in supporting catfish farming households and empowering the farmers in negotiations to fix trade contracts with the export and processing enterprises. Farmers were also caught unawares over the severity of the problem, suggested they should have better access to information on market and trade issues. This would help them foresee and follow the impacts of the trade policies to the local market and maintain their levels of production.

By late 2003 and in 2004, the prices of tra and basa fish price completely recovered to their highest recorded level before the antidumping case. Fish farmers who survived the “shock” in 2003 are now investing in new cages and ponds to recover their past losses. Five new processing export enterprises have entered the industry and another five new processing factories of the existing businesses will start operation by the end of 2004. This evidence shows that the Vietnamese catfish industry has not only sustained but also developed further after the US antidumping decision. Local stakeholders have learnt more about the many requirements of international markets and conditions for trade liberalization. Various economic reform initiatives have also been undertaken to enable Vietnam to join the World Trade Organisation and promote competitiveness of the Vietnamese products. Without being a member of the WTO, Vietnam is restricted in its opportunities to fight such anti-dumping decisions. Process businesses also focused more on product quality and invested in modern technologies so are now better equipped for international competition and international standards.

The antidumping case of Vietnam was an important lesson for local stakeholders on the need for protection of vulnerable poor people from negative impacts of trade liberalization. Farmers consulted during this study recommended that they be better supported by credit, training and market information services. Civil society organizations of catfish farmers should also strengthen their roles to empower farmers in negotiation with processors and protecting the interest of farmers, especially the poor groups involved, such as the hired farm labourers and processing factory workers.

Shrimp anti-dumping case

Following experience with catfish, Vietnam faced a new anti-dumping threat in 2004 that may also have a major impact on stakeholders involved in the shrimp industry. This comes from the claim made by US Gulf of Mexico shrimp fishermen and farmers that a number of developing countries are dumping farmed shrimp in the USA market. The challengers are the “Southern Shrimp Alliance”, an ad hoc group of shrimp fishers (mainly) and farmers. Their petition to the US International Trade Commission names Vietnam among the six developing countries who are globally all significant and low-cost shrimp farmers. Antidumping petitions were filed with the United States International Trade Commission (ITC) on 31 December 31 2003 and in a July 2004 decision, the United States International Trade Commission (ITC) determined that there is a reasonable indication that a U.S. industry is materially injured or threatened with injury due to the import of certain shrimp products from Brazil, China, Ecuador, India, Thailand, and Vietnam. The proposed tariffs range from 12 to 93 percent on Vietnamese exports. However, the Commerce Department will not set final dumping penalties until after the ITC makes its final

ruling in January 2005. The case study also makes a preliminary analysis of the potential impacts of this anti-dumping case on the shrimp industry in Vietnam, and livelihoods of people involved.

General recommendations²

Some more general recommendations that arise from this study include

- A review of overall developing country assistance provided by the major international food/trade agencies to identify whether they are already providing any support for countering unfair anti-dumping measures. If so, evaluation of the effectiveness of that assistance is required. If not, then indicative proposals for technical assistance units might be considered.
- In view of the negative consequences of anti-dumping measures for exporting countries, and the fact that they apparently do not significantly improve the situation for domestic producers in importing countries, it should be considered to devise a lobbying approach to put this issue on the donor agenda and generate support for measures to reduce the use of and impact of such measures,
- At national level it is important that there is close cooperation among all the main stakeholders in the export chain when faced by anti-dumping measures. The Vietnam catfish case clearly showed that the private sector alone would have had difficulties in responding adequately.
- WTO members as well as non-members may be exposed to anti-dumping measures. Whilst WTO members have access to arbitration panels and supposedly better information and advice, the non-members such as Vietnam rely on bilateral trade agreements. As a result, the latter are likely to be more exposed and in need of additional assistance. The development of practical manuals and other relevant dissemination materials explaining the various steps in countering such measures may be considered.

² These general recommendations were developed following presentation of the study at the “Workshop on Implications of Liberalization of Fish Trade for Developing Countries”, held on 5th-6th July 2004 in Rome.

PART 1: BACKGROUND

INTRODUCTION

This report provides a Vietnam-based case study on the impacts on poverty of fisheries trade, with an emphasis on the theme of anti-dumping measures (ADM). The case study is prepared as a contribution to the FAO-commissioned (SIFAR-coordinated) project “Implications of Fish Trade Liberalization for Developing Countries” co-funded by DFID and GTZ. This includes a series of case studies in Vietnam, Uganda, Guinea Conakry, India, Cabo Verde and Bangladesh, to be completed during the first half of 2004.

The report is divided into three parts. The first part provides background on trade and poverty in Vietnam, with an emphasis on the fishery sector. The second part (and main focus of the report) is a detailed study of the impacts of an antidumping measure involving export of catfish to the USA from Vietnam. The third part is a preliminary review of the implications of a second anti-dumping measure affecting Vietnam, this time concerning the export of shrimp to the USA. The shrimp study was completed before a preliminary antidumping decision (unfavourable to Vietnam) was made on the 6th July 2004, but the report has been updated slightly to reflect the decision. The authors hope that new studies will provide further insight into the implications of this new antidumping measure for poor stakeholders in Vietnam.

POVERTY AND TRADE IN VIETNAM

Context

Vietnam and its 79.7 million people are characterised by a rich cultural and ecological diversity. There are 54 ethnic groups with one majority group, the Kinh, comprising 86.9% of the total population. The total landmass comprises 330,363 km², and three quarters of the land is mountainous, while the remaining 25% of the area consist of rich alluvial plains where the majority of the population live.

Vietnam has significant natural potential for fisheries development. It has a 3,260km coastline stretching through 13 latitudes from 8⁰23’ North to 21⁰39’North. The area of inland and territorial waters is 226,000 km² and that of the Exclusive Economic Zone is over 1 million km², three times greater than land area. Based on this natural condition Vietnam is developing its inshore and off-shore catch fisheries, and aquaculture. In 2002, aquaculture produced 976,100 tonnes of aquatic products from 955,000ha of area (fresh water farming covered 425,000 ha).

Since the end of the 1990s, when Vietnam launched the *doi moi* policy of renovation, economic and social conditions have improved markedly for the majority of the population. The numbers of people living below the poverty line has been cut by half over the past ten years. Social services have remarkably improved and the economy in general continues to grow at a high rate, reaching a GDP growth rate over 7% in 2002, 2003 and also as forecasted for 2004 by the World Bank. Vietnam's current position on the Human Development Index (HDI) ranked by the UNDP Human Development Report 2002 is 101st out of 175 countries, up from 120th position in 1990. Over the last ten years, Vietnam has also made steady progress on key governance indicators,

including the general application of rule of law, administrative reform, decentralisation and establishment of a legal basis for "grassroots democracy".

Using the international poverty line, poverty incidence in Vietnam has been reduced from 37.4% in 1998 to 28.9% in 2002, or 2 percentage points decline annually. Access to basic services like electricity, safe and clean water, health care and education has been improved, especially in rural, remote and mountainous areas. Progress has also been made in the field of gender equality. However, poverty still remains at a high level and the disparity among regions (Table 1 below) and ethnic groups is increasing. Poverty is mainly concentrated in rural areas, where 90% of the poor live. The Northern Mountainous, the Central Highlands and the Northern Central regions are the poorest areas of the country. Poor people are the farmers, with a low level of education and limited access to resources such as cultivatable land, financial resources, technologies, information, and basic social services. Hunger is concentrated in specific areas and regions, mostly in households of ethnic minorities, who live in remote mountainous areas and suffer from isolation and low level of education and health services. Ethnic minorities are significantly poorer than the Kinh group (Vietnamese majority); 75% of them were classified as poor in 1997/98, using the World Bank definition of poverty.

Table 1: Regional poverty rate

	1998		2002	
	GSO poverty rate	Food poverty rate (2,100 calories)	GSO poverty rate	Food poverty rate (2,100 calories)
Whole country	37.4	15.0	28.9	10.9
- Urban areas	9.2	2.5	6.6	1.9
- Rural areas	45.5	18.6	35.6	13.6
North Uplands	64.2	32.4	43.9	21.1
Red River Delta	29.3	8.5	22.4	5.3
North Centre	48.1	19.0	44.4	17.5
Central Coast	34.5	15.9	25.2	9.0
Central Highlands	52.4	31.5	51.8	29.5
Southeast	12.2	5.0	10.6	3.0
Mekong River Delta	36.9	11.3	23.4	6.5

(Source: Vietnam Living Standard Survey 1998, and 2002)

Causes of the remaining high level of poverty in the Northern and Central Uplands include the degraded and limited natural resources, and household land plots often cannot support consumption needs. While agricultural land has now largely been allocated, most of the forestland remains unallocated. This in particular affects tenure security of mountainous poor households as they tend to have a greater proportion of upland to paddy land, and more sloping and distant plots. Other resource constraints inhibiting poverty alleviation for remote communities includes low access to extension, financing and other production inputs, limited access to post-harvest facilities and markets and to education and health facilities. Problems of remoteness, inadequate infrastructure and physical and social isolation will continue to trap

ethnic minority communities in poverty, particularly when compounded by the pressure on the land on which they depend resulting from environmental degradation and population pressure.

For the Mekong River Delta, where there is significant aquaculture development, and poor people involved in the catfish anti-dumping case and shrimp farmers live, the causes of poverty do not differ from the mountainous regions. In the Mekong Delta, the poverty level is relative to the ownership of cultivatable land. In An Giang province for example, people often say that the poor are the ones who do not own any land (they have to rent) or have less than 0.5 ha of land. The Participatory Poverty Assessment (PPA) for the Mekong Delta conducted by UNDP and AusAid in late 2003 found that poverty most falls to the families with low literacy, high number of children and without access to cultivatable land.

Poverty reduction and rural development have been at the forefront of the Government's agenda over the past decade. In 1998 the Government established the Hunger Eradication and Poverty Reduction (HEPR) Programme (Programme 133) and the Support to the Most Difficult and Remote Communes Programme (Programme 135), currently under implementation. In 2000, the Government formulated a ten-year poverty reduction strategy (PRS) and a five-year poverty reduction action plan. Responding to the World Bank PRSP Initiative, in May 2002, the Prime Minister of Vietnam issued document N^o 2685/VPCP-QHQT approving the "Comprehensive Strategy for Poverty Reduction and Growth" (CPRGS) (Comprehensive Poverty Reduction and Growth Strategy, 2002). This is an important document that elaborates the general objectives, tasks, mechanism, policies and strategies set forth in the 10-year Socio-Economic Development Strategy and UN Millennium Development Goals that Vietnam has committed to fulfil. The strategy includes policies and measures Vietnam has to implement in order to ensure a sustainable growth in parallel with poverty reduction. In this strategy, the Government commits to eradicate chronic hunger by 2005 and reduce poverty to 5 % by 2010, according to new official Vietnamese standards for poverty.

To achieve this ambitious development target over the coming decade, the Government has called for diversification of agriculture, recognising the importance and dynamism of the non-rice sub-sectors, such as aquaculture. Rice output has more than doubled since 1988, contributing significantly to a 60% increase in farm incomes from 1993 to 1998, but this policy recognises the need for diversification to improve incomes. As the recent dramatic slump in world prices for rice and coffee have also demonstrated and as Vietnam becomes more integrated into the world economy, the agricultural economy will need to become more diversified and flexible in order to respond to market conditions and local food requirements.

Aquaculture and poverty reduction

Based on the natural advantages of its inland water surface and long coastal line, the aquaculture sector was selected by the Government of Vietnam as one of the priorities for rural economy diversification and development. According to the UNDP Report on Fishery, Trade and Human Resource in Vietnam of May 2003, approximately 80 percent of households in coastal communities generate their income by fishery activities. More than 4 million people live in tidal areas and about 1 million in swamp and lagoon areas in the island line of 714 villages and wards belonging to 28 coastal provinces and cities. In addition, there are several million inland aquaculture farming and fishing households. One in every twenty-five persons in Vietnam is engaged in fisheries activity according to Ministry of Fisheries statistics. This means that there is

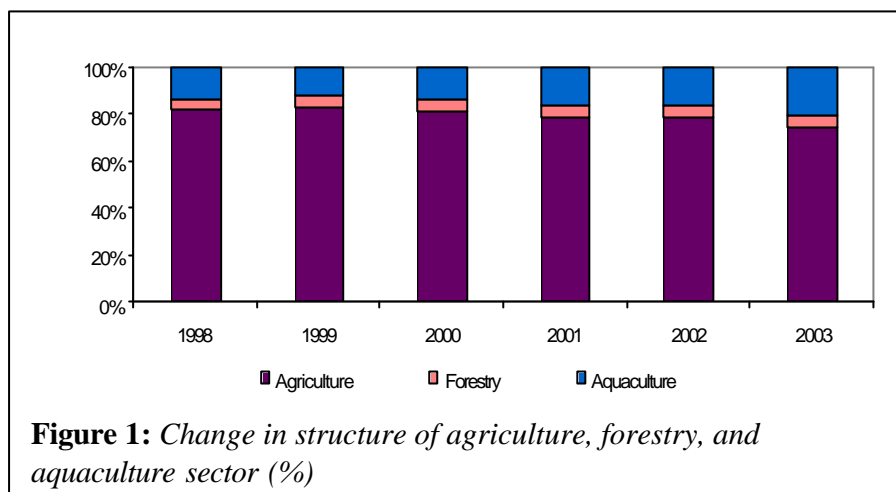
a considerable labour force of around 3 million people employed in the fisheries sector in Vietnam. Therefore, the fisheries sector, especially aquaculture activities, is crucial for not only economic growth but also poverty reduction in rural areas.

With inshore waters in Vietnam heavily exploited, Government policy is to develop off-shore capture fisheries, and particularly aquaculture, through investment in infrastructure and other assistance to improve farmer's access to credit and better technologies. As part of the 10-year National Hunger Eradication and Poverty Reduction Strategy, the Government approved in 1999 the Programme for Development of Aquaculture 2000 – 2010. The purpose of this programme was to ensure food security and provide products for export. The policy also aimed at providing employment for around 2 million people. The programme set a target of 2 million tonnes of aquatic products by 2010.

In addition to the policy for development of aquaculture, the strategy for Sustainable Aquaculture for Poverty Alleviation (SAPA) was designed by the MOFI with support from various agencies, including NORAD and the Network of Aquaculture Centres in Asia-Pacific (NACA), as part of the national strategy in poverty alleviation designed and co-ordinated by the Ministry of Labour, Invalids and Social Affairs (MOLISA). The SAPA strategy was approved by Government on 23 April 2001 as the poverty-focused direction for aquaculture development in Vietnam (SAPA, 2001). The primary aim of SAPA is to improve the living standards of the poorer sections through the development of aquaculture. Specifically, SAPA aims at:

- Consolidating and upgrading management capacity, especially at local and community levels, in order to better satisfy the needs of the poorer communities whose lives depend wholly or partly on aquaculture;
- Improving access for the poor to facilities, information, credit, farming extension and the market;
- Improving the exchange of information between stakeholders inside and outside the sector, through raising awareness, sharing experiences, setting up network, co-coordinating within or between sectors as well as with donors, introducing community participation in the design, implementation, supervision and evaluation of plans, and announcing development policies;
- Developing and introducing environment-friendly technology in aquaculture, both inland and marine, which involves lower levels of risk and investment; and
- Building up appropriate management strategies and emulating successful experiences.

Thanks to the strong policy support from the Government, the fishery sector has achieved outstanding results over the past years. According to the 2003 Year Report from the Ministry of Fisheries, the total aquatic output of the sector in 2003 was 2,575,500 tonnes, an increase of 7.95% over 2002, in which the capture fisheries output was 1,470,200 tonnes or 3.44 % increase over 2002; the total aquaculture production was 1,105,300 tonnes or 14.5 % increase over 2002. Thus, the fishery sector has rapidly grown and remarkably improved its share in the national economy. The aquatic production value in 2003 was reported to account for 21.3% of the production value of the whole agriculture, forestry, and fisheries sector (compared to this share of 16.5 % for 2002). The fishery sector has contributed more than 4% of the GDP in 2003, compared to 3.79 % in 2002 (Ministry of Fisheries, 2004). Figure 1 shows the increasing share of the sector in the whole agricultural, forestry and fishery production from 1998 to 2003.



Aquaculture development has provided good opportunities for many farmers to diversify their production and improve their living standard. The Vietnam Household Living Standard Survey (VHLSS) conducted by the General Statistics Office (GSO) in 2002 reveals that fish ponds are

increasingly common in Vietnam and by now, 15 percent of rural households, both rich and poor, have at least one pond (World Bank, 2003a, b). Many poor households particularly in the Mekong River Delta manage to capture these new income generating opportunities and as a result have escaped from poverty.

The fishery sector is also one of the leading export sectors of the country. Seafood export and its processing industries create many jobs and thus make an important contribution to poverty reduction. Although the direct poverty impact of further exports of aquatic products may diminish substantially due to the increasing capital and knowledge requirements, the indirect impact of these relatively high value exports through economic growth and their role in keeping non-poor from falling back into poverty should not be underestimated (Centre for Rural Progress, 2003). The National Strategy for Development of Fishery Export up to 2010 was approved in 1995, identifying the export value targets of US\$ 1.1 billion by 2000, US\$ 2 billion by 2005 and US\$ 3.5 – 4 billion by 2010. Accordingly the Seafood Export Development Program up to 2005 approved by the Government in December 1998, Vietnam successfully implemented this program for its first phase. In 1999 export markets and products were remarkably diversified, expanding to more than 50 countries in the world, accounting for 20% of the total national export value. In 1999, the total fishery export value reached USD 971 million, and the major export markets were Japan 41%, USA 14%, EU 10%, China and Hong Kong 12.5%. To further promote seafood exports the Vietnam Association of Seafood Exporters and Producers (VASEP) was established on 12 June 1998.

Fish exports from Vietnam have been increasing rapidly in recent years with export of aquatic products exceeding \$2 billion in 2002, up by nearly 45% from 2000, driven largely by increases in aquaculture (UNDP, 2003). According to the Department of Customs, the fish export value (including shrimp and other aquatic animals) for 2003 is estimated of US\$ 2.240 billion, an increase of 10.74 % over 2002. The target of the export industry is to reach an export value of \$3 billion in 2005 (Ministry of Fisheries, 2004).

Exports are primarily composed of farmed shrimps, but other exports include molluscs, grouper, snapper, catfish, tilapia, gourami, snakehead, eel, soft shell turtle, and frog. Vietnam exports have been in large quantities and values of both marine and freshwater species. Export markets as of 2003 had expanded to 75 countries and territories as result of efforts by Government and

local export enterprises. The largest export market in 2003 was the United States (38% of total export value, increased 26.64% over 2002). Respectively, the other major markets for Vietnam's exports of aquatic products in 2003 were Japan (26.64%, increased 6% compared to 2002), the EU (5.5%, but greatly increased by 60% over 2002). Export to China had decreased from 16.25% to 7 % due to SARS and level of competitive price of Vietnamese product (Ministry of Fisheries, 2004).

Institutions

Ministry of Fisheries (MOFI)

After the war against France, to recover and develop the local economy, the Government paid much attention to fishery development. The Fishery Department under the Ministry of Agriculture and Forestry (MOAF) was established as the first state administration agency on fishery in 1954. After restructuring in April 1960, the MOAF was divided into four new organizations, namely the Ministry of Agriculture, the Ministry of State-managed Farm, the General Department of Forestry and the General Department of Fishery (GDF). On 5 October 1961, the Government promulgated the Decree 150/CP which defined the mission, competence and organizational system of the GDF. It was an important milestone marking the time when the fishery sector was recognized as an important economic sector of the national economy. After the reunification of the country in 1975, Vietnam's fisheries stepped into a new development period. It was marked by establishment of the Ministry of Marine Fisheries in 1976 and renamed as the Ministry of Fisheries (MOFI) in 1981. With the new title the Ministry undertook two additional missions, namely freshwater aquaculture and import-export of fish products.

MOFI has now nine departments and four research institutes, namely the Fisheries Department, the Fisheries Resources Conservation Department, Department of Planning & Investment, the Department of Personnel & Labour, Department of Science & Technology, Legislation Department, Department of Finance & Accounting, the International Cooperation Department, the Ministry's Administrative Office, Department of Inspection, the Aquaculture Research Institutes Numbers 1,2 and 3 and the Research Institute for Marine Products. The Fisheries Resources Conservation Department and a system of 37 sub-Departments in localities are responsible for policy promulgation, direct management and inspection of fisheries resources protection and development tasks. The Central Fisheries Extension Centre with its Representative Office in Ho Chi Minh city and a system of fisheries and agricultural extension units nationwide are responsible for transferring experiences, techniques, technologies and information to fishermen and farmers (in both public and private sectors). In 2004, the Ministry is continuing its administrative reforms with special priority to implementation of the Law on Fishery, which was approved by the National Assembly in 2004.

Export and Quality Control Organization

The National Fisheries Inspection and Quality Assurance Centre (NAFIQACEN) comprised a Head Office and six branches located in key fisheries locations in the country. It is the national competent authority for fisheries food safety assurance and quality control. On 23rd August 2003, the Minister of Fisheries expanded the scope of the work of the centre to include veterinary matters (fish and shrimp disease control) and renamed the centre as "National Fisheries Quality Assurance and Veterinary Directorate (NAFIQAVED)".

Civil Society Organizations

Along with the establishment and development of the state administration, civil society organizations of people working for the fisheries sector have established and play an important part in sector development, mobilizing all kinds of human and financial resources for fisheries development in Vietnam. The Vietnam Fisheries Association (VINAFA) was established in 1982, respectively the Association of Shrimp Culture (the former Vietnam Association of Aquaculture) in 1989, the Trade Union of Vietnam's Fisheries in 1992; the Humanity Fund of Vietnam's Fisheries in 1996 and the Vietnam Association of Seafood Exporters and Producers (VASEP) in 1998. On the 5 May 2000 the Ministry of Home Affairs (MOHA) issued the Decision number 33/2000 to assemble the Association of Aquaculture and the Association of Fisheries and formally establish the Vietnam Fisheries Association (VINAFIS). There is a plan to merge also VASEP into this VINAFIS in the near future.

The development of civil society has led to requests for VINAFIS and VASEP to be “reformed” to independent organizations from the Ministry of Fisheries as non-government organizations whose primary goal is to support the business interests of Vietnam’s fisheries sector, with information as well as customer recommendations. It should in future represent the interest of Vietnamese businesses in negotiations with domestic ministries and international agencies on policies related to fisheries trade and on the protection of legal rights of the businesses. VASEP also plays an important role in providing consultancy to the Ministry of Fisheries on trade policies and decisions, and has been active recently in the two antidumping cases.

Trade Liberalization

Trade Liberalization Legislation and Policy

Reform of Vietnam’s trade policy was one of the cornerstones of Vietnam’s 1986 *doi moi* economic reform strategy, which initiated a transition from the previous centrally planned economy to a market-oriented economy. Progress with trade reforms has been rapid, with gradual removal of trade restrictions towards trade liberalization. Steps have also been taken to liberalise the foreign exchange market and harmonise tax treatment of foreign and domestic enterprises. Key milestones in Vietnam’s trade liberalization process since 1989 are given below:

Year	Trade Liberalization (or Restriction)
1989	<ul style="list-style-type: none"> • Customs tariff introduced for first time
1990	<ul style="list-style-type: none"> • Special sales tax introduced • Export – import companies required to register
1991	<ul style="list-style-type: none"> • (Export of certain commodities limited to relevant exporters associations) • Imported inputs used to produce exports were exempted from duty • Export processing zones regulation introduced • Export duty on rice reduced from 10 to 1 percent • Private companies allowed to engage in international trade
1992	<ul style="list-style-type: none"> • HS system introduced • Signed bilateral trade agreement with EU
1993	<ul style="list-style-type: none"> • Export shipment licensing relaxed • Duty rebate system improved • Customs declaration form improved

IMPLICATIONS OF LIBERALIZATION OF FISH TRADE FOR DEVELOPING COUNTRIES - A CASE STUDY OF VIETNAM

1994	<ul style="list-style-type: none"> • Import permits eliminated for all except 15 products • GATT observer status received • Licensing steps reduced • Export shipments relaxed
1995	<ul style="list-style-type: none"> • Vietnam joins ASEAN • Import permit system relaxed • Import quota goods reduced to seven • Export quotas reduced to one (only rice) • (Export taxes raised on 11 products)
1996	<ul style="list-style-type: none"> • Maximum tariff reduced considerably • AFTA list promulgated • Managed import goods reduced to six
1997	<ul style="list-style-type: none"> • WTO accession process started • Rice quotas allocated by provincial government • (Import of sugar prohibited) • (Temporary prohibitions imposed on consumer goods)
1998	<ul style="list-style-type: none"> • Management of quota goods shifts to tariffs • Highest tariff reduced to 60 per cent • Private sector exports allowed • Foreign invested enterprises allowed to export goods not in license • CEPT road map released • 3-schedule tariff introduced • (Partial surrender requirements imposed) • (Special sales tax extended)
1999	<ul style="list-style-type: none"> • Decree 57 liberalising right to import and export • New tariff with smaller range and rates released • Surrender requirements reduced from 80% to 50% • (Decree 254 adds to list of conditional imports)
2000	<ul style="list-style-type: none"> • US_VN bilateral trade agreement signed • Import permits system relaxed (from 20 to 12) • Trade Promotion Centres established • Control on Foreign Exchange relaxed
2001	<ul style="list-style-type: none"> • All legal entities permitted to export most goods without having obtain a special license • Quantitative restriction multilaterally on all tariffs lines of 8 groups products removed • Foreign exchange surrender requirement reduced from 50% to 40% • 713 tariff lines moved from TEL to IL
2002	<ul style="list-style-type: none"> • Foreign exchange surrender requirements reduced from 40% to 30% • List of goods and tax rates for implementing CEPT detailed • Implementing decision for US BTA issued • WTO negotiation team started working sessions in Geneva
2003	<ul style="list-style-type: none"> • Foreign exchange surrender requirement abolished • Sixth and seventh WTO working parties conducted (May and December) • Tariff rates for implementing CEPT officially announced
2004	<ul style="list-style-type: none"> • Vietnam repeats its aim of joining WTO by 1 January 2005 • Further three working parties conducted

(Source: Centre for Rural Progress (CRP), 2003, updated by authors)

From the above, it can be observed that existing commitments of Vietnam mostly fall under the two following regional and bilateral trade agreements:

1. AFTA/CEPT

Viet Nam has participated in the Association of Southeast Asian Nations (ASEAN) since 28 July 1995 and officially joined the ASEAN Free Trade Area (AFTA) since 15 December 1995 by signing the Agreement on Common Effective Preferential Tariff (CEPT), under which all members have made commitments in tariff reduction and elimination of non-tariff barriers.

2. Viet Nam - US Bilateral Trade Agreement

The ratification of the Viet Nam - US Bilateral Trade Agreement (BTA), which was concluded in 2000 by the US Congress and Vietnamese National Assembly in late 2001 will pave the way for Vietnam's entry into the WTO by dramatically opening up Vietnam's economy, bringing it more in line with international norms. Entering into force on 10 December 2001 in Washington (i.e. on 11 December 2001 Hanoi time) immediately after the Vietnamese and US representatives exchanged notifications that each had completed the ratification, the BTA will remain in effect for a 3-year period, extended automatically unless terminated by either party at least 30 days before the end of a term.

The BTA is based on international norms, including those of the WTO. Though, given Vietnam's low level of development, the BTA recognizes that Vietnam requires transitional periods to meet some of these standards. In some aspects, the BTA is more liberalized than the WTO. A comprehensive set of commitments including reduction of import tariffs, phased elimination of QRs and liberalization of trading rights, which aims to improve its market access, has been made under the framework of the BTA by Vietnam. Over a period of 3 to 7 years Vietnam will cut tariff rates and reduce non-tariff barriers over a wide range of products, open up areas of the service sector to greater foreign investment, and generally ease investment rules. With regard to agricultural goods, Vietnam has made the following commitments:

- **Trading rights and distribution rights.** All Vietnamese firms, and over time US persons and firms, will be allowed to import and export freely products not subject to explicit restrictions. All domestic enterprises, upon entry into force of the agreement (i.e. December 2001), shall be allowed to engage in trading activities in all products except those subject to specific restrictions (where quantitative limitations or reservation to State trading enterprises are in place).
- **State trading** Vietnam commits that its State trading enterprises shall make any purchases or sales solely in accordance with commercial considerations including price, quality, availability, marketability, transportation and other conditions of purchase or sale, and that it shall afford the US enterprises adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sales.
- **Import tariff** Current tariff rates on 195 agricultural products among 244 HS 8-digit items subject to tariff reduction commitments under the BTA will be reduced by between 20 and 75 percent over 3 years, and exceptionally over 6 years with regard to 11 tariff lines.
- **Quantitative restrictions** Nearly all non-tariff barriers on imports and export restrictions that are inconsistent with the GATT will be phased out. The agreement also specifies phase out periods ranging from around 3 to 5 years (from coming into force of the agreement, i.e. December 2001) for import QRs on 64 agricultural import items, and to 10 years for 5 tariff

lines of sugar. A 4-year phase-out period for import QRs is predominant (accounting for 44 out of 69 agricultural products subject to import QRs removal). These products include some important items that are at present subject to some types of non-tariff barriers such as licences of Ministry of Trade (e.g. vegetable oil), and requirements for local material area development (e.g. milk, vegetable oil).

SANITARY AND PHYTOSANITARY MEASURES THE AGREEMENT STATES THAT WTO STANDARDS WILL BE ADHERED TO WITH RESPECT TO SANITARY AND PHYTOSANITARY MEASURES (WHICH IS MEANT TO ENSURE THAT SUCH MEASURES CANNOT BE USED FOR PROTECTION PURPOSES). ENSURING THAT PRODUCTS IMPORTED FROM US TERRITORY RECEIVES TREATMENT THAT IS NO LESS FAVOURABLE THAN THAT ACCORDED TO LIKE DOMESTIC PRODUCTS OR LIKE PRODUCTS ORIGINATING IN ANY THIRD COUNTRY, IN RELATION TO SUCH TECHNICAL REGULATIONS OR STANDARDS, VIETNAM COMMITS THAT ANY SANITARY OR PHYTOSANITARY MEASURE WHICH IS NOT CONSISTENT WITH THE PROVISIONS OF THE GATT 1994 IS APPLIED BY VIETNAM ONLY TO THE EXTENT NECESSARY TO PROTECT HUMAN, ANIMAL OR PLANT LIFE OR HEALTH AND IS BASED ON SCIENTIFIC PRINCIPLES AND IS NOT MAINTAINED WITHOUT SUFFICIENT EVIDENCE (I.E. A RISK ASSESSMENT), TAKING INTO ACCOUNT THE AVAILABILITY OF RELEVANT SCIENTIFIC INFORMATION AND REGIONAL CONDITIONS, SUCH AS PEST FREE ZONES.

A number of additional references (Ministry of Agriculture and Rural Development, 2001; European Union and Ministry of Trade in Vietnam 2003, and 2004; Centre for Rural Progress (CRP), 2003; and Ministry of Trade, 2004) provide further details.

PART 2: CATFISH STUDY

STUDY ORGANISATION

Objectives and methods

The objective of this study of catfish is to gain insight into the situation and impact of the antidumping tariff of the USA on the stakeholders of catfish (tra and basa) farming, processing and export system in Vietnam. The study focuses on the affects of the antidumping policy on the livelihood of fish raising farmer households, poor labourers hired by farming households, and poor workers in processing enterprises. Lessons learnt and recommendations from this study are intended to contribute to assisting international organizations, government agencies and non-governmental organisations in refining policies and programmes to effectively address long-term issues faced by the poor people living in developing countries under trade liberalization and economic globalization. However, it must be emphasized that this research is preliminary and further studies could be conducted on the impacts of trade liberalization policies on poor people involved in the fishery trade in Vietnam.

Quantitative and qualitative methods were used.

Quantitative methodology involved collection of information from review of existing documents, household survey forms, and key-informant interviews with relevant government officials in the Ministry of Fisheries (MOFI), Ministry of Trade (MOT), Vietnam Fisheries Association (VFA), and in An Giang province with the Department of Labour, Invalids and Social Affairs (DOLISA), Department of Trade (DOT), Department of Agriculture and Rural Development (DARD), An Giang Fisheries Association (AFA), and five seafood processing and export companies in the province.

Qualitative methodology used the livelihood analysis approach. The approach involved using intensive rather than extensive interviews of focus groups, households, and key informants. Interview methods included semi-structured and informal conversation, listening and information sharing. On average, interviews with each household took between one hour and a half to two hours. Annex 1 gives the list of interviewed farmer households.

The survey was approached following a three-step process:

- 1) Gathering of general information on catfish farming, processing and stakeholders involved, including identification of survey sites and characteristics of places where catfish farmers household practise pond and cage aquaculture.
- 2) General overview of the market chain, to export, including identification of stakeholders, interview with key officials, individual farmers and enterprise workers and managers, using interview guidelines focusing on the four issues.
- 3) Gathering of in-depth and comprehensive information through secondary data collection and interviews to collect primary information and observation with households at their homes or working places.

The survey focussed on An Giang province in the Mekong Delta of Vietnam where most of the tra and basa fish production takes place, and where most export comes from. Two communes in An Giang were selected for detailed study. The two communes were selected based on consensus between the study team and government officials in An Giang province. The main criteria for selection were:

- 1) Places where aquaculture farmers, including cages or by pond farming, were concentrated;
- 2) Places in different districts but within a distance of at least 30 km; and
- 3) Communes and districts selected not belonging to sensitive areas in terms of politics or national security and defence.

Based on these criteria, Vinh Thuan village, Vinh Thanh Trung commune, Chau Phu district was selected as a representative place for catfish pond-culture. Respectively Phuoc Tho village, Da Phuoc commune, An Phu district was selected for study of the group of cage farmers culturing tra and basa fish. Twenty one households were intensively interviewed in both villages. The location of An Giang province in the Mekong delta is shown in Figure 1.

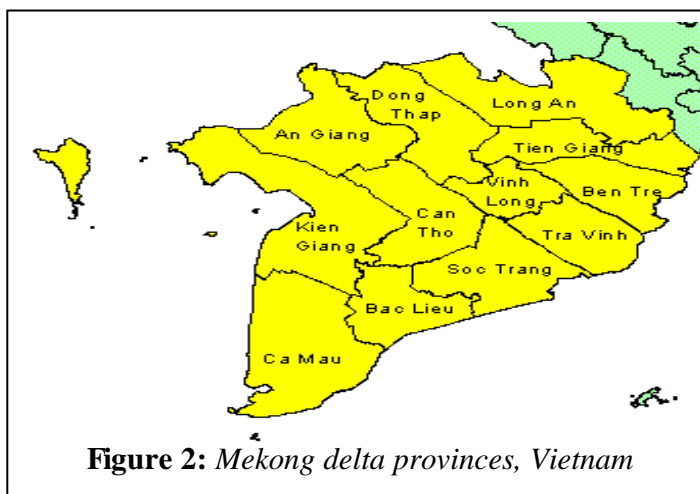


Figure 2: Mekong delta provinces, Vietnam

HISTORY OF THE CATFISH ANTIDUMPING CASE

Development of catfish farming for export

The Mekong River Delta covers around 39,600 km², accounting for about 1/8 of the area of Vietnam. It has a population of about 17 million or 21 % of the total population of Vietnam. It includes 12 provinces: Long An, Tien Giang, Ben Tre, Dong Thap, Vinh Long, Tra Vinh, An Giang, Kien Giang, Can Tho, Soc Trang, Bac Lieu and Ca Mau (Figure 2).

The Mekong Delta plays a very important role in the socio-economic development strategy for Vietnam. It is the largest granary in Vietnam, not only ensuring national food security but also export goods, especially rice and aquatic products. With large agricultural development potential, in recent years the Mekong Delta has contributed about 50% of the total food production of Vietnam (16.8 million tonnes in 2000). The Mekong Delta is the biggest producer of aquatic resources. For the year of 2003, capture fishery in this region reached 629,535 tonnes or 42.79% of the whole country. The total aquaculture production of the Mekong Delta for 2003 was 740,369 tonnes or 66.9% of the total aquaculture output of Vietnam (146,000 tonnes of shrimp or 69.5% of national output) (Vietnam Fisheries Association Newsletter, April 2004).

Catfish has a history of more than 50 years and catfish farming has been a traditional means of livelihood for farmers in the Mekong Delta for generations. Catfish is not only an important

protein source for residents in the Mekong delta, but also an important source of income for many rural households in the region. The catfish in the Mekong Delta mainly belong to genus *Pangasius*, in which the most valuable is basa (*Pangasius bocourti*) and tra (*Pangasius hypophthalmus*). The Genus *Pangasius* (and related species) includes several species that are referred to in ordinary English as ‘catfish’ (Phillips, 2002).

Tra fish make up the bulk of production and are raised in ponds and floating cages, mostly along the Mekong river tributaries in An Giang province. Basa, that make up a smaller proportion of production are farmed mainly in cages. Catfish raising is a commercial activity in Vietnam. Before the reunification of the country in 1975, tra and basa fish used to be domestically consumed and exported to outside markets in Hong Kong, Singapore and Taiwan Province of China. Formally tra fish was traditionally raised in ponds to supply mainly poor farming households, but with improvement in farming practices and technology it has become in recent years an important export item.

In the mid-1980s, catfish began to be exported again, initially in the form of fillet to Australia and markets later expanded to Hong Kong and Singapore in the early 1990s and to North America and the European Union in the mid 1990s. The expansion of markets and demand led to further development of basa and tra fish farming. The total volume of catfish fillet exported by processing establishments reached 5,000 tonnes in 1996 and 10,000 tonnes in 2001 (90% of which was the tra species), with half of it going to the US market. The number of floating cages for farming catfish increased significantly from 2,000-2,500 in 1995 to over 3,000 in 2001. Among these, there are several large rafts with a capacity of 150-200 tonnes of fish/raft. In 2002, according to the An Giang Farmer’s Union there were 3,400 catfish cages on the Mekong river in An Giang province, and a water surface of 1,430 ha for officially registered catfish ponds. The export price also increased from US\$ 3.5-4.5/kg to over US\$ 5/kg for fillet from 1996 to 2001. More information on catfish farming in Vietnam will be presented later in this report.

Vietnam began exporting catfish to the United States in 1996, and supplied about 2 percent of the United States market for catfish in 2002, valued at about US\$ 500 million (UNDP, 2003) Vietnamese tra and basa fish are a favourite in the US market for their quality, flavour and a price 50% lower than US catfish. Consequently, the price of US domestic catfish was sharply dropping as illustrated in Table 2.

Table 2: Price structure within the Vietnamese-USA catfish supply chain

Product	Price (US\$/kg)
Whole producer price tra/basa Vietnam	0.7
Whole fish producer price USA (<i>Ictalurus</i>)	1.25 (formerly 1.65)
Fillet price tra/basa in Vietnam	2-2.5
Fillet price tra/basa imported USA (pre duty)	3.5
Fillet price <i>Ictalurus</i> USA	3.8 (formerly 4.5)

(Source: Trade press, Vietnamese rebuttal, 2001)

History of the USA-Vietnam catfish anti-dumping case

In 2001, the US domestic producer prices of catfish dropped from \$1.6/kg to \$1.4/kg (round fish, first sale) and then went on down to \$1.25/kg. This prompted aggressive protective action by eight catfish producing states of US. Measures to protect the domestic industry began.

First, the Vietnamese producers were attacked on environmental and sanitary grounds. In 2001, the Catfish Farmers of America (CFA), comprising commercial fish producers and agribusiness, initiated a catfish lobby. Led by Congressional members in the six southern states of the United States, the lobby persistently campaigned for a ban on the imports of catfish products from Vietnam in an attempt to expand its own share in the fish market. Some US Senators alleged that the Vietnamese catfish was grown in unhygienic conditions in the Mekong river and hence not fit for consumption in the United States. Marion Berry, one of them, even alleged that the catfish raised in the Mekong basin was poisonous on account of the huge amounts of Agent Orange that was dumped into the Mekong River by United States air force in the past (ActionAid, 2002). These claims, however, were refuted by the United States Embassy in Vietnam, which undertook an examination of farming conditions and concluded that the quality of Vietnamese catfish farming in the Mekong basin was above reproach. An USDA visit to the Mekong delta also found no justification for these allegations.

Second, trade description legislation was used to restrict the name “catfish” solely to Ictalurids grown in the USA, so denying tra and basa fish from using the brand “catfish” in US market. A group of lawmakers in the United States claimed that Vietnamese catfish was, in scientific terms, not catfish at all, and that it should not be sold under the label of “catfish” in the United States market. They demanded that the United States Food and Drug Administration (FDA) process only certain types of fish raised in North America -specifically those that grow in the six southern states - as catfish. After a review and debate about the claims, the United States Congress passed an amendment in December 2001, banning the use of the term “catfish” to describe any fish product, unless it originated in the United States. President George Bush promulgated on 13 May 2002 that according to the Farm Security Act of 2002 (H.R.2646; now P.L.107-171) it was illegal to label Vietnamese catfish of the genus *Pangasius* as “catfish”.

In response to the ban, Vietnamese enterprises had to register their two main exported fish species as “basa fish” and “tra fish”. These species, though not labeled “catfish” anymore in the United States, continued to be popular in North America not only on account of their competitive price, but, more importantly, their taste. Export of Vietnamese basa fish and tra fish to the United States continued rising. Unable to limit the export of catfish from Vietnam by quality and labeling charges, the American Catfish Farmers Association (CFA) began preparing a case against Vietnamese seafood exporters for dumping.

On 28 June 2002 the International Trade Commission (ITC) under the United States Department of Commerce (DOC) received a petition from CFA and eight individual catfish processors in the United States demanding an anti-dumping investigation into the imports of certain Vietnamese frozen fish fillets. The petitioners alleged that the Vietnamese frozen fish fillets were sold in the United States at less than its production value, and such imports were materially damaging the domestic catfish industry. The petition named the Vietnam Association of Seafood Exporters and Processors (VASEP), who represented 56 seafood processors in Vietnam, as the defendant in the case. The CFA petition said Vietnamese basa and tra fish imports have increased from 1.9

million pounds in 1999 to 7 million pounds in 2000 to 17.1 million pounds in 2001, and now (mid 2002) equal to approximately 12 percent of the US catfish market. In addition, the low price of Vietnamese fish has caused prices for US catfish to drop sharply. At an ITC hearing on 19 July 2002, Randy Rhodes, vice president of sales and marketing for the Southern Pride Catfish Company, said that frozen catfish fillet prices in the US dropped from \$ 2.82 per pound in 2000 to \$2.41 the end of 2001. The CFA petition also argued that despite the restrictions on the use of the “catfish label” it is “clear” that US purchasers “consider the frozen basa and tra fillets to be “interchangeable with US frozen catfish fillets. On 19 July 2002 the petitions were registered by the ITC, which requested the VASEP and the CFA to submit their arguments on this case by 8 August 2002. ITC then would vote for or against the allegation on 12 August 2002.

The Vietnamese side requested the Ministry of Fisheries and Ministry of Trade in Vietnam to cooperate with VASEP and hired the White & Case Law Corporation of the US to represent them in the case. Since significant numbers of poor catfish farming households and workers in processing factories would stand seriously to lose their livelihood if the anti-dumping tariff minimum of 144% was imposed, public stakeholders in Vietnam organized various actions to protest the anti-dumping petition of the CFA. ActionAid conducted the research “What do the catfish farmers say?” from 25 to 31 July 2002 through interviews with catfish farmers in An Giang and Vinh Long provinces and workers of two export companies. This research concluded that catfish farming “is an occupation that provides employment for the whole family. If the dumping tariff is imposed then thousands of people will lose their jobs and their only source of livelihood. Most of the catfish farmers have taken large loans from the banks. If they are unable to sustain their present levels of production due to the trade ban then they will simply go bankrupt” (Action Aid, 2002). A scan of media and public opinion in Vietnam also clearly anticipated that the anti-dumping by the US “is not only going to jeopardize the livelihood of large number of poor farmers and labourers, but it also going to undermine the very essence of the Bilateral Trade Agreement ratified by both US and Vietnam governments.

At the 19 July 2002 ITC hearing, Mr. Edmund Sim from the firm White & Case, representing the Vietnamese side, said the US industry’s contention that the Vietnamese fish are “interchangeable” with US catfish is “completely contradicted” by statements made by members of Congress during floor debate over the labeling ban. Mr. Sim quoted Congress Representative Mike Ross, who said in October 2001 that “this so-called catfish from Vietnam is not catfish at all – not even from the same species”. He argued that under US antidumping law, if the basa and tra fish are not considered similar to catfish, then it becomes more difficult to prove that increased imports of the fish are harming the US catfish industry. Other witnesses on behalf of the Vietnamese industry argued that the US catfish farmers and processors have been harmed by the US economic downturn and by an excessive increase in capacity in recent years, not Vietnamese imports. The Vietnamese government also weighed in on the dispute. Vietnam’s Minister of Trade, Vu Khoan, wrote to the US Trade Representative Robert B. Zoellick on 12 July 2002 that the CFA’s petition “can be considered an action to create trade barriers” and requested a “stop to the investigation”.

However, in a first step towards imposing antidumping duties on Vietnamese frozen fish fillet imports, the US International Trade Commission issued a preliminary affirmative determination on 8 August 2002 that there is “a reasonable indication” that imports of Vietnamese tra and basa fish threaten material injury to the US catfish industry. The ITC’s decision, based on a unanimous vote from all five commissioners, means that the Department of Commerce (DOC)

will proceed with its investigation into whether the Vietnamese fish are actually being dumped, or sold at “less than fair value” in the US market. To win the antidumping case, the petitioner must show both that the imports are dumped and that they are causing or threatening to cause material injury to a US industry. DOC scheduled to make its preliminary determination by 5 December 2002 and its final determination by 18 February 2003. If the findings are affirmative, antidumping duties would be imposed by 15 April 2003.

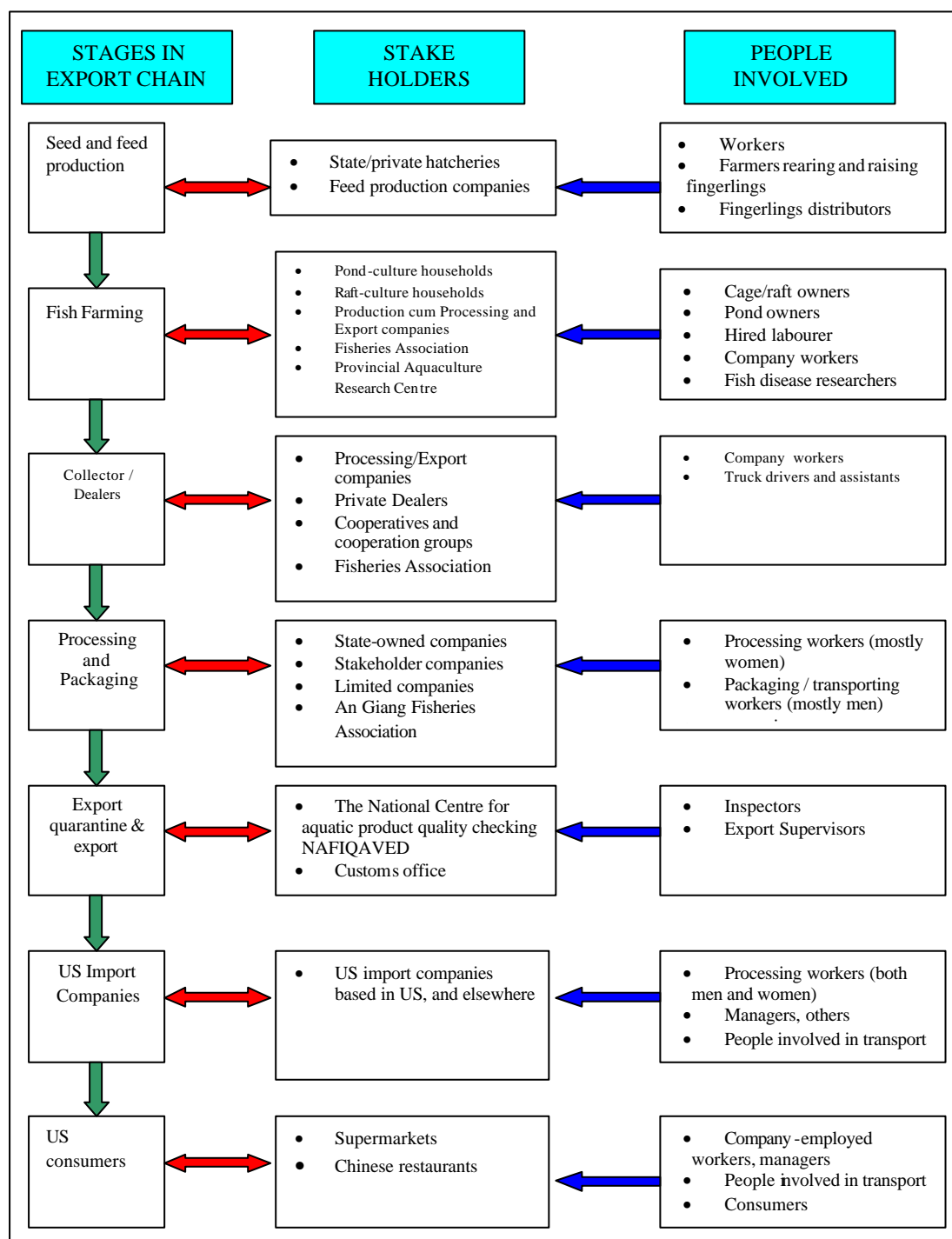
On 30 September 2002, a United States DOC delegation traveled to Vietnam to investigate the dumping allegation. The main objective of this delegation was to instruct Vietnamese enterprises to provide accurate responses to the investigation questionnaires sent by the DOC. After working with the United States Embassy in Vietnam, MOFI, the Ministry of Trade and VASEP, the delegation decided to work with four biggest Vietnamese processing and exporting enterprises - namely, AGIFISH, Navifishco, Cataco and Vinh Hoan Co. The delegation investigated the Vietnamese legal system, its policies on economic development and trade, especially some aspects of the market economy in Vietnam, the country’s regulations on the use of land, water surface and aquatic resources, its policies on natural resources and environment conservation, and its policies on private businesses and trade unions. The Vietnamese Government and enterprises pointed out that Vietnam’s status as a market economy was one of the prerequisites of the Bilateral Trade Agreement (BTA) signed less than one year ago between the United States and Vietnam. After an analysis regarding the nature of Vietnam’s economy, on 8 November 2002, the Office of Policy of DOC’s Import Administration recommended that DOC treat Vietnam as a non-market economy (NME) for the purposes of anti-dumping and countervailing duty proceedings. They determined that Vietnam has not successfully made its transition to a market economy and that the anti-dumping charges were substantiated. It was proposed that India be used as the reference country to assess a new tariff rate for Vietnamese products, and that the proposed tariff hike could be as high as 191 percent. However, the Vietnamese side recommended that Bangladesh be selected for reference as it is more relevant. In January 2003, the DoC ruled in favour of the US catfish industry, and levied a series of tariffs against Vietnam’s catfish exporters. The top four, Agifish, Cataco, Nam Viet and Vinh Hoan, were imposed with tariff levels of 37% to 53%; meanwhile seven other companies that co-operated with the investigation were given tariffs of 45%. All other exporters have had to pay 64% and the USA might also impose minimum prices or quotas.

The following parts of this report investigate how the antidumping tariffs have affected the livelihood of poor farmers and laborers in Vietnam.

CATFISH FARMING AND POOR PEOPLE IN AN GIANG PROVINCE

Market chain description

Tra and basa fish farming is a long-standing livelihood of inhabitants in the Mekong Delta, particularly along the Tien and Hau branches of the Mekong River, for more than 50 years. Since 2000 when the export market of tra and basa fillet expanded significantly, farming and processing these kinds of fish have created an important economic sector for this region. The production-export chain of the Vietnamese catfish industry has fast developed with specialized operations providing seed and feed supply, fish raising, processing and export. The following diagram summarizes the stakeholders directly involved in the chain from production to export of tra and basa fish from Vietnam to the US market:



The following Table 3 is an initial analysis of the stakeholders noting the presence and activities of poor stakeholders in the market chain. Table 4 below also provides further information on other, indirect, stakeholders involved along the market chain.

Table 3: Summary of stakeholders and poor groups involved in market chain for farmed catfish in An Giang

Section	Stakeholder	Quantity	Description of poor stakeholders	Technologies
Catfish farming in ponds and cages	Farmer households involved in production, processing and export companies	Number of rafts: 3.178 Total pond surface: 1562 ha Poor groups are the hired labourers working at cages and ponds. Their number is estimated at 6,000 An Giang province, 3,000 in Dong Thap and more than 10,000 in the Mekong Delta.	Sex: men 70%; Age: 18-60; Ethnic group: Vietnamese 80%; Khmer and others 20% Religion: Buddhist 60% Average Income: VND 0.7 million /month Alternative earnings: none Property: small house Land: none or limited Debt: 2 – 5 VND million Education: primary school or illiteracy Social insurance: none Social capital: assistance by neighbours.	Intensive cage and pond aquaculture
Services of seed, feed and chemicals	State seed centres	3 centres	About 200 poor people involved in selling fingerlings and feed to households.	Artificial Fertilization
	Nursing farmers	about 100		
Fish dealers and traders	Feed companies	3 companies: Cargil, CP group and Hibro	Their average income is VND 0.5 million/month	Techniques from government aquaculture research centres Transportation of live fish by boat with water tanks.
	Private business	Hundred poor people as boat drivers Dealers buy fish in small amounts from different households and sell to processing companies		
Processing and packaging for export	State-owned companies	AGIFISH and AFIEX	Sex: 70% female Age: 18 – 30 Ethnic group: Vietnamese Origins: Immigrated from rural villages Property: rent shared room with co-workers Average Wage: VND 800,000 – 1,000,000	Labour intensive technology International quality and hygiene standards
	Stakeholder (farmer association) companies	AFA		
Export	Limited companies	Nam Viet and Tuan Anh companies Poor group includes about 5,000 in An Giang province		Frozen fillet transported by ship
	All companies	Export volume: 23.000 tonnes in 2003		

Table 4: Summary of indirect stakeholders involved in market chain for farmed catfish

Stakeholder	Mission	Involvement in the antidumping case
Provincial Peoples Committee	Projection of socio-economic development and management policies	Decides support policies to farmers such as extension of credit return, reduction of interest rate, etc.
Department of Agriculture	State administration of agricultural activities. Assist the local government in planning and managing agricultural activities	Provide trainings for farmers in fish seed rearing and fish raising. Report to the government difficulties of farmers and directly manage support activities.
Department of Trade	Monitor and develop export market. Facilitate trading and export/import activities.	Directly involved in managing US research on Vietnamese catfish production and export; Advise government in trade legislation and negotiation; Assist in developing alternative overseas and domestic markets for the export companies.
Farmer's Association	Mobilize farmers resources for implementation of government policies Represent interest of all farmers	Raise "voices" from poor farmers through media and meetings. Assist the households seriously affected by the reduction of market price
Fisheries Association	Mobilize social capital of fisheries farmers and enterprises. Represent them in trade negotiation and assist them in developing business.	Represent the Vietnamese side as defendant to the court case. After the US decision, AFA requested export companies to sign contracts with farmers, built up a processing factory so that member farmer households can directly process and export catfish to overseas markets.
Banks/Credit Fund	Provide financial assistance to companies and individuals	Extend possible loans to farmers

Stakeholder descriptions and activities

Fish seed and feed production

In the past (before the steep increase in production after in 1995) catfish fry were caught from the Mekong River, around the border between Cambodia and Vietnam. The breeding-ground is in the Mekong River and tributaries in Cambodia. Collecting wild catfish fry from the river and raising them for selling fingerlings used to be a source of income for many fishing households living on the Mekong riverside, in Vietnam and Cambodia. Since 1995, catfish culture began to require large numbers of fry, and mass production of catfish fry using artificial fertilization started. According to Mr. Anh, Deputy Director of Tuan Anh Company, which grows and also exports catfish to many international markets, tra and basa fish seed production today is mainly conducted by the private sector. To ensure the purity of the fish breed, the local government has established three state-owned fish seed centres. Under the fish breeding centres, catfish broodstock are grown and kept for artificial fertilization. The average weight of female catfish reaches 5 kg, some even up to 20 kg. Eggs and sperm are mixed and kept in warm temperature until hatching. Eggs are delivered only when the mature female fish is gently pressed by hand. Larvae are nursed on chicken egg and sold to farmers when the fingerling reaches about 5 -10 cm long. The current unit price (2004) of 5 cm long fingerling is about VND 1,500, while 1 kg of 10 cm long fingerlings costs VND 30,000. In general, the current breeding capacity by both the state and private nurseries is sufficient to meet fingerling demand of the tra and basa fish raisers.

The main species produced by hatchery production is *Pangasius hypophthalmus* (tra) the major species produced. *Pangasius bocourti* (basa) is more difficult to breed, and probably some fingerlings are still collected from the wild (Trong et al, 2002). The abundance of basa fingerlings from artificial breeding, and limitations of wild tra fry, is one reason why farmers are growing more basa species.

Feed production is another major activity. It is estimated that it takes about 4 kg of food to produce a kg of catfish, depending on type of feed supplied. Therefore, in 2003, a total production of 120,000 tonnes of catfish production in An Giang province would have consumed about 480,000 tonnes of feed. Given this estimate of feed demand, it is not surprising to find many agricultural feed production firms such as Cargill USA, CP Thailand, Hibro, and others have introduced industrial feed in the local market. These formulated diets require about 2.5 – 2.8 kg of feed to produce 1kg of catfish. However, local catfish raisers still prefer the “home-made” feed, which is mixed from rice, vegetables and “trash” fish. This self-made mixture looks like the household-made feed for pigs in the region. Since the prices of local labour cost and rice residues are quite cheap in An Giang, the catfish raisers prefer to cook the food for fish by themselves. This is also one reason why local catfish farming involves a substantive number of poor people, who do not own any agricultural land and live on whatever activities that the better-off farmer households hire them to do. Since the catfish raising activity is developed, catfish households hire landless people to process the food and feed the catfish five or six times per day. These hired labourers therefore stay with their employers to ensure a continued production of the homestead food.



Figure 3: A food grinding machine on a raft, on which people live together with the catfish

Fish rearing

Tra and basa farming is a traditional occupation in the Mekong Delta of Vietnam, in An Giang, but also the other provinces of Dong Thap, Can Tho, Vinh Long, Ben Tre, and “Tra” Vinh. Most of the people interviewed revealed that they had been in this occupation for a “very long

time”. In fact, many households began catfish farming before 1970, with a majority of them inheriting the occupation from their parents. (ActionAid, 2002).

Tra and basa fish are cultured most by the household farmers either by giant rafts (with the household living above the fish cage) or in ponds. Although pond farming has been practiced for many years, it is only recently that catfish for export have been produced in ponds. Some seafood processing and export companies also invested in a limited number of cages. In terms of growing

environment for these two kinds of fish, it is necessary to note that tra fish can live both in pond conditions, and in running water or in cages, but basa fish grows only in flowing water environments in cages. Tra larvae are nursed in hatcheries and fingerlings are raised in running water and then in the rafts when their weight is about 10 - 15 fish/kg. The scientific name of basa is *Pangasius hypophthalmus* that can live in stagnant ponds and lakes. It is easy to raise the fish as it is less susceptible to disease. After 6-10 months of raising, the weight of both tra and basa fish reaches around 1 - 1.5 kg, that can be sold to the fish processing and export factories with sufficient fillet to meet export requirements. Fish is sold either directly to the factories or through intermediaries depending on the locations and quantity of the owners. Results from our survey of households showed that most of the households sold fish through intermediaries as they produce in small quantities. At the factories, fish is processed, filleted, then frozen and then exported.

It should be noted that one key advantage of the Vietnamese tra and basa fish is that these species can be reared and raised around the year while in the US and more temperate countries catfish farming is more seasonal. This advantage provides catfish farmers in the Mekong delta with a faster return of investment and allows export companies to be able to sign longer-term export contracts based on a predictable and regular year-round supply.

According to statistics from the Provincial Department of Agriculture and Rural Development (DARD), in An Giang province in 2003 there were 3,178 rafts and 1,560 hectares of catfish ponds, mostly concentrated in three districts of An Phu (mostly rafts), Chau Phu (mostly ponds) and Phu Tan. In An Giang Province in 2003, Provincial statistics note 11,058 households raising the catfish either by cage or pond, producing 136,800 tonnes of tra and basa fish (compared to 111,599 tonnes for 2002). Table 5 records the development of the tra and basa farming sector in An Giang province over the last five years:

Table 5: Development of tra and basa farming in An Giang province over the last five years

	Unit	2000	2001	2002	2003
Number of rafts	pieces	3,086	3,237	4,053	3,178
Total pond area	hectare	1,218	1,253	1,747	1,560
Total tra and basa production	tons	38,383	83,513	111,599	136,800

(Source: Department of Agriculture and Rural Development of An Giang Province)

These statistics reveal the facts that productivity of tra and basa sector has remarkably increased over a short period (about 4 times between 2000 and 2003, even when the number of rafts and area of ponds have not almost changed). Another important factor is the strong policy of the provincial authority to control the number of rafts and the area of fish ponds. The reason for this control policy is the risk of negative environmental impact when people rushed to invest in developing rafts and ponds in 2002, generating fish diseases and consequent economic and social risks. The significant investment required for rafts also acts as another “brake” on development. According to our interviews, the provincial authorities have set 3,500 as the number of rafts. Any construction of new raft needs to be approved and registered by the local authority, providing some degree of effective control on numbers.

The main producing province is An Giang, but Dong Thap province (on the other side of Mekong river) produced about 60,000 tonnes of catfish in 2003. There are five export companies in this province. A small amount of fish are also produced other provinces in the Mekong Delta such as Vinh Long, Can Tho, Soc Trang and Tien Giang. However, all these provinces supply

their fish to the processing and export companies based in An Giang and Dong Thap provinces. Since the local authority limits the number of rafts, farmer households tend to construct bigger rafts with substantive capacities. Thus only farmers with sufficient access to capital can invest. Catfish cage is made by bamboo, “sao” wood and “iron” wood available in Cambodia and Vietnam. The largest cage of 10 m (wide) x 25 m (long) and 5 m (deep) produces 200 tonnes of catfish after six months. The cage mesh is a square of either 3cm x 3 cm or 5 cm x 5 cm. The latter is used when the fingerlings are at least 10 cm long. Each cage needs at least two labourers who take care of cooking food and feeding the fish. Average production cost of 1 kg of fish by the cage culture is 8,600 VND /kg, which is broken down according to the following box:

Box 1: Production cost of tra fish raised on rafts (cages)

(Department of Agriculture and Rural Development of An Giang province, 25/7/2002)

Basis of calculation:

- Size of raising raft (14 x 7 x 5) m
- Size of breed: body height of 2.5 cm, average weight of 0.075 kg per piece (about 14 piece per kg)
- Average price of breed: VND 1,400 per piece.
- Average price for feed: VND 1,800 per kg
- Feed coefficient: 3,0
- Raising duration: 8 months. Output: 40 tonnes

Production costs:

- Breed cost: 40,000 peaces x 1,400 dong per piece = 56,000,000
- Feeding cost: (40,000 kg - 3,000 kg) x 3 x 1.800 dong per kg = 199,800,000
- Raft depreciation: 200,000,000 dong x 10% = 20,000,000
- Labourer wage: 500.000 dong per capita per monthx2 laboursx8months = 8,000,000
- Fuel cost: 20 l x 40 t x 3,800 dong = 3,040,000
- Disease prevention and treatment cost: = 10,000,000
- Fixed asset depreciation (equipment, machines) and other costs: = 5,000,000
- Bank interest: 200,000,000 dong x 70% x 1% x 8 months = 11,200,000
- Business registration tax and other fees: = 1,000,000

Total cost: = 314,040,000

Production cost excluding wastes: 314,040,000 dong per 40,000 kg = 7,851 /kg

Cost of waste (40,000 kg x 10%) x 7.851 dong = 31,404,000

Production cost (314,040,000 dong + 31,404,000)/40,000 = **8,636 /kg**

Thus, the production cost of a *Tra* fish raised in a raft is 8,636 dong per kg.



Figure 4: Large scale basa fish cage

Catfish pond farming is conducted in ponds with areas ranging from 0.2 to 1 ha. Each pond needs from 2 to 3 labourers who take care of feeding the catfish. Production cost of catfish by pond culture is lower than by the cage culture. The following Table 6 provides the catfish production cost in ponds based on figures from our interview with Mrs. Nguyen Thi Nung living in Vinh Thuan village, Vinh Thanh Trung Commune, Chau Phu district.

Table 6: Production cost of tra fish by pond culture

	Unit	Year 2001	Year 2002	Year 2003
Number of fish	Thousand kg	90	80	90
Fingerling cost	Million VND	108	72	135
Pond construction devaluation	Million VND	10	10	10
Labour cost	Million VND	12	0	15
Feed	Million VND	450	450	450
Other expenses	Million VND	30	10	30
Total Cost	Million VND	610	542	640
Unit production cost	VND thousand/kg	6.78	6.78	7.11

Raising tra and basa fish is highly profitable as its benefit is about 100% of its production cost. The current (mid 2004) market price of basa at rafts is from VND 14,500 to VND 15,500 per kilo against its production cost of about VND 8,500. Tra fish at pond is sold in early 2004 from VND 9,000 to 10,000 per kilo. However, catfish raising in Mekong Delta is also regarded by farmers as an highly risky employment. First, it needs a high level of initial investment in construction of the raft and for purchase of fish fingerlings. Construction of a cage of 200 tonnes of fish per year (sizes of 10 m x 25 m x 5 m using iron wood) costs VND one billion (about US\$ 60,000). Therefore, almost all the catfish farming households at their initial stage have to borrow from the Bank of Agriculture and Rural Development or the Vietnam Commercial Bank or the People's Credit Fund with market interest rates ranging from 1 to 1.2 % per month. Loan size ranges from VND 100 million up to some VND billion. However, the maximum loan size is kept by the banks below VND 100 million, so many households also borrow from their family members, friends or private sources with higher interest rates. All these banks require collateral for the loans, a property ownership or land use-right certificate. Such investments are clearly not for poor people.



Figure 5: *Raising catfish in a pond*

Poor households in An Giang province are mostly landless or those with small land holdings. Therefore even when they “dare” to invest in the catfish business, they do not have conditions to access credit from the bank. Poor people, however, thanks to catfish farming development, get better job opportunities, since each catfish raft needs at least 4 or 5 labourers. The owner

households use first their family members or relatives to reduce recurrent cost, therefore, they have to hire only about 2 poor people from outside their families. These two people are usually the poor, who do not own any agricultural land and sell their labour. They stay with the households, where they are paid about VND 600,000 per month in addition to daily meals and some bonus after a successful fish crop. These poor cash labourers are mostly men, who send their money back to help their wife and children. More information on their livelihoods will be provided in the next part of this report.

Since the number of rafts in An Giang province is about 3,500, it is estimated that there are from 6,000 to 7,000 such poor labourers working for cage catfish farming households. Their jobs are fragile as the catfish farming business is highly risky. Apart from markets, risks include the uncontrolled quality of river water and occurrence of fish diseases. Quality of water is better during the flood season from July to November, however, it is reported to be a problem when rice cultivating farmers begin their crops. Wastes from rice field are drained to the river, and residues from pesticides and fertilizers can cause problems for cage culture. During 2001 and 2002, households reported losses due to a disease in liver of the fish. Farmers reported symptoms such as dry fish skin, not like the healthy wet skin of normal fish.

In addition to such risks, there are fluctuating changes in market prices of tra and basa fish due to various causes, including the US anti-dumping tariff. Trade problems are completely unforeseen by local farmers, giving the farmers a real “shock”. The abrupt fall of local catfish price due to the anti-dumping tariff imposed by US to the Vietnamese export pushed many farmers into a very difficult situation in 2003.

Processing and export

In processing factories, catfish are cleaned, filleted and frozen for export. In An Giang province there are five companies currently processing and exporting catfish:

An Giang Fish Import-Export Company (AGIFISH). This company was established in 1986 as a State enterprise under the management of An Giang Provincial People’s Committee. The current number of employees in the company is 2,300 of which 72% are female. The company has two factories for fillet processing and freezing and one factory for food processing. Different

kinds of processed basa and tra have been developed by the company in response to the anti-dumping case (the anti-dumping tariff is imposed only on the tra and basa fillet), such as dried fish, canned fish and basa spring roll, amongst others.

An Giang Agricultural Import-Export Company (AFIEX). The company was established in 1999 as a State enterprise under the management of An Giang Provincial People's Committee and has a fish processing factory. The current number of employees in the company is 1,300 and women account for 75%. This company also raises tra and basa fish on 20 rafts with a total production of 1,500 tonnes of fish per six months.

Nam Viet Company. This is a Limited Company set up in 2000 with 1,100 employees of which 73% are female.

Tuan Anh Company. This is a Limited Company set up in 2003 with 1,000 employees of which 93% are women.

Export Company of An Giang Fisheries Association (AFA). The An Giang Fisheries Association (AFA) is a civil society organization established for interest of all individuals and companies working for fisheries development in the province. AFA has started a project of building a new fish processing factory with capacity of 5,000 tonnes per year. The purpose of this investment is to enable the cooperatives and other groups of catfish farmers to process and export their products directly to the international market, and not through the current dealers and the trading companies. This, the largest catfish processing factory in An Giang, is expected to start operation by the end of 2004.

Other processing/export companies. In addition to the AFA, there are four private companies in An Giang which have been established in 2004 and are constructing new fish processing plants, with an estimated capacity of 3,000 tonnes per year per plant. In total, in An Giang by end of 2004, there will be additional processing export capacity of 20,000 tonnes to be added to the current capacity of 30,000 tonnes. The names of the new four private companies are Mekong, Thai Nguyen, Thuan An and Thien Thanh. In Dong Thap province, in addition to the two existing processing and export companies, namely Vinh Hoang and DOSIFISH, there will be three limited companies starting operation in late 2004, namely Toan Sang, Thanh Hung and QVD. It is foreseen that with the entry of these new processing and export companies, the output of the catfish farmers will not meet demand of all the export enterprises by end of 2004.

The main challenge for existing export-processing companies is reported as insufficient financial resources. There is high competition among the companies themselves, while at the same time exporters are required to meet technical requirements of many "difficult" markets such as US, EU and Japan. This requires the companies to ensure a high level of investment in modern technology. In addition to that, the fluctuation of international market created by the many international trade barriers such as the anti-dumping example, gives the companies many difficulties in sustaining their production, keeping their workers employed, exploring new markets and developing new products. The unmet need for capital to buy input materials from fish farmers is also a problematic situation for the processing enterprises. Nevertheless, investment in the sector is increasing.

A further factor is the environment, another critically pressing issue that urges the managers to solve and preserve the environment, especially the waste disposal from their factories. At present, none of the processing factories have sufficient waste treatment system. Existing processing factories have only some ponds that are unable to fully decontaminate processing waste properly, especially organic waste from fish processing. Vietnam is still an under developed country and in such provinces like An Giang where the people's living standards are still low, the priority task for the locality has been employment and income generation for the inhabitants, rather than environmental problems. Nevertheless, the provincial government and factories of the aware immediate actions, and the issue will need to be addressed.

According to the Department of Trade in An Giang there are 5,300 workers at the present five operating processing and export enterprises. This number will be doubled when the four new processing enterprises start operation by the end of 2004. The majority of the workers are in the age range from 18 to 30 years old and live in the areas surrounding their factories. According to our survey, the worker's average wage ranges from VND 800,000 to VND 1 million, depending on individual productivity. Some fast-working women could even receive about VND 2 million per month. While average income ranges from VND 800,000 to 1,200,000 per month, they have to cover all their living expenses including rent of a shared room (about VND 100,000), food and other daily expenses. Most of them could save about 20% of their salaries for sending back to their families in rural areas. Almost all of them are immigrants from rural districts in An Giang province. In fillet production, 95% of workers are women. The men mostly are responsible for transportation and completion of fillet packaging process.

Since the workers are immigrants from rural areas, their livelihood is not sustainably set up in the provincial city. They live temporarily by hiring small rooms in slum areas where they are vulnerable to social influences (drug, prostitution, etc). The workers are trained by processing factories on the simple techniques of fillet production. It is difficult for the workers to move to other industrial factories as they were simply trained, in addition to the very limited labour demand of the industrial sector in the province.

Roles of indirect stake holders

The Provincial People's Committee (PPC) and different departments under the PPC are responsible for management of the different sectors in the province to promote economic development. The PPC provides guidelines for fish farming, designation of areas, estimation of productivity as well as the capacity of the factories to encourage the households to raise fish within their suitable capacity. In addition, the functional economies including as agriculture, industry, commerce, etc. always are interested in providing instructions and monitoring the implementation of productivity capacity, production, product quality, competition and consumption possibility. In cooperation with An Giang Provincial Department of Commerce and Tourism, An Giang Provincial Department of Agriculture and Rural Development just (in earl 2004) signed the joint Agreement on the prices of material procurement with 5 neighbouring provinces, namely Dong Thap, Can Tho, Vinh Long, Soc Trang, and Tien Giang in order to preserve the fish raisers and fight against the price coercion for the households.

The Fishery Association includes representatives of the fish farmers and acts as the bridge between the households and the factories to help them in terms of productivity, needs of market, and negotiating with banks to increase the loan for the members.

The banks play an important role providing loans on the basis of mortgage (properties or agricultural land). Through the lobbying of the Fishery Association, the bank increased the loan higher than its regulation. However, the capital is limited while the people's needs for loan is 1.5-2 times higher than the current loan.

Poor people in the catfish farming and market chain

According to the census, in 2003 there were 22,277 poor households (4.96% population) in An Giang province with average income per capita of VND 92,000 per month. This amount of money was only enough to meet minimum requirements for food. Most of these poor people did not have their own houses. They had to rent houses or led an unsettled life. They did not have land for production. The causes of their poverty resulted from unstable jobs, lack of professional skills, knowledge, awareness and having many children (AusAID, 2004).

With a GDP per capita in An Giang in 2003 of VND 6,150,000 per annum (or USD 1.1 per day), the living standard of An Giang people is in general quite low. While the living standard of the people in the urban area is higher, 73% of the population lives in the rural area with average income below USD 2 per day. It is obvious that workers in the agriculture and aquaculture production sector will face many difficulties when they lose their jobs and have to look for other means to sustain their livelihoods.

In aquaculture production, the poorer people are labourers and the farmers who raise fish on a small scale (mostly ponds). As a result of falling price, fish farmers may be forced to seek other employment, such as porters or service providers in rice cultivation. Ten percent (10%) of the processing factory employees lost their job in 2003. For those large scale fish raisers (pond and cage farmers) who have to borrow loan from the banks, some were obliged to sell their properties (land, other properties, even their houses) to repay loans and seek another means of living, such as small business and rice cultivation.

Interviews with 22 farmer households who raise tra and basa fish in An Phu and Chau Phu districts indicate that the owners of the fish ponds and rafts should be classified above the poverty level. However, many farmers are just only above the poverty line and very vulnerable to fall back into poverty due to the high risks associated with catfish farming. Apart from market risks, other risks include the quality of river water which is vulnerable to environmental impacts from industrial and agricultural development in upstream areas. At the same time, fish farming households are vulnerable to the changing price level of the international market. The serious reduction of price of fish as consequences of the US antidumping tariff imposed to Vietnam is a very typical example of the high vulnerability of the fish farmers.

According to our field survey, the poorest group involved with catfish farming are hired labourers working for cash income on the cages and fish ponds. Their monthly income is about VND 700,000 to VND 800,000. The second poor group in the catfish export chain are the workers at the processing and export companies. These workers are mostly young women who also receive less than US\$ 2 per day, with an average monthly wage minimum of VND 800,000. Although this income level is relatively high, the women have to survive in a city environment where the cost of living is greater than at home in rural areas.

The survey also shows that most of the pond catfish raising households own stable or semi-stable houses. With the traditional housing style, houses are near to their fish ponds so that they can regularly feed and take care of the fish, as well as for security reasons. Houses are mostly made with wood floors and steel roofs. Each household typically has 4 or 5 members. Most of them have low educational level, *i.e.* have not finished mid-level primary school. Their physical assets include the house, furniture, motorbikes and power-generators. Households involved in cage farming live on the river right above the fish cage. The average size of the household/cage area is 5-10 m times 15-25 m. The smallest fish pond is of 0.2 to 0.3 ha, the biggest is about 1 ha. The fish farmer's income mainly depends on the market price they could sell to the dealers or agents of processing companies. Table 7 below summarises information on income.

Table 7: Summary of average income of different stakeholder groups

Person Income/day	AGIFISH	AFIEX	NAM VIET	Raft labourer	Pond labourer
Under US\$ 1	0%	0%	0%	0%	0%
From US\$ 1 – to US\$ 3	70%	80%	80%	100%	100%
Higher than US\$ 3	30%	20%	20%		

(Source: Department of Trade and research team interviews)

Most of the workers in the fish processing factories are young female from 18 to 25 years old. Though the above income level of the factory workers is still quite low, it is much higher than they could gain before through agricultural activities in their homeland rural areas. All the people hired as labourers for catfish farming households also enjoy better stable income through the work on fish ponds and rafts. Since they were mainly landless farmers, they had to go around the villages to look for anything to do for money; work is available mainly during the periods of rice crop planting and harvesting. Now, working for catfish raising households they have less worries about their daily food and in addition can have some money to send to their families even though it is rather little.

Development trends in the export chain

In 2003, the export of aquaculture products from An Giang reached USD 54.9 million. It was 20.88% lower than 2002 (equivalent to an USD 15 million reduction). In terms of proportion, tra and basa accounted for 97% of exported products, and the remainder were freshwater prawns and other aquaculture products. In the 2004 plan, An Giang intends to export 40,000 tonnes of aquaculture products - around 1.7% higher. If this target is obtained, almost all tra and basa produced in the locality will be consumed and the capacity of several renovated fish processing factories and some expanding ones will be exploited effectively. However, first and foremost for An Giang at the moment is the outputs for their products, so this province continues to promote commerce with the motto: "diversification of the market and products".

According to the common opinions of the export enterprises, the export market structure in 2003 was reasonable with not so much reliance on particular markets. However, in order to sustain the reasonable market structure and increasing export turnover, each market has its own procedures. For the American market, this product still maintained 26.8 % in 2003 because the enterprises decided to replace the previous products by refined ones (to avoid the CPG) and increased the proportion of non-American markets from 2.2 % to 14.3%. As a consequence, in 2004, export to American markets focused on the refined products in addition to increasing the proportion of the

other markets from 30-35% to two times higher than the current one. Two potential non-American markets are Mexico and Canada. On the other hand, the proportion of Asian markets doubled in 2003, in which Hong Kong proved to be an outstanding one with more than 11% market-share and nearly 42% of this region. Other trading partners in Asia include Taiwan Province of China, South Korea, Singapore, and Malaysia. China is considered a potential one. It is known that since 2004 when China started to forbid fishing in several coastal areas, there was a deficiency in aquatic products for the market while the actual demand is rising as a result of successful development of market-oriented economy and growing population. For Arabian countries, a new market, it will be a good chance for the business to expand their markets in the Middle East. Another favourable factor is that tra and basa have received a certificate for consumption in Muslim countries. In the forthcoming time, West European countries (Germany, Belgium, the Netherlands, Spain, Switzerland, etc) will still account for a high proportion through such distributors as Eurogroup, Coop, Sippo, Binca, Seafood, Marigold, and others. In the East European market, plans are for products to be distributed through some companies of Russia, Ukraine and Czech to penetrate and expand markets. In recent times, businesses in the province have engaged in discussion and negotiation for future cooperation with a range of businesses and countries. In comparison with the other markets, Australia is also an important importing country; the country is considered to have a high potential import capacity because import tax for fish-based products in this country is exempted (0%). With market expansion, the productivity of processing and exporting went up and kept stable despite the fact that the aquaculture productivity decreased in 2003 due to the anti-dumping case.

Expanding international markets has led to various challenges for the export businesses of An Giang. The US market applied its antidumping policy. Other markets including the European countries and Japan require strict quality of the products, particularly in terms of sanitary requirements, antibiotic residues and weight. Less demanding markets are not numerous and have not got used to the flavour of this fish. At the present time, enterprises are also concentrating on expanding sales within the domestic market. The system of primary and secondary agencies in some markets has been developed.

It should be noted that raising tra and basa is an industry for export in a developing country that is in the preliminary stages of accessing the international market, and when the country has not become a WTO member. Exported products face difficulties such as the regulations on customs duty and non-custom duty of the international markets, the quality of products, and competition capacity, and negotiation in trading. The limited knowledge of Vietnamese enterprises relating to the international rules, result in loss and disadvantages for them in negotiation. It is even more difficult for producers, who have limited understanding of the international market mechanisms. Despite the efforts of the provincial government, the capacity to manage the development of export industry is still too limited to meet the requirements of farmers. Lack of timely guidelines and information on the market is a particular problem. As a consequence, development is still spontaneous, and not well connected to market demand and requirements. The lack of knowledge creates further risks for farmers. Poor farmers in particular find difficulties in accessing credit for investment because they lack properties for collateral. A further serious problem to the catfish farmers is the lack of longer term contracts to the enterprises and traders, who did not have any supply contract or mutual agreement; most farmers of them sell their fish through the mediators instead of direct trading to the factories. Therefore, when the export companies fail due to any negative change in the international market (e.g., due to anti-dumping

tariff), they reduce the price they offer to the farmers in order to protect their benefit. As the final result, the poor fish farmers and their workers are the most vulnerable, as they are usually forced to sell their fish at loss.

The following part of this report analyses in more detail the negative impacts of the US anti-dumping policy to the catfish farmers and workers in Vietnam.

IMPACTS OF THE US ANTI-DUMPING DECISION ON POOR PEOPLE

The history of the anti-dumping case with Vietnamese catfish imports to the USA is described in detail above. The US Department of Commerce in April 2003 ruled in favour of the US catfish industry, and levied a series of tariffs against Vietnam’s catfish exporters. The top four, Agifish, Cataco, Nam Viet and Vinh Hoan, were imposed with tariff levels of 37% to 53%; meanwhile seven other companies that co-operated with the investigation were given tariffs of 45%. It was a short period for investigation by the US administration and the quick decision on the antidumping tariff against the catfish export from Vietnam was a “shock” to not only the processing export enterprises, but more severely to the poor people working in farming in rural areas (cages and ponds) and the processing enterprises in the city of An Giang. Evidence of the damages to the tra and basa fish raisers have been found by our study team, mainly resulting from the decrease of farm-gate price of fish from January to August 2003.

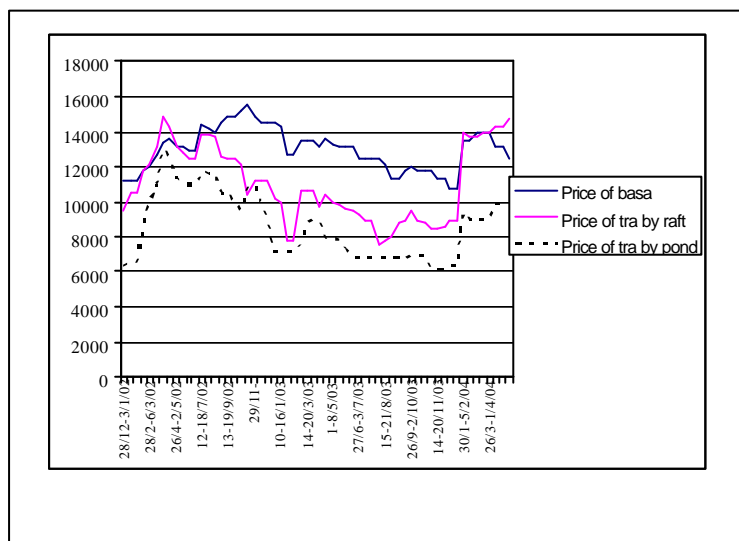


Figure 6: Price changes for tra and basa fish

Catfish farmers, hired labourers and the workers at the processing factories most suffered from the antidumping decision. Small-scale farmer households used to sell their fish through the dealers, without any business contract fixing their purchasing price. Even with the larger scale households who sold their fish directly to agents from the processing companies, they did not have any

contractual basis with companies on market prices. Therefore, when the antidumping tariff was imposed on the export companies (in order to ensure their benefit when the companies have not found alternative markets), the only way for them was to reduce purchasing price to the farmers. The companies who first understood the impacts of antidumping tariff even started reducing their buying price from farmers as soon as the American Catfish Association submitted the petition. Before the tariff was imposed, export companies began to reduce both their purchasing volume and price with the farmers. The fish farmers in An Giang province began to suffer difficulties when the export companies started reducing their buying price.

According to the records at the Department of Trade in An Giang province, the company AFIEX at the point of time from 16 January to 13 February 2003 reduced its purchasing price for fish from cage farmers from VND 14,250/kg down to VND 12,650/kg. In early February 2003, within one month, the price of basa went down from VND 14,250/kg to VND 12,650/kg; Tra fish raised in rafts from VND 9,900/kg decreased to VND 7,850/kg and tra fish raised in the pond decreased from VND 9,000 to VND to 6,000 - 7,000 per kg. After April 2003 the local prices of tra and basa fish dropped even lower than their production cost. This led to severe problems for farming households, and workers. Calculations based on total production volume and price decrease suggest that the fish farmers suffered a total loss of more than VND 200 billion. Figure 6 shows the decrease in price from 2002 to 2003 based on statistics from the Department of Trade in An Giang province.

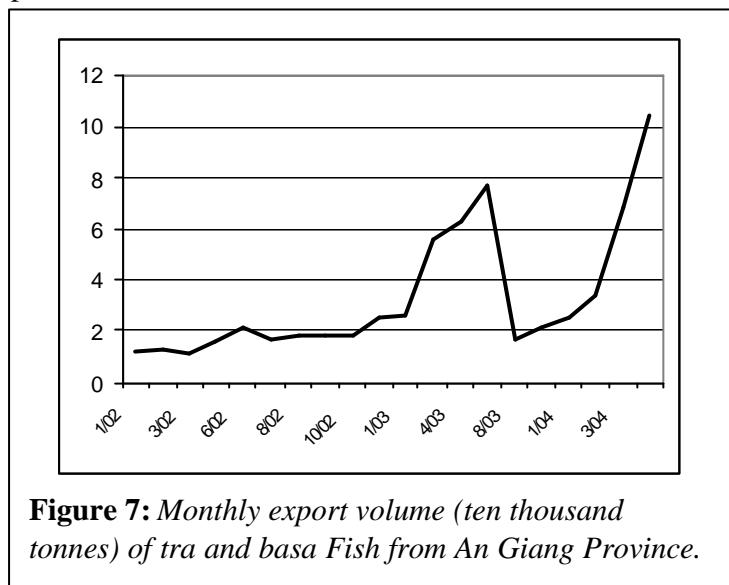


Figure 7: *Monthly export volume (ten thousand tonnes) of tra and basa Fish from An Giang Province.*

During the period between May and August 2003, the production of fish processing factories was also dramatically reduced as a consequence of the decreased import to the US market. To ensure their financial efficiency, the enterprises purchased raw materials from fish farmers at lower price than before, stagnated production, increased their storage capacities and concentrated on developing new processed products as well as finding alternative markets.

The value of export in 2003 experienced a strong decrease resulting from the anti-dumping decision that appears to have influenced performance since the beginning of that year. Figure 6 shows the total export volumes over the period from 2002 to 2004 recorded by the Department of Trade in An Giang province. Since in early 2003 two private enterprises entered the export industry, the total export volume increased in first quarter of 2003, however, from May to August 2003 it dramatically decreased due to the US antidumping tariff.

The anti-dumping tariff forced catfish export companies in Vietnam to reduce their export to the US market. However, as the figure above shows the export was only reduced for about six months, during which the export companies adapted their marketing policies. First, they changed from fillet to different processed final products, which were not affected by the anti-dumping tariff. Second, fillet was exported to a third country. Third, companies developed the domestic consumption of tra and basa fish, for example in the north of Vietnam. Fortunately, due to the chicken flu outbreak in Vietnam in late 2003 tra and basa consumption was boosted as people switched from chicken to fish. Fourthly, the companies found new international markets.

However, the serious reduction of catfish price over the six months in 2003 had significant affect on fragile local economies and livelihoods of catfish farmers and other stakeholders during this time. The following analysis of impacts of the antidumping policy on the livelihood of the catfish aquaculture farmers and the workers at the export processing companies are based on the

statistics available at the Department of Trade in An Giang province and the results of our interviews with 10 households, who raise tra fish by ponds in Vinh Hoa village, Vinh Thanh Trung commune, Chau Phu district and 11 cage-culture households in Phuoc Tho village, Da Phuoc commune, An Phu district, An Giang province.

Impacts on livelihoods

According to the annual survey conducted by the Department of Agriculture and Rural Development in 2001, the share of households living on aquaculture is 2.4% of the total household number in An Giang province. Information from the survey and findings from our interviews with 22 catfish raisers show that these farmers have a living standard above the average level in the region. Since catfish culture requires a high level of investment, poorer people are not able to get loan and cover the construction of the cage or pond and recurrent costs of daily operation. Poor people are actually the hired cash labourers who work for the catfish households. With the decline in prices related to the antidumping decision, catfish raising households suffered financial loss. Their situation became worse when their fish could not be sold and they had to continue buying food for the fish. They therefore sought cost cutting measures, and one way to reduce financial loss was to sack their employees. Interviews with fish farmers in Vinh Thuan and Vinh Hoa hamlets, Vinh Thanh Trung commune, Chau Phu district showed that in late 2002 five out of the ten interviewed households were loss-making and all of them were in very difficult circumstances in 2003. They had to reduce their production cost to minimize their loss.

Box 2: Impacts on household income

Ms. Nguyen Thi Nung in Vinh Thuan hamlet, Vinh Thanh Trung commune, Chau Phu district, An Giang province has been raising tra fish in a pond for the last three years. Currently, her family has a pond of 0.5 ha, which can produce for her family 50 tonnes of tradable fish. In 2002 she hired two labourers, who get from her VND 600,000 per month. In early 2003, the price of tra fish went down from VND 10,000 to 6,000/kg and she had difficulties in family income. She did not have enough money to pay for the two hired labourers, so in June 2003 she had to release them.

Ms. Nung has two children. One goes to the nine grade of secondary school and the other to the five grade of primary school. Since she did not have labourers in 2003, she had to ask the older daughter to leave school to help her in raising fish.

In 2002 she borrowed VND 100 million from the Bank of Agriculture and Rural Development with interest rate of 1% per month. However, it was enough only to maintain the pond and buy fingerlings and feed. She said if she has borrowed bigger amount she could retain the labourers and suffer other losses when the fish price declined in 2003. If so, her daughter did not have to leave her school in that year.

According to the Department of Trade in An Giang, about 15% of fish farmers lost their job, of which 22% were households who raised fish on cages, and 13% households who raised fish in ponds. According to a survey by the DARD in An Giang in 2002, there were more than 26,000 labourers working in fish raising in which 8,000 were hired workers in addition to more than 5,000 factory workers in the processing plants in the province. In terms of age, most of the fish raisers were 25- 35 years old and 90% among

which were male while the most of factory workers were 18 - 30 year old and female worker accounted for 70%. Hired labourers lost their job and had to seek other jobs, such as services to rice cultivation. The most affected districts were An Phu, Chau Phu and Phu Tan.

According to the respondents of our survey, some households coped by mobilizing their own (family) labour force because of the impossibility of reinvesting after the lawsuit. Even now (early 2004), about 75% households are using only their family members, mostly “to gain benefits by their own hands”. Out of 22 households met, 3 households went bankrupt including 2 households who raised fish in the rafts and one household who raised fish in the pond, due to the sudden decrease of price. Since the lawsuit, some households also discontinued raising fish after they sold the fish. Some did not feed fish because they were scared of loss when the price fell dramatically in July and August 2003. This situation had an effect along the supply chain, in supply of fingerlings, fish feed and farming and factory materials and transportation services.

Processing factories cut down their labour force by about 10% to minimize processing costs after the anti-dumping decision. 500 workers, mainly females, in An Giang province had to find another job or went back to their rural homeland for agricultural work following the decision.

Financial capital

Most of interviewed fish farmers said that they had borrowed loans from the banks, namely the Bank of Agriculture and Rural Development, and the Vietnam Commercial Bank. When the antidumping tariff was imposed to the export companies and the catfish prices decreased, many households suffered losses. About 14% of interviewed households were pushed into insolvent situation by returning their loans to the banks. These households had to request a support from the local authority or the An Giang Fisheries Association to convince the banks to extend the loans so that they could continue their work. Households who raised fish in the ponds also suffered losses, with some having to sell land and house to repay loans. Due to loss and for their prestige, they tried to repay first by selling land, house or borrowing money from other sources. Results from the interviews with the fish raisers in Vinh Thuan and Vinh Hoa hamlets (Vinh Thanh Trung commune, Chau Phu district) indicate that 5 out of 10 households were loss-making in 2002 (as price declined), and all of them were in the same circumstances in 2003. The impacts of the reduced market price of catfish were more serious to the households involved in cage-culture since they had borrowed larger loans for cage construction. 50 % interviewed households in cage culture in An Phu district said that they could not repay their loans with money they gained from fish farming. The farmers were unable to stand long-term debit, in addition, the bank insisted on reclaiming loans.

Farmers responded to such problems by decreasing the scale of farming, selling part of their properties or compensated from the other businesses to repay the loans. Fortunately, in early 2004 the selling price for farmers started increasing due to the chicken flu, increasing domestic demand, and export companies developing new international markets. During our interview in May 2004 all fish raisers were happy to say that “it is good enough with the current situation!” The households raising fish in the rafts were more satisfied because they considered that with the current price and prospects, they should soon recover and continue to get profits for themselves and for the province. It was said by the interviewed households that they would try to repay their loans by end of 2004 and then re-borrow again in 2005 with a hope that they would be more fortunate in the following year when prices became higher.

Human capital

With the decreasing price of fish, households had to reduce their expenses and save fuel and minimize the labour force. Those households who had hired labour in the last time sacked their employees and worked themselves and tried to overcome the difficulties. Ms Nung in Vinh Thuan hamlet, Vinh Thanh Trung commune, Chau Phu district said that she hired 3 employees in 2003, but had to sack all of them when the price was lessened and her husband and children had to work instead.

Box 3: Impacts on household financial assets

Mr. Nguyen Van Tai in Vinh Thuan hamlet, Vinh Thanh Trung commune, Chau Phu district, An Giang province revealed that in 2003 he borrowed VND 20 million from the Bank of Agriculture and Rural Development to repair his pond and buy fingerlings. However, in 2003 he suffered a loss of VND 30 million when the selling price of fish came below his production cost. This year 2004 he tries to continue raising catfish as the price has now recovered to a higher level. However, he does not have money to buy fingerlings and other inputs. He intended to take a further loan from a bank. However, no bank accepted his application since he is in debt of VND 20 million and having difficulties in repayment.

At last, he could convince his mother to use her land certificate as collateral for borrowing another VND 50 million. With the increased price in 2004 he hopes that he will get high profit from the catfish farming this year and return the total loan of VND 80 million to the banks. However, talking to us he revealed that he was very worried about any sudden price reduction like the antidumping shock in 2003 and whether it could happen again. If so, he will have to sell his house for repayment of these big debts.

It was estimated by the Farmer’s Association in An Giang province that about 1,500 labourers lost their job due to the reduction of 875 rafts and 226 hectares of aquaculture by 2,000 households during 2003 as a results of the US antidumping policy. Most of the hired labourers had low education so they faced much more difficulty in seeking another means of earning when they lost their job. The fish raisers were also driven in difficult circumstance because it was not easy for them to change occupation in

such a fiercely competitive society. They will often suffer loss if they start a new occupation without knowledge and advantages. It takes a long time to have an occupation. They need support in terms of technology, capital, fingerlings and facilities while it is impossible for the local authority to satisfy every demand at the same time. There was a change in their way of earning. Among the farmers who had to leave change jobs, 13% households who raised fish in the rafts and 22% household who raised fish in ponds had to start another business because of their loss.

Export productivity went down fast during the period between June and August 2003. At that point, the companies’ markets came to a standstill leading to loss of employment reduction in employees’ income. Adverse consequences were borne by the employees and their families. Most of the employees, who were terminated during the antidumping “shocked” period, were single, young and unskilful ones. After leaving the factories, they came back to their families to do housework or small business. No research or study reports and statistics are available on the negative consequences to these workers, while their number was not small (about 500 workers). Most of them were young women.

Environment and natural resources

The US petition on the sanitary and environmental quality of tra and basa fish to an extent has made a positive impact on the environmental and natural assets in An Giang province. Recently, the catfish industry has showed its concerns on the environmental consequences and improved its investment on waste treatment and sanitary equipment. Food sanitation is being improved through investments in the production process in processing factories. For the time being, the factories are improving their quality to meet the strict European standards for production, microbial contamination and antibiotic residues. For example, the AFIEX company invested in buying equipment for production and for product testing.

An Giang University has conducted research on the environmental consequences of fish growing and processing. This research found that in terms of environmental impact from food residues, the food for tra and basa has a low rate of waste that does not cause environmental problems. Some tra and basa farmers often mix in their cages some other kinds of fish, namely “lan” and “ec” fish, which help reduce waste by eating unused food. Factories and some farmers have started to implement new quality control systems (in cooperation with SGS company).

However, there is still a need to improve waste management in catfish farming and processing. Waste from the factories was not completely processed before disposal, leading to some smell problems surrounding the factories. In addition to this problem, solid wastes from the fish rafts (e.g. trash and other kinds of waste) were disposed directly to the river. There is a need to improve awareness on environmental protection to avoid pollution and fish diseases.

Vulnerability

The poor have high vulnerability were the people who suffered the worst loss because there was no institution to protect them (e.g. the economic contracts and court or their association who are strong enough to negotiate or fight against the others on their behalf or social insurance scheme where their accessibility was low because of shortage of resources). Since late 2001 when the American farmers requested subsidies, and the name “catfish” was prohibited by the US, the price of fish as materials went down and fluctuated. In the unforeseen shock of the antidumping decision, the poor were most negatively impacted. Why? Since the antidumping tariff was imposed, the export enterprises included the tax in their cost price and decreased the input price (to buy materials) to avoid loss. As a result, the poor people who directly raised fish were forced to sell at loss because the enterprises were their only potential customers at that time.

The Vietnamese farmers raise fish because they can improve their earnings. They do not have access to information and knowledge about potential risk from international trade. The first question we used to interview the farmers was about their awareness on the antidumping matters. All of the interviewed people said that they did not know any thing about it until it was mentioned on the mass media and the catfish price went down. Farmers also expected that the enterprises shared difficulties with them in difficult circumstances. Many of them were not satisfied with the fact that in such situation, the poor were the main victims while the enterprises almost did not suffer the same loss. It was too late for the local people to know about the antidumping policy when the prices had dropped.

Results from the interviews showed that so far they have learnt certain information regarding the US antidumping case concerning export of tra and basa fish from Vietnam. They gained some

information through mass media, of government agencies and officials. However, they did not have deep knowledge on this trade issue as well as its harmful causes and impacts. All the farmers agreed that the US antidumping measure made the local price of local catfish go down and considered it was not fair for the US Government to do this in such a way because the farmers did not do anything harmful to the catfish farmers in the United States.

Coping with the anti-dumping tariff

For the 4 last years, and despite the anti-dumping tariff, export volumes have been increasing fast. The productivity of 2003 was 4.6 times higher than that of 2000. In 2003, the market for catfish products involved 27 countries around the world (9 times higher than the 2002). The total export volume of tra and basa fish was 23,000 tonnes. In early 2003, the US imposed the antidumping tariff for Vietnamese tra and basa (from 37 to 53%), jeopardized the catfish industry, especially the fish farmers, in Vietnam. This created great challenges to all stakeholders in Vietnam and stimulated identification of new overseas markets and promotion of domestic fish consumption in the country. As a consequence of the antidumping tariff, export to the US market accounted for only 25% (in 2002 the US market-share was 40%). During the first 6 months, the productivity gained only 39% compared with estimated. Local agencies and export companies in An Giang concentrated on seeking solutions to the market problems caused by the decision, such as development of alternative international markets and expansion of the domestic markets. As a result, the total export for the last 6 months of 2003 increased substantially, and such gains were continued into 2004. During the first 6 months of 2004, two catfish export enterprises interviewed by the study team reported unexpectedly high sales totalling VND 52 billion (USD 3.3 million).

Government policies

At the provincial level, the An Giang Provincial People's Committee, the Provincial Department of Agriculture and Rural Development, the Department of Trade, and the Fishery Association collaborated to develop new markets for catfish farmers. Local government provided assistance to its trade agencies by sending different delegations to new countries and conducting market surveys. At national level, VASEP in cooperation with the Ministry of Fisheries also invested in organizing fairs, exhibitions and international conferences to promote basa and tra to international markets, as well as domestic consumption in Vietnam.

Experiences of the antidumping case, the requirements of the strict markets such as the US on the environmental and sanitary quality of products have led the government to strengthen capacities of the research institutions, quality administration and control agencies. This has also encouraged processing and export companies to modernize their technologies in line with international standards in production, packaging and waste treatment. Accusation of the US on the non-market economy as reason for imposing the antidumping tariff to some extent has stimulated the government to accelerate the on-going economic reforms in the country. The Contra-Monopoly Law and Competition Law are being developed to create a stable and enabling legal environment for business enterprises. In 2004, five new private companies in An Giang and Dong Thap provinces are entering the catfish industry, making the sub-sector more competitive.

In early 2004, the price started increasing, partly due to avian flu stimulating domestic demand for fish. Many fish raisers were happy and said that "it is good enough with the current situation". The households raising fish in the rafts were more satisfied as they hoped that with

current price and prospects, fish farmers would soon recover and continue to gain benefits for themselves as well as for the province.

Processing and export companies

When the price of fish fell in late February 2003, the enterprises intensified procurement and production for export, taking advantage of the low prices. However, the export productivity went down fast during the period between June and August 2003. At that point, the companies' markets came to a standstill resulting in loss of employment and reduction in employees' income as described above. In response, processing and export companies adopted two important strategies - seeking alternative markets, and development of new products.

More than 50 various products were produced from tra and basa that have attracted attention of the consumers. The major products now include fillet, dried basa, underdone sliced skill, shredded and dried fish, canned fish, basa sausage, stomach, and others. With support from government agencies, processing and export companies also developed new domestic markets. The long-term strategy is to diversify products of high quality to satisfy the need of consumers in different domestic and overseas markets. Before, when the fillet was the only one product for export, the subordinate products such as bones and heads were generally disposed of. Today, along with the efforts to diversify their products, other parts of catfish such as their fat (basa in Vietnamese means "three fats") are processed or sold to other companies to produce secondary products, for example fat could be used for production of soap, bones and heads are inputs for production of livestock feed. Developing more and more final products from tra and basa fish is the overall strategy and focus of investment of the export companies. For example, Agifish Company is conducting research to produce fish-liver oil to supply the pharmaceutical companies using DHA in the fish fat.

Many new products have gained favour by consumers and elected as Vietnamese high quality products in recent competitions and exhibitions, for example the products from the Agifish company in the recent Seafood Exhibition in Ho Chi Minh city in early May 2004. On average, currently each of the on-going five companies purchases about 5,000-6,000 tonnes of materials per year from farmers. According to Mr. Tuyen, Deputy Director of Tuan Anh Company, only in An Giang by end of 2004 there will be four new factories with design capacities exporting 20,000 tonnes per year. It is anticipated that in the forthcoming years, the export companies will have to compete in buying fish from farmers as the number of cages is controlled to be lower than 3,500. Therefore, the roles of fish farmers will now actually be much more secure as the companies will have to sign buying contracts with farmers with fixed prices even before the crop. This arrangement should help farmers under the contracts and may help to protect them from impacts of international market or trade policies imposed by import countries. Companies, professional associations and public agencies will have more formal contracts in fishery production and planning to help ensure the production level as well as to promote consumption.

Civil society

A positive impact of the antidumping case was the strengthened role of the An Giang Fishery Association (AFA). The absence of purchasing contracts between the companies and farmers led to farmers having to bear negative impacts of the antidumping policy, and this provided an

important lesson for the local farmers. Thanks to the antidumping case, the role of AFA has now been strengthened to assemble the farmers, empowering them in negotiation with processing factories, facilitating their closer linkage with the factories to have better balance between the supply and demand of the factories.

The AFA also formed their own business “An Giang Fisheries Association's Joint Stock Company of Importing and Exporting Aqua-Produce (Afasco)” established in mid-October 2003 (Anon, 2004). Tran Phu Huu, company deputy director, was quoted as saying “the company's most important objective is to protect fish farmers from risks in their cultivation and sales activities. Price fluctuations on the market sometimes create difficulties for the farmers. They also do not receive timely and proper assistance from processing and export enterprises when they meet market difficulties. These problems led the fish breeders to develop a company of their own” (Anon, 2004). The aim of the company is to help local fish farmers in farming, processing and selling aquatic products, particularly tra and basa, with the company involved in production cultivation, procurement and selling.

The Fishery Association is also helping fish raisers register the accurate number and kinds of aquaculture products, and time of raising and selling. Processing enterprises need to base their businesses on the actual market situation, and planning with farmers can help respond more efficiently to market demand. There is also a need to strengthen the cooperation with government agencies, which should have more effective monitoring and coordination capacities.

Following the reduction in production after the US antidumping decision, Trade Union's also made interventions to support employees benefits (termination payment, etc.) before the companies terminated their working contracts. Thus trade unions in the companies have learned their higher responsibility for protecting employees in compliance with the Labour Code.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

In early 2003 the United States Department of Commerce imposed an antidumping tariff on the export companies exporting tra and basa fish from Vietnam to the United States. At that time, tra and basa farming and the export-processing sector were providing jobs to thousands of households in the Mekong Delta, including cage and pond aquaculture farmers, suppliers of feed and fish seed and other services, and labourers, including large numbers of women, in processing and export businesses.

In An Giang province, there were 3,178 catfish cages (structures to hold catfish on the flowing river) and several thousand ponds of total water surface of 1,560 ha. These cages and ponds provided employment for 11,058 households raising catfish either by cage or pond, producing 136,800 tonnes of tra and basa fish in that year of 2003 (111,599 tonnes in 2002). Dong Thap and other provinces in Mekong Delta also produced about half of the catfish output from An Giang province with about 5,000 households involved. Taking into account each household hired two labourers to work for fish feeding, it is estimated that about 30,000 poor landless people were working at the fish farming sub-sector and vulnerable to the US trade policy. On average, each hired labourer working on fish cages and ponds gets about VND 550,000-600,000 (US\$36-40) per month or less than US\$ 2 per day. All those workers interviewed in An Giang province

claimed they were key “money makers” and had to send money home to support their families. This factor makes us to anticipate that the US trade policy affected a much higher number of people through the family members depending on this catfish labour income.

In 2003 there also were 5,300 workers with salary income less than US\$ 2 per day in five catfish export-processing factories based in An Giang province. The number of workers in fish processing in Dong Thap, Vinh Long and other Mekong Delta provinces is about 3,000. The US trade policy was affecting not only these 8,000 factory workers, but also thousands of people who indirectly provided services (in finance and credit organizations, fish feed sellers, veterinary services, storing and transportations) to the catfish industry.

This study has found that the catfish farming households, their hired labourers and the workers at the processing factories were most vulnerable and suffered impacts as a result of the US antidumping decision. The study shows negative impacts to livelihoods in terms of financial, social, human and physical assets. The most obvious impacts are the reduction in physical, human and financial assets, reflecting the decline in the local market price, the stagnation in production in farming households and reduction in processing of fillet products at export companies, the loss of employment among catfish farm labourers and workers at processing/export enterprises, and the consequent bankruptcy of small farming households. Behind the scenes is damage to social capital when individual and organizational trusts are broken, and impacts on environmental and natural resources when the enforcement of environmental regulations were neglected during the enterprises economic loss.

The antidumping tariff reduced the price of selling basa at the ponds and rafts from VND 14,000 to even lower than its production cost of VND 7,000. Catfish farmers at that stage faced serious difficulties with their finances as they had to continue feeding the fish and hiring the labourers, but could not sell out their fish. All the interviewed households had to release hired labourers to reduce their recurrent cost. Some households (20% of the interviewed households) reported having to sell property (vehicles, houses, rafts) to repay bank loans. It is estimated that only in An Giang catfish raisers lost more than VND 200 billion (US\$ 12 million) from the reduction in farm-gate price. Taking into account this province produces half of the total production of catfish in Vietnam, it is estimated the antidumping policy has caused an economic loss of US\$ 24 million to the catfish farming households in Vietnam.

In terms of employment, the available secondary information from government agencies in An Giang province shows that 13% households raising fish in cages and 22% households raising fish in ponds ceased farming - equivalent to nearly 4,000 households. With a minimum of two persons working for each pond or cage household, then 8,000 people lost their jobs in catfish farming and had to seek alternative employment. After catfish farming these households may have changed their ponds to another type of fish farming or continued in rice agriculture. However, the poorer groups of hired labourers, who did not have any piece of land or pond, had the most difficulties. To reduce the recurrent cost of fish production, fish farming households released their hired labourers and carried out fish farming by themselves. As a result, the poorest group of people, who rely on very low cash income and meals served by their employers, became jobless. They had to borrow money from family members to survive till they could find a new job opportunity, which was not easy to find in the rural areas. No statistics are available by the local agencies on how deep the social impacts were to labourers who lost their jobs.

The same problems occurred with the 10% or 500 workers who were sacked from the export-processing enterprises in An Giang province. As they were immigrants from rural areas, they had to return to their agricultural activities or live on their savings till they could find a new job in the city. Due to the limitation of our time and resources, we have not been able to interview these workers to estimate the social impacts of the trade policy. However, it is visible through our interviews with the management staff of the processing enterprises that even when the production capacity of the enterprises reduced by 75% their export productivity right after the declaration of the US antidumping policy, the companies did not suffer any noticeable loss. They eventually reduced their purchasing price with the farmers, since there was no contractual basis among the processing factories and the farmers on the fish purchasing price. They also took the initiative in terminating labour contracts with many workers to reduce production cost.

To save the catfish industry, processing factories, local government agencies and civil society organizations discussed coping strategies and decided to promote the domestic consumption of these kinds of fish, at the same time to invest in marketing campaigns for other potential markets through international fairs and exhibitions. This decision on the coping policy was responsive and effective in assisting stakeholders and poor people to overcome the “shock” from the US trade policy.

However, there were many immediate negative impacts that poor farmers and workers had to suffer as mentioned earlier due to the absence of protection policies to fish farming households and their hired labourers. It was also a valuable lesson for the supporting institutions such as the Fisheries Association and the Provincial Department of Agriculture and Rural Development in helping the farmers in negotiation with the private sector. They have now become more active in helping to organise catfish farming households and empowering the farmers in negotiations and fixing trade contracts with export and processing enterprises. Farmers also lacked information on the US decision, and need better access to information on trade issues so that they could foresee and make better decisions with their businesses and production levels.

By late 2003 and the first quarter of 2004, the tra and basa fish price had recovered to the highest level prior to the antidumping case. Fish farmers who survive the “shock” in 2003 are happy to invest in new cages and ponds to recover their losses during last year. Five new processing export enterprises have entered the industry and another five new processing factories of existing enterprises will start operation by the end of 2004. The Vietnamese catfish industry has not only sustained but also has developed further after suffering the effect of the US antidumping policy. Thanks being accused in the case about environmental and sanitary conditions in Vietnam, and the need for a competitive market economy, local stakeholders have learnt many requirements of the international markets and conditions for trade liberalization. Various economic reform initiatives have been undertaken to support Vietnam’s joining of the WTO and promoting competitiveness of Vietnamese products. Enterprises after the case have focused more on their product quality and invested in modern technologies for fulfilment of international standards.

Recommendations

1. The study shows the vulnerability of poor people arising from a US antidumping decision. The case provides an important lesson to local stakeholders in terms of social security needed for economic globalisation. Poor people were most severely affected by the case since they were not sufficiently protected, by contract or social security policies, or by civil society

organisations that could protect for their rights and interest. Therefore, besides developing economic institutions for poor farmers and workers, local agencies should provide them with sufficient social insurance policies and strengthen the roles of the civil society, not only at the provincial level, but also at the grassroots level. Farmers associations in particular should be more actively involved at the commune level, to facilitate cooperation among individual households and empower them in negotiating with fish traders and export companies. Contracts among the farmers and the export enterprises should be developed to ensure buyer commitments on prices.

2. Other developing countries should learn from these Vietnam cases about the need for a proper coping strategy to overcome any difficulties in the process of trade liberalization. For the Vietnamese catfish, a crucial factor for a successful coping strategy was close cooperation among the direct and indirect stakeholders along the export chain. Local government agencies played an important role; they provided support to export enterprises for expanding domestic markets and seeking alternative foreign markets; the Department of Trade was particularly active in development of markets, conducting market surveys, and organizing and participating in workshops to introduce tra and basa products to consumers; the Department of Agriculture and Rural Development were assisted farmers in planning production, provided technical support, as well as fingerlings and veterinary services to fish farmers; other Provincial Departments and national agencies such as VASEP also assisted in various ways in market promotion and support to farmers.
3. The catfish case emphasises the need for local agencies and professional organizations to pay more attention to the aquaculture industry, especially with urgent preparations for the entrance to WTO underway, including issues related to the privilege of customs tax. Fish farmers also need better support in terms of loan, techniques, sufficient quality fingerlings and information on the markets to ensure the comparative advantages of aquaculture and bring about benefits for the country.
4. Policies relating to poverty reduction attract the attention of the country but also of the international community. Policies for trade competition and protection for the poor involved with international trade should be harmonized through cooperation among developing and developed countries. Under the current globalization, developing countries are impacted by trade barriers and trade risks. Trade liberalization policies therefore need to pay proper attention to poorer stakeholders. In addition to the poverty reduction efforts made by every country, there should be better cooperation in foreign-trade negotiations to avoid loss for poorer stakeholders. WTO should also take responsibility for and be involved in this issue.
5. There is a need to improve the information flows to aquaculture stakeholders in general and on trade liberalization issues in particular. This cannot also be a one-way process, because as primary stakeholders, exporting producers and businesses have a right to take part directly and indirectly in discussions on the scope and direction of trade arrangements at international and national levels; their opinions should be sought more vigorously at every stage.

PART 3: SHRIMP³

INTRODUCTION

Part 2 of the Vietnam case study analyses the situation and impact of the US antidumping case on stakeholders involved in catfish (tra and basa) production, processing and export system in Vietnam. This provides a more detailed analysis of the effects of the catfish antidumping case on stakeholders in the Mekong delta of Vietnam. Part 2 summarises ongoing work on the shrimp farming industry in Vietnam. This analysis brings together present understanding of the shrimp industry, poorer stakeholders and trade. This is timely research as Vietnam's seafood industry is currently facing a fresh round of dumping accusations from the United States, and its shrimp exports are under investigation.

A preliminary decision was made in July 2004, just after completion of this case study. The United States International Trade Commission (ITC) determined that there is a reasonable indication that a U.S. industry is materially injured or threatened with injury due to the import of certain shrimp products from Brazil, China, Ecuador, India, Thailand, and Vietnam. The proposed tariffs range from 12 to 93 percent on Vietnamese exports.

The research reported in the shrimp paper is also co-funded under an ongoing research project of NACA entitled "International Seafood Trade: Supporting Sustainable Livelihoods Among Poor Aquatic Resource Users in Asia (EP/R03/014)" that runs from October 2003 until March 2005 with support from the European Community's Poverty Reduction Effectiveness Programme (EC-PREP). This complementary case study on shrimp provides an overview of the following:

- Review of the present status of shrimp farming and trade liberalization in Vietnam, trends and its importance to the economy.
- Analysis of the stakeholders involved, including poor stakeholders.
- Key issues related to shrimp trade liberalization mainly in Vietnam focussing on market issues in general and anti-dumping measures.
- Implications of shrimp trade liberalization measures for livelihoods issues, analysed from a micro- and macro-level perspective.

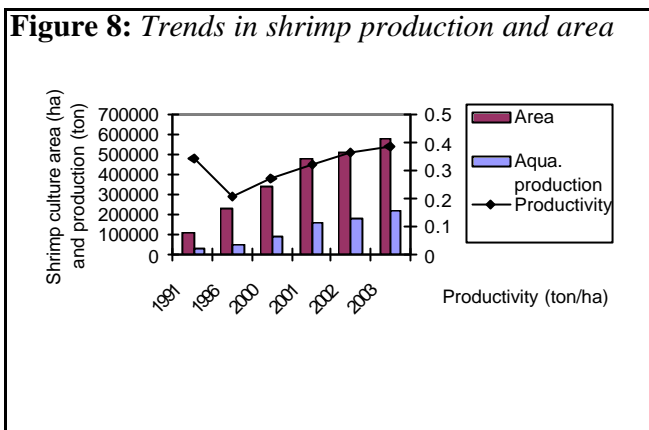
SHRIMP AQUACULTURE AND TRADE LIBERALIZATION IN VIETNAM

Shrimp culture appeared in Vietnam approximately 100 years ago, but grew most strongly during the 1990's supported by development of technology for artificial shrimp seed production and farming, increasing international market demand, trade liberalization supported through implementation of the Government policy for economic reform – *doimoi* - and an increasingly favourable government policy. Much government attention has been placed on shrimp farming, which now makes a substantial contribution to export values for the country.

³ This shrimp paper was drafted by Michael Phillips, including also material developed with collaborators involved with the EC-PREP project EP/R03/014.

Brackishwater aquaculture in Viet Nam is dominated by shrimp farming, although crabs, mollusks, and brackishwater fish are also cultured in extensive traditional ponds from the north to south of the country. Extensive, traditional forms of shrimp culture, have existing for some time, but there was a significant expansion in 1990s and early 2000's. Perhaps the most spectacular increase in shrimp farming area followed the government policy change allowing farmers to convert unproductive rice fields, uncultivated areas and salt pans into aquaculture ponds. The area for shrimp culture jumped increased from 250,000 ha in 2000 to 478,000 ha in 2001, largely in the Mekong delta.

Although the growth rate slowed down, during 2002-2003, the area of shrimp culture in Viet Nam still continues to increase and at the end of 2003 there were an estimated 550,000ha of land used for shrimp culture. Currently Viet Nam is among the world's largest shrimp farming nations in terms of area cultured. Figure 7 shows the trends in production, yields and area, having barely increased since the early 1990's.



Yields continue to be low by Asia regional standards, and indicate considerable scope for improved efficiency of use of land and better farming practices

The shrimp main species cultured in Viet Nam is *Penaeus monodon*, with *P. merguensis*, *P. orientalis* and *Metapenaeus ensis* also founds, particularly on extensive farms. *P. monodon* is the most important in terms of production. The white shrimp (*P. vannamei*) was introduced in 2000, but production is confined to a few intensive commercial farms and is overall still low. An extensive network of over 5,000 small-scale hatcheries supports shrimp farming, in 2003 producing around 25 billion shrimp PLs. These hatcheries are concentrated in the Central Southern provinces. However, quality and shrimp disease are major problems. Currently, Mekong delta and Northern provinces are trying to produce shrimp seed by themselves to meet local demand and minimize the risks of spreading shrimp diseases and improving quality. Shrimp farming is also supported by feed and chemical suppliers, makes the major contribution of shrimp for export and is a major employer in coastal areas of Vietnam, but particularly in the Mekong delta. The expansion of shrimp farming has been increasingly controversial, contributing to loss of mangrove forests, degraded water quality, social problems, and significant risks associated with shrimp disease (EJF, 2003, Tran Van Nhung et al, 2004).

Policy for shrimp aquaculture

The Vietnamese Government has been increasingly supportive of aquaculture development, recognising the sector as an important means of rural development and export earnings. Aquaculture in general and shrimp culture in particular is considered to have made important contributions to the development as well as poverty reduction and hunger eradication in Vietnam. In general, the government policies have led to substantial improvements in shrimp production, and export (Table 1). The guidelines and policies for aquaculture have also been harmonized with social and economic development targets and environment protection, with the aim of maintaining a sustainable and high growth rate. However, implementation of these

policies has faced several drawbacks. According to the Institute of Fisheries Economics and Planning, “the enforcement of policies for aquaculture development in last time was inclined to focus on economic growth and social stability without concerning fully about the sustainability” (Thong, 2003). The translation of policies into practical and sustainable development in the shrimp aquaculture sector remains as a considerable challenge.

Table 8: The shrimp export value of Vietnam.

	2000	2001	2002	2003
Shrimp export value (million US\$)	662	780	940	1.059
Fisheries export value(million US\$)	1.479	1.760	2.014	2.240
The total value of export	14.483	15.027	16.100	
% shrimp export /fisheries export	45	44	47	47

(Source: Ministry of Fisheries, 2002-2004)

Shrimp trade liberalization

Vietnam’s fisheries exports have expanded significantly in recent years. In the last decade, the Vietnamese growth rate of fisheries export averages 20% per year (Nguyen Cong Sach, 2003). The value of shrimp export, largely derived from aquaculture, accounts for a high proportion of the total value of Vietnam’s fisheries export. Vietnam’s fisheries exports reached US\$2.24 billion in 2003, of which shrimp represented over US\$1 billion (Table 8). In 2004, the value of shrimp export continued to increase, and the target for fisheries exports is US\$3 billion in 2005. Vietnamese shrimps are exported in various forms, including block frozen, canned and processed products. Block frozen make up the bulk of exports, although there is a trend towards investments in further value addition within Vietnam and product development. Capacity and skills for value-added product development are increasing, as the country is viewed favourably for investment in seafood processing.

Important export markets of Vietnam’s shrimp are Japan, US, China and the European Union. Before 2001, Japan was the number-one market for Vietnamese fisheries, but the volume and value of exports to the US market has increased. The share of Vietnamese fisheries export in Japan has increased after 2002 and now Vietnam is second in export value and volume after Indonesia. Fisheries exports to the US climbed sharply after the signing of Vietnam-US Bilateral Trade Agreement. In 2002, the America market accounted for 36.25 % fisheries export value (an increase of 30.42%). Vietnam’s frozen shrimp export to the US is ranked the 2nd position behind Thailand. China and South Korea are also potential markets for Vietnamese fisheries exporters. In 2003, the Chinese market share was 7% in value, a fall of 55% due to SARS and apparently price competition. EU is a large fisheries import market but the Vietnam’s share remained modest. Vietnamese exporters are nervous about the risks associated with the EU market, following rejection of shrimp during 2002 and 2003, due to antibiotic contamination. However, the export value to European market in 2003 increased by 60% in comparison with the number in 2002 (Ministry of Fisheries, 2003). In addition to the goal of export, farmed shrimps are also consumed in domestic markets, mainly in large cities like Hanoi, Ho Chi Minh, Hai Phong, Da Nang, Hue, but in small volume. Major products in the domestic market are fresh and boiled shrimp. Table 8 gives the fisheries export market share.

Table 2: Destination of seafood exports (by value)

Country	1997	2000	2001	2002	2003
Japan	50	33	26	27	26
USA	5	21	28	32	38
EU	10	7	6	4	6
China	14	20	18	15	7
Others	21	19	22	22	23

(Source: Annual report of fisheries sector, Ministry of Fisheries, 2002-2003)

Along with this trade liberalization have come a number of market-related challenges. These include a declining farm-gate price for shrimp, increasing emphasis on food safety and quality in major markets, driven particularly by the concerns of the EU following findings of banned antibiotics in shrimp exports to Europe, increasing interest in certification and trace-ability, growing awareness of social and environmental issues in importing markets, vertical integration, and last but not least the threat of further anti-dumping measures against Vietnamese shrimp, the latter being the most significant at the present time. Risks from the anti-dumping case are particularly significant given the increasing exposure of the Vietnamese industry to the US market.

Environmental and social issues

The rapid development of Vietnam's shrimp farming has already caused significant coastal environmental problems, including contributing to the loss of important natural assets such as mangrove forests. Before 1943, estimates suggest mangrove forests covered around 400,000 hectares. Due to the highly increasing rate of coastal population and wars, clearance for planting rice, exploiting firewood, the coverage of forest in general and of mangrove forest in particular decreased significantly. According to the estimates (Phan Nguyen Hong and Hoang Thi San, 1993), by the year 1983, the coverage of forest in Vietnam, including 46,600 hectares of planted forest remained 252,500 hectares, mostly concentrated in the Mekong River Delta (191,800). The Asian Development Bank (ADB, 2000) estimated that there were only about 110,000 hectares of mangrove forest left in Vietnam. Coastal shrimp farming has contributed to these losses. Although there are now increasing efforts to replant and rehabilitate coastal mangrove areas, the management of coastal wetlands represents a major challenge.

Together with the degradation of mangroves forest, there are other environmental problems arising from rapid shrimp farming development. These include water pollution in some more intensive shrimp farming areas, impacts on fresh groundwater supplies in areas with sandy soil, and serious shrimp disease outbreaks, largely related to shrimp viruses. With environmental issues receiving increasing attention in major importing markets, and world trade generally, these problems will need to be addressed if the sector is to develop in a sustainable manner.

Role of shrimp aquaculture and poverty in Vietnam

According to various figures, substantial numbers of people live in Vietnam's coastal areas, of which 80% are reported to be directly or indirectly involved with fisheries (DFID, 2001). The Ministry of Fisheries estimates give four million of population living in or near tidal areas, and about a million of people living in coastal lagoon areas, however, exact figures are uncertain. Problems of high population density, rapid population growth rate, and low education, underdeveloped infrastructures and scarcity of opportunity for economic development have led

to unemployment and excess of labor in coastal areas. Coastal aquaculture represents one of the few alternatives. According to Ministry of Fisheries figures, about one million fishermen earning their living by inshore fishing have gradually shifted to aquaculture due to declining fisheries resources. In addition, a number of people whose livelihoods depended on agricultural farming, and low-productivity salt production have turned to aquaculture, encouraged by government policies. The result of favourable policies for shrimp development in Vietnam are social and economic benefits, seen in jobs generated, and income created in coastal communities, improved local infrastructure and growth in foreign exchange earnings for the country (Oxfam, 1999).

The patterns of development in shrimp farming are changing though. The first shrimp farming activities in most coastal areas were extensive, embanking water areas with minimal investment in labor and management. This method of farming (although contributing to losses of mangroves) appears to have made a positive contribution to poverty reduction, with minimal risk. The SAPA workshop proceedings (SAPA, 2000) notes several examples. In Bang La commune located in Do Son district, Hai Phong province for example, a poor village living mainly by producing salt with an income of VND 1.2 million per year, such extensive shrimp farming successfully improved the living standard and reduced poverty among coastal households. However, since 2000 the sector has been “industrialising”, in line with government policy. At this stage, it is becoming more difficult for the poor to be involved directly in shrimp farming, due to the assets required. One important reason is the high land price in shrimp farming areas. A further reason is that intensive and semi-intensive farming requires more financial assets and skills making it more difficult and risky for poor people with limited assets. There are therefore reports of increasing inequity with shrimp farm development in coastal areas (Oxfam, 2001). Although development of shrimp farming in Vietnam has not led to severe social conflicts and human right abuse as seen in some other countries (Environmental Justice Foundation, 2002), probably because it has been based largely on implementation of the “household economy” concept, there is clearly an increasing need to address the social aspects of shrimp farm development as the sector intensifies and continues its integration with the global economy.

ANALYSIS OF STAKEHOLDERS IN SHRIMP FARMING AND TRADE

Market chain

The shrimp industry in Vietnam is dominated by small-scale producers and involves substantial numbers of poor people. The market chain involves considerable numbers of people, involved directly or indirectly with shrimp production and trade. The following description of the market chain and major stakeholders involved is based on information collected from secondary sources in the five coastal provinces of Thua Thien Hue, Nghe An, Thanh Hoa, Ca Mau and Quang Tri⁴.

⁴ These data were collected during two workshops held in Vietnam during March and May 2004, involving staff from NACA, RIA-1, Provincial Department of Fisheries, VASEP and the Ministry of Fisheries

Stakeholder group	Description
Shrimp broodstock collectors	Fishermen collect shrimp broodstock from the wild, with both small-scale and larger-scale fishermen involved. In Quang Tri, small-scale fishers using non-mechanised boats are involved as shrimp broodstock are available close to the shore. Fishermen sell broodstock shrimp to shrimp hatchery operators, sometimes directly and sometimes through middlemen/traders. The market chain for broodstock is complex, and may also involve imports.
Shrimp hatchery and nursery operators	Some shrimp hatcheries (and nurseries) produce post-larvae for stocking in shrimp ponds. Larger hatcheries employ poor labourers and technicians, others (the majority) are small-scale family run operations based on household labour.
Shrimp fry traders	Vietnam has an extensive shrimp fry trading network that transports shrimp post-larvae widely through the country from major shrimp hatchery areas. Shrimp may be transported at various sizes from nauplii to post-larvae. Complex trading networks complicate efforts to establish effective quality control systems for shrimp post-larvae. Trade may also involve imports from other countries (including China, but also others)
Shrimp farmers	Shrimp farms range from small-scale household managed ponds with limited investment to larger more “industrial” scale farms. Small-scale farms dominate numbers. People involved directly in farming include farmers and their households, farm labourers and technicians (larger farms only). Women are also involved, particularly on household farms.
Service sector	Other stakeholders include people in the rapidly expanding services sector (supply of medicines, feeds, extension and credit) including private, semi-government and government services.
Middlemen/traders	There is an extensive network of traders involved in purchasing and trading in shrimp post-harvest. In the north (Nghe An, Thanh Hoa) and Thua Thien Hue traders will move shrimp from farmers to processing plant in other provinces (local processing not available, due to lack of facilities or insufficient product). Traders may often extend credit to farmers so that farmers have to sell their shrimp to them.
Processing plants/exporters	Processing involves chilling, processing, packaging, storage of shrimp prior to export. There are significant numbers of women workers involved in processing. Other stakeholders in the processing plant and trading network include service providers (ice producers), people processing waste product (shrimp heads), and administrative or quality control services. NAFIQAVED has government responsibility for quality certification for export.
Export shipment	Transport/shippers moving shrimp to importing markets

This preliminary market chain analysis shows the range of people involved, both in terms of employment and livelihoods. It is interesting also to note the considerable geographic distances involved along Vietnams 3,200 km coastline. Inputs to farming – seed and feed – may move from the south to north, and in some cases also involve imported products. Shrimp feed may be imported, or include ingredients coming from other countries. Due to the shortage of quality fish meal in Vietnam, fish meal is imported from elsewhere, including Asia and southern America (Edwards, 2004). Thus stakeholders involved at various levels are subject to significant global influences.

Poverty situation in the market chain

Some preliminary analysis has been carried out on the status of people involved in the market chains for farmed shrimp in Vietnam. This analysis is far from complete, but the following table summarizes our current knowledge, based on experiences with consultation in the five provinces mentioned above, and more detailed discussions with farming communities around Tam Giang lagoon in Thua Thien Hue. Classification of poverty status of people involved in the shrimp trade has not been easy, and more work is required on this aspect. Some preliminary classifications are used here (condensing the outline provided in the Bangladesh case); 1 for extremely poor or poor, 2 for intermediate status; and 3 not poor. These categories are largely based on the land ownership, qualitative assessments of well-being made by local people themselves during discussions, and monthly income (using combinations of government/World Bank criteria).

Classification of shrimp farmers is particularly difficult. As some assets are required (land particularly) to engage in shrimp farming few farmers could be classified as extremely poor. However, poor farmers have entered shrimp farming, particularly for extensive farming, including under special government schemes. There are also farmers that have improved their wealth status by shifting from agriculture to shrimp aquaculture, as there are farmers that have become more poor when exposed to the risks of shrimp aquaculture. The table below therefore provides a preliminary classification of the different shrimp farmer stakeholders along with the other stakeholders involved in the market chain. Further research is ongoing on this aspect.

At this stage, it is not possible to identify the numbers of people involved, but the numbers of poor people are substantial in some coastal areas, particularly in the Mekong delta provinces where the bulk of the countries shrimp production comes from.

Stakeholders	Status	Assets (and vulnerabilities)
Shrimp broodstock collectors	2,3	Mostly richer or above average individuals with assets (mechanised boats) but also includes some small-scale inshore fishermen without mechanised boats (as in Quang Tri province)
Shrimp hatchery owners	2,3	Shrimp hatchery owners tends to have financial assets to build and operate hatchery tanks and other facilities. Some are small-scale family run operations based on household labour.
Shrimp hatchery labourers	1	Poorer labourers, including migrant labour in Thua Thien Hue. Limited skills. May be employed part time, depending on seasonal production cycles (less employment opportunities in the northern-central coastal areas)
Shrimp hatchery technicians	2,3	Some knowledge and skills in shrimp aquaculture. Reasonable salary, including sometimes share of income generated from shrimp hatchery
Shrimp fry traders	2,3	No poor people involved.
Shrimp nursery operators	1,2,3	Includes some poor people with limited assets with access to small ponds for shrimp nursing in Thua Thien Hue
Shrimp farmers – extensive, with limited or no investment	1,2,3	Includes poorer farmers with limited assets. May be involved through cooperation/equity with wealthier farmers in large extensive ponds Does not include extreme poor, except as labourers. Some large coastal ponds operated by wealthy individuals or groups of households with good political/social capital.
Shrimp farmers – extensive/improved	2,3	Generally, intermediate group with some access to investment

extensive farming, with some investment		in inputs required
Shrimp farmers – semi-intensive, intensive, investors	2, 3	Wealthier individuals with access to investment in inputs required for intensive farming
Labourers	1	Includes extreme poor and poor with limited assets, including women, sometimes landless, employed either on an occasional or seasonal basis
Service providers	2,3	Includes people in the growing services sector (supply of medicines, feeds, extension and credit). Two types – “first grade” - those who are direct agent of feed and chemical companies and “second grade” – those who purchase or take on credit and sell inputs provided by the “first grade”. Includes business, semi-government operations, and government services (eg disease control, diagnostic services, PCR etc)
“Affected” stakeholders	1,2	Includes extreme poor whose livelihoods are influenced by shrimp pond expansion (such as people dependant on mangroves, agriculture)
Ex-shrimp farmers	1	Poor people (men and women) who have invested in shrimp farming, were unsuccessful and had to sell land due to debt (mainly arising from disease losses)
Middlemen/traders	2,3	Mainly better off private and public sector individuals with financial assets, including traders who may also extend credit to farmers so that farmers have to sell their shrimp to them. Traders considered in Thua Thien Hue as the highest income local stakeholders [in this province traders may employ workers, but these are usually relatives]
Processing plant workers – women	1	Poor women, sometimes migrant workers from rural areas. Includes landless.
Processing plant – men	1	Poor men, sometimes migrant workers from rural areas. Includes landless.
Ice producer/vendor	2	No details
Processing plant owners	3	State enterprises and wealthy individuals
Export shipment	3	State enterprises and wealthy individuals

Stakeholder trends

There are some fast moving trends among stakeholder groups in coastal Vietnam. An important stakeholder group in the Mekong delta are the agriculture farmers that have converted their rice-based farms to shrimp, under government policies to diversify agricultural production. This group involves several tens of thousands of farmers. In the past 3 years, the government has encouraged investment in the shrimp sector from private business. This is partly in response to the lack of investment capital available from local farmers, and the government. This is leading to larger business investments in larger farms. There has been a trend, noted in Tra Vinh and Ca Mau for example towards the most vulnerable small-scale farmers moving out of shrimp farming. Oxfam studies in Tra Vinh province in southern Vietnam show that some vulnerable groups had to sell land and become labourers to better of shrimp farmers. There is an ongoing social change in coastal areas of Vietnam that requires significant attention. Although this is recognised by government, being acknowledged as a concern by Ministry of Fisheries officials, including the Minister Dr Ngoc himself, putting in place policies and institutions to address such concerns remains a challenge.

Vulnerability and influence

So far, the studies have focussed on the shrimp farming part of the market chain, with further work to do on other stakeholders, particularly women and men involved in processing and post-harvest. The vulnerabilities for people involved in the shrimp farm market chain, including both market and non-market related factors. The associated box shows some of the vulnerabilities expressed by shrimp farmers during focus group discussions Phu Da and Phu Xuyen communes in Thua Thien Hue province (STREAM/NACA/FAO/MOFL, 2004). The vulnerabilities mentioned by this group of shrimp farmers include factors related to market, and other factors related to farming practices (crowded farming areas, lack of water treatment), and others related to external environmental factors, financial assets, services and others. The vulnerabilities of the other stakeholders in the market chain remain to be investigated. It is expected that vulnerabilities described for the workers in the processing factories involved with catfish will be similar to shrimp.

Box 4: Vulnerabilities as expressed by shrimp farmers in Phu Da and Phu Xuyen commune, Thua Thien Hue province:

- *Water quality problems from wastewater discharge*
- *Shrimp disease – red tail, white spot, yellow head*
- *Market price fluctuation (no price support policies)*
- *Increasing concern with regards to environment, as there is no water treatment system.*
- *Wastewater is discharged directly to canals, leading to water quality problems and mixing of farm effluent and water supplies*

An interesting issue in some coastal areas in Vietnam is the change in assets, vulnerabilities and influences on people’s livelihoods shifting from traditional coastal activities (agriculture, salt making, fishing) to shrimp aquaculture. This includes agricultural farmers who have shifted to shrimp aquaculture, facing a different kind of skill requirements and vulnerabilities.

There are also a number of factors influencing the livelihoods and vulnerabilities of shrimp farmers in the market chain. From focus group discussions in Thua Thien Hue the box below shows several factors influencing livelihoods of shrimp farmers, with market and non-market factors.

Box 5: “Influences” on livelihood assets and vulnerabilities as expressed by shrimp farmers in Phu Da and Phu Xuyen commune, Thua Thien Hue province:

- *Market price fluctuation, general decline in prices*
- *Fixed prices offered by shrimp buyers (coming from Danang) – farmers cannot influence price*
- *Access to investment and credit*
- *Government policies – land, credit, taxes*
- *Access to supporting services (district extension)*
- *Environmental deterioration*

An interesting feature of the consultations with farmers in the above provinces is the little, if any, awareness of international market trends, for example residues and food safety concerns. Surprisingly, despite the international attention and debate on such issues these concerns have mostly not been communicated to farmers. This raises issues noted in the catfish studies of poor communication networks to the farm level, and need to improve the institutional arrangements for supporting farmers.

KEY TRADE ISSUES AND LIVELIHOOD IMPLICATIONS OF SHRIMP TRADE

The shrimp farming sector in Vietnam is being influenced by several macro-level market-related trends. The farmer consultations mentioned above and two workshops involving stakeholders from MoF, Provincial Department of Fisheries, VASEP, STREAM and Vietnamese researchers raise the following major market issues affecting the shrimp trade in Vietnam:

- Trends towards lower farm gate prices
- Increasingly stringent food safety and quality standards
- Certification and trace-ability
- Importing country awareness of social and environmental issues in shrimp farming.
- Vertical integration in the shrimp industry to control costs and risks
- US Anti-dumping case, probably the most pressing and significant issue at the time of writing this summary report.

The following provides a preliminary analysis of these trends, bring together current understanding of the implications of these trends for livelihoods of the stakeholders involved, and particularly the poorer stakeholders. The information presented here comes from several sources in Vietnam, including recent workshops referred to earlier.

Market price trends

Globally, the farm gate prices of shrimp have shown a steady decline in recent years, most significantly in the past 3 years. This is in response to the increased global supplies, expansion of *Penaeus vannamei* farming in Asia (China and Thailand in particular) and recently due to some uncertainties in the global market related to the US shrimp anti-dumping case. This has significant implications for the return on investment by farmers. The trend will require increasing attention to production efficiency, influencing the development of farming systems and intensification. Already, there are indications of a price decline due to the US antidumping decision. Farmers interviewed by the author recently in the Mekong delta report a decrease from May to July of 10-15% compared to 2003. In August 2004, processors consulted in Ca Mau in the Mekong delta are passing the anticipated 10-15% minimum taxes onto farmer purchase prices.

Implications for livelihoods of poor:

The reduction in farm-gate price is already well recognised by farmers as a significant influence on their livelihoods. Lack of ability to negotiate prices with buyers and prices fixed with credit suppliers create additional vulnerability for farmers. The influence is most significant for indebted poorer farmers, reduces the capacity of indebted farmers to pay off existing debts (which are significant among some coastal shrimp farming communities), and will inevitably increase the likelihood of poorer farmers having to leave the industry. Poorer farmers tend to be at most risk from disease problems, due to limited skills, and ability to purchase quality inputs, compounding the risk. Small-producers also lack the ability individually to reduce input costs because of small volumes of purchase, and credit-relationships with input suppliers. As in the case of catfish, wealthier farmers may reduce expenditure on labour to reduce costs.

Combined with the potentially increased investment in food safety and quality control systems, as discussed below, the price trend can be expected to have increasing implications for competitiveness of small-scale farmers. One option to address this concern is to explore economies of scale and efficiencies in the small-scale farming sector through working together, probably through more organised cooperation or self-help groups of farmers.

Food safety and quality

A major challenge faced by Vietnamese fisheries in relation to market access, especially to markets in the EU, followed by the United States and Japan, concerns food safety. Vietnam has made good progress in implementing HACCP systems. However, internationally, there is also an increasing trend to application of HACCP at the *farm level* to reduce risks of contamination in the production process, particularly antibiotic residues. This raises significant challenges for all in the shrimp sector in Vietnam, but perhaps most to the many thousands of small-scale producers involved.

Implications for livelihoods of poor:

While implementation of effective SPS measures in the shrimp sector will enable the country to remain competitive on international markets, the implications for poor stakeholders could be significant, particularly among farm households. The implementation of HACCP and food safety management at farm level requires knowledge and skills and investment in infrastructure and extension. Poorest producers – due to limited human, social, financial assets - are likely to find it most difficult. The need to assure the quality of inputs and trace-ability and verification procedures may also make it difficult for anything but the most organised input suppliers (feed and seed) to comply again putting at risk substantial numbers of people, for example in the shrimp seed business.

Certification and eco-labeling

Certification of shrimp aquaculture products is slowly coming to the international scene, partly in response to food safety concerns, but more generally in response to consumer and NGO concerns sustainability of shrimp farming. Certification is a relatively new concept for Vietnamese fisheries in general. At present, the Vietnamese government is pilot testing some certification procedures for food safety of shrimp aquaculture products from farms operating “Good aquaculture practice (GAP)”, based on experiences with the Code of Conduct and GAP programs from Thailand. The intention is to establish a wide coverage of a basic GAP program, with certification of shrimp product from certified farms by NAFIQAVED, the Government designated responsibility for seafood certification. There is also a pilot organic shrimp certification scheme in southern Vietnam, with shrimp certified by the organic certifier “Naturland”. The scheme offers a 20% market price premium to farmers, with shrimp exported to Germany and Switzerland. Farmers and the State Enterprise in the Mekong delta involved in the scheme commented recently at a public meeting in Ho Chi Minh city (Organic aquaculture conference, organized by INFOFISH) that they would like to simplify the certification procedures, and be able to adapt the standards to allow for more intensive aquaculture (the system is confined to extensive farms, with limited stocking and no feeding, hence limited financial return to farmers).

Implications for livelihoods of poor:

A certification system will require substantial investments in farmer organisation, support to implementing certification standards and a certification systems. Again, substantial knowledge and skills, financial assets, and access to institutions and services to support the certification scheme will be required. It is inevitable that poorer farmers will find it most difficult to participate in such schemes, unless substantial focussed support on the small-scale sector is provided. Certification is a substantial challenge in Vietnam where there are many thousands of farmers involved.

Environmental and social awareness in importing countries

Although food safety is probably the most significant issue influencing shrimp imports at the present time, there is evidence of increasing awareness of the environmental and social issues in importing countries and regions. Following a major campaign by the EJF, UK supermarkets for example have been exploring accessing shrimp produced and processed in “socially responsible” ways. In the US, NGOs are increasingly targeting consumers with campaigns about the environmental and social implications of seafood. This appears to be slowly driving the industry towards certification, and industry assurance systems that address social and environmental issues.

Implications for livelihoods of poor:

Provided effective institutions can support better environmental management, there would be benefits to coastal people in Vietnam because of its small-scale sector base. However, costs of putting place certification systems based around this concept may make it difficult. At the processing plant level, policies and support services that reduce the vulnerability of poor women and men may be positive, although with potential increased costs. Again, the least organised groups and individual farmers will find it most difficult to organise and implement systems.

Vertical integration, business structures, risk management

In response to changes in the international trading environment for seafood, there is increasing vertical integration, with companies attempting to control costs through the seafood production and marketing system, and control risks. Processors in Ca Mau interviewed by the author in August 2004 were concerned to control risks by closer cooperation with farmers, suggesting investment in contract farming as one possible way to assure quality and trace-ability.

Implications for livelihoods of poor:

Poorly organised small-scale farmers are most likely to be affected and difficult to adjust. Market trends may accentuate the negative effects on small-scale poorer farmers of price declines and investments in food safety systems. Better organization among farmers, such as through self-help groups, marketing arrangements and institutional structures that support organizations of small farmers (eg as seen in the catfish study) are required.

US Antidumping case

Vietnam now faces a new anti-dumping threat that may have a major impact on stakeholders involved in the shrimp industry. This is the claim made by US Gulf of Mexico shrimp fishermen and farmers that a number of developing countries are dumping farmed shrimp in the USA market. The challengers are the “Southern Shrimp Alliance, and ad hoc group of shrimp fishers

(mainly) and farmers. Their petition to the US International Trade Commission names Vietnam among the six developing countries who are globally all significant and low-cost shrimp farmers. Antidumping petitions were filed with the United States International Trade Commission (ITC) on 31 December 31 2003 by the Shrimp Trade Action Committee.

In a February 2004 decision, the United States International Trade Commission (ITC) determined that there is a reasonable indication that a U.S. industry is materially injured or threatened with injury due to the import of certain shrimp products from Brazil, China, Ecuador, India, Thailand, and Vietnam. The affected products include frozen and canned warmwater shrimp and prawns that are allegedly sold in the United States at less than fair value. This finding is a preliminary determination set in motion by antidumping petitions filed on December 31, 2003 by the Shrimp Trade Action Committee.

A preliminary decision was made in July 2004, just after completion of this case study. The proposed tariffs range from 12 to 93 percent on Vietnamese exports.

Box 6: Action Aid study of the US shrimp anti-dumping case

A study conducted by Action Aid has warned that thousands of Vietnamese farmers may fall back into poverty and people's confidence in free and fair international trade will be shattered by the United States' lawsuit against shrimp dumping. The study, which was released by Action Aid Vietnam (AAV) at a press conference in Hanoi on June 28, also warned of the loss of million dollars in shrimp trade between the US and Vietnam and the jobs of hundreds of thousands of people. It was conducted in five major shrimp-producing areas, Ca Mau, Soc Trang and Phu Yen provinces, Hai Phong and Ho Chi Minh City's Can Gio District and involved interaction with farmers, workers, traders, consumers, enterprises, fishery officials in March 2004. The study concluded that the case filed by the American Southern Shrimp Alliance (SSA) against the dumping of Vietnamese shrimp in the US was unjust. Vietnamese shrimp is highly competitive and affordable in the US market because of a number of favorable conditions like natural advantages, modern aqua-culture techniques and low labor cost, it said. Of those polled in the five areas, 86 percent said that shrimp related activities were their families' main breadwinners. The report called them the most vulnerable and worst-affected sections if the US Department of Commerce (DoC) decided to impose anti-dumping tariffs on Vietnamese shrimp exports. Thanks to shrimp farming and processing, thousands of families in rural areas have escaped poverty and steadily improved their living standards over the last decade, an official from AAV said. He said if the DoC decided to impose higher tariffs on Vietnam's shrimp exports, not only peoples involved in the shrimp industry in Vietnam but also consumers in the US who would be seriously affected.

[Summary of study from
<http://www.vietrade.gov.vn/English/display.news.detail.asp?id=1646>]

Implications for livelihoods of poor:

As in the case of catfish, it is likely that the effects of an unfavourable decision (for Vietnam) in the US antidumping case will lead to further substantial negative consequences for the many small-scale farmers and other stakeholders involved in the industry, and particularly the poor and vulnerable. Already, farmers in Ca Mau complain that prices for shrimp are particularly low in the early half of 2004, although shrimp farming is still profitable (provided disease losses are minimised).

Although lesson's have been learned from the catfish case, the many ten of thousands of stakeholders involved, and still weak governance and institutional support, essentially mean that many stakeholders will be negatively impacted, with limited "safety nets". The problems may

even accentuate some of the industry trends referred to above. A statement released by Action Aid following consultations conducted in March 2004 is given in the box above. Ongoing studies by EC-PREP should provide further insights into the outcomes. Given the wide range of stakeholders, including poor people, the implications of a negative decision could be highly significant. Research on options for managing vulnerabilities and risks is ongoing, with particular emphasis on the institutional arrangements for supporting organization of farmers to harvest the benefits but cope with the vulnerabilities in the international shrimp trade.

SUMMARY

Vietnam has been actively promoting the development of shrimp aquaculture in coastal areas of the country as an important strategy to generate export earnings and poverty reduction in coastal areas. The country has been highly successful in generating revenue, with shrimp farming contributing substantially to record export earnings from the seafood sector.

As the production and volume of exported shrimp have increased, though Vietnam has been faced with a number of significant issues effecting the development of the sector. Although the production of shrimp has grown significantly, this production has come from increase in farming area, rather than substantial increases in efficiency. The country now has 500,000 ha or more of coastal area devoted to shrimp aquaculture, the largest in Asia, but efficiency of production is low. Further the expansion of area has come at the cost of environmental sustainability, with loss of coastal habitat, and particularly mangrove areas. Farmers face declining prices, and increased risks, as the country integrates into the world trading system, facing declining prices of shrimp, and increasing competition and barriers to trade from technical and sanitary reasons of importing countries. Furthermore, the structure of the industry is changing, with increasing business investment in aquaculture in coastal areas. Whilst this is a positive move in terms of bringing investment capital to rural areas, this raises special challenges with regard to the traditional household based production systems in Vietnam's rural areas.

While Vietnam has considerable competitive advantages in shrimp farming, with international markets becoming more competitive, the problems need to be addressed if the country is to remain competitive. At the same time Vietnam is facing a number of considerable challenges arising from its successful engagement in international markets for shrimp, including most recently an anti-dumping case brought by the United States. With Vietnam's accession to the WTO expected in 2006 or 2007, and a number of challenges on the immediate horizon, the need to improve the sectors efficiency on the world markets will become increasingly urgent. The implications are significant for many poor people involved in the shrimp market chain.

The shrimp industry in Vietnam involves a considerable number of stakeholders, including many poor and vulnerable people. The industry structure is still dominated by small-scale producers. There is evidence that shrimp farming has lifted communities out of poverty. However, there is also evidence of negative social impacts on some of the poorest stakeholders from trade liberalization, caused by inappropriately planned and managed shrimp farm development, and exposure to the risks of shrimp aquaculture and trade. Shrimp farming in Vietnam is slowly changing from an extensive system requiring only limited and financial assets to one requiring more investment in terms of:

- financial assets
- human assets in the form of knowledge and skills to manage risks

- social resources such as local self-help groups and access to necessary services
- physical assets in the form of water supplies and other necessary infrastructure

Unfortunately, the poorest farmers have limited access to such assets and are those most exposed to the risk. In some coastal areas, inequity has occurred and the poorest farmers have suffered increasing debt, and in some cases been forced to sell land to pay off debts and leave the industry. Institutions and policies that support such people are essential.

The increasing liberalization of seafood markets will place increasing market influences on the shrimp farming sector in Vietnam. While the country has a comparative advantage for shrimp farming due to favourable environmental conditions, labour, and other advantages, substantial market challenges exist. Such challenges are likely to accentuate the risk to the poorer stakeholders in the industry, and particularly those engaged in farming, including poor landless laborers. The strong orientation of government policy towards the “farm household economy” and poverty reduction remains a positive aspect for pro-poor development of the sector. However, it remains to be seen if these these general poverty oriented policies can be translated into specific pro-poor actions that lead to further rural development.

We can see from the preliminary analysis presented in this paper that smaller-scale farmers and poor stakeholders in the market chain have been and will continue to be most significantly influenced by trade liberalization. While trade in shrimp offers substantial rewards, including for poor people, the development of effective institutions and policies that reduce the risks from their participation, and provide effective “safety nets” to the shocks associated with the trade will be essential if the social benefits from such trade are to be realised. Better understanding of the costs and benefits from engaging in the international shrimp trade, as well as technical support to address the constraints is required.

REFERENCES

Action Aid (2002) What do the catfish farmers say? Report of an interaction with catfish farmers in the Mekong Delta of Vietnam. Report of field trip research to the Mekong delta (An Giang and Vinh Long provinces) from 25 to 31 July 2002 commissioned by ActionAid Vietnam, Food Rights Campaign. Hanoi, Vietnam.

ADB (1996) Viet Nam Coastal Aquaculture Sector Review – Final Report (TA 2382-VIE). Asian Development Bank, Manila, Philippines

Anbinh Phan (2003) The New “Catfish” War: United States v. Vietnam, Woodrow Wilson School of Public Policy and International Affairs
[<http://www.cid.harvard.edu/cidtrade/Papers/catfishfinal1.doc>]

Anon (2004) An Giang Fish Breeders Form Business. VDC Business Newsletter. January 2004
<http://www.vn-style.com/newsletter/2004/040129.htm#2>

AusAID (2004) The Regional Poverty Assessment - Mekong River Region. Published by UNDP and AUSAID.

Centre for Rural Progress (CRP) (2003). Assessing the Poverty Impact of the Doha Development Agenda: A Case Study of Vietnam. Draft Final Report. Prepared for the Overseas Development Institute (ODI) of the UK, Hanoi, February 2003.

Comprehensive Poverty Reduction and Growth Strategy (2002) Approved by the Prime Minister as Document No. 2685/VPCP-QHQT, dated 21th May 2002.
[<http://www.imf.org/External/NP/prsp/2002/vnm/01/053102.pdf>]

DFID (2001) Poverty and Aquatic Resources in Vietnam: an assessment of the role and potential of aquatic resource management in poor people’s livelihoods. Aquatic Resources Management Programme. DfID SEAsia, Bangkok, Thailand
(www.streaminitiative.org/virtuallibrary)

European Union and Ministry of Trade in Vietnam (2004). International Trade and Environment Obligations – Relevant Issues for Vietnam, March 2004

European Union and Ministry of Trade in Vietnam (2003a). Taking Advantages of Bigger External Markets, December 2003

European Union and Ministry of Trade in Vietnam (2003b). Trade Reforms and Its Impacts on Agricultural Sector in the 90’s, December 2003

General Statistics Office (1998) - Vietnam Living Standard Surveys. Hanoi.

General Statistics Office (2002) - Vietnam Living Standard Surveys. Hanoi.

Ha Xuan Thong (2003) Planning of aquaculture activities for shrimp aquaculture development towards safe and sustainable environment, hygienic production and strategic demands. In Expanding Shrimp Aquaculture on Sandy Land in Vietnam: Challenges and Opportunities. The World Conservation Union (IUCN), Hanoi, Vietnam.

Hong, P.N. and H.T. San (1993) Mangrove of Vietnam. IUCN, 1993. 172 pp

Edwards P., Le Anh Tuan and G.L. Allan (2004) A survey of marine trash fish and fish meal as aquaculture feed ingredients in Vietnam. ACIAR Working Paper Number 57.

Environmental Justice Foundation (2003) Risky Business: Vietnamese Shrimp Aquaculture – Impacts and Improvements. Environmental Justice Foundation, London, UK.

Lam Quoc Tuan (2003) Country Case Study. Trade in Fisheries and Human Development Vietnam. United Nations Development Program, Asia-Pacific Regional Initiative on Trade, Economic Governance and Human Development
[<http://www.asiatradinginitiative.org/view/vn/default.htm>]

Phillips, M.J. (2002) Fresh water aquaculture in the Lower Mekong Basin. MRC Technical Paper No. 7, Mekong River Commission, Phnom Penh. 62 pp. ISSN: 1683-1489

Ministry of Fisheries (2001) Report on Progress of Year 2000 Plan Implementation and Measures for Implementation of 2001 Fisheries Plan. Ministry of Fishery, Hanoi. (in Vietnamese).

Ministry of Fisheries (2002) Report on Progress of Year 2001 Plan Implementation and Measures for Implementation of 2002 Fisheries Plan, Ministry of Fishery, Hanoi. (in Vietnamese).

Ministry of Fisheries (2003) Report on Progress of Year 2002 Plan Implementation and Measures for Implementation of 2003 Fisheries Plan, Ministry of Fishery, Hanoi (in Vietnamese).

Ministry of Fisheries (2004). Development Stages of Fisheries Sector in Vietnam, 2003 Ministry of Fisheries: Report on Development of Fisheries Sector for 2003, March 2004. (in Vietnamese)

Ministry of Trade. (2004) Key Issues of Tariff Reduction in Regional Economic Integration and WTO Access of Vietnam, March 2004

Ministry of Agriculture and Rural Development (2001) Impacts on Agriculture Sector When Implementing International Commitments on Opening Market, December 2001

Nguyen Cong Sach (2003) International export implications of expanding shrimp aquaculture in Vietnam. In Expanding Shrimp Aquaculture on Sandy Land in Vietnam: Challenges and Opportunities, The World Conservation Union (IUCN), Hanoi, Vietnam.

Oxfam GB (1999) Tra Vinh: A Participatory Poverty Assessment. Oxfam GB in partnership with Tra Vinh Province, World Bank and DFID Hanoi.

SAPA (2000) Proceedings of the Scoping Meeting for Development of the Sustainable Aquaculture for Poverty Alleviation (SAPA), 23rd-25th May 2000. Ministry of Fisheries, Hanoi, Vietnam.

SAPA (2001) Sustainable Aquaculture for Poverty Alleviation. A strategy paper by the Vietnamese Ministry of Fisheries. Ministry of Fisheries, Vietnam

STREAM/NACA/FAO/MOFI (2004) Report of the training workshop on analysing market chains and livelihoods, 10-14 May 2004, Hue Vietnam. Prepared for EC-PREP Project “International Seafood Trade: Supporting Sustainable Livelihoods Among Poor Aquatic Resource Users in Asia (Project EC/R03/014)” and FAO Project “Livelihoods Diversification and Enterprise Development Sub-Programme Project on Changing Livelihoods: New Aquaculture Enterprises and Traditional Livelihoods in Coastal Vietnam”. Published by the Network of Aquaculture Centres in Asia-Pacific (NACA) and Support to Regional Aquatic Resources Management (STREAM), Bangkok, Thailand.

Tran Van Nhung, Dinh Van Thanh, Bui Thi Thu Ha, Trinh Quang Tu, Le Van Khoi, Tuong Phi Lai (2004) The shrimp industry in Vietnam: status, opportunities and challenges. Unpublished report from the Department for Fisheries Extension and Socio-economic Studies (DFESS), Research Institute for Aquaculture No.1, Dinh Bang, Tu Son, Bac Ninh, Vietnam

Trong, Trinh Quoc, Nguyen Van Hao and Don Griffiths. 2002. Status of Pangasiid aquaculture in Viet Nam. MRC Technical Paper No. 2, Mekong River Commission, Phnom Penh. 16 pp. ISSN: 1683-1489.

Van Zalinge, Nicolaas; Lieng Sopha, Ngor Peng Bun, Heng Kong, and John Valbo Jørgensen (2002) Status of the Mekong *Pangasianodon hypophthalmus* resources, with special reference to the stock shared between Cambodia and Viet Nam. MRC Technical Paper No. 1, Mekong River Commission, Phnom Penh. 29 pp. ISSN: 1683-1489.

Vietnam Fisheries Association Newsletter, April 2004

World Bank in Vietnam (2003a). Growth and Reduction of Poverty – Annual Report of 2002 – 2003. World Bank in Vietnam.

World Bank in Vietnam (2003b) Refining Policy with the Poor: Local Consultations on the Draft Comprehensive Poverty Reduction and Growth Strategy, January 2003. World Bank in Vietnam

Annex 1 - List of Interviewed Farmers

Type	Name of Household	Address
Pond Culture	Mrs. Tran Thi Nung	Vinh Thuan village, Vinh Thanh Trung commune, Chau Phu district
	Mr. Lam Thanh Ho	
	Mrs. Le Th? Nga	
	Mr. Nguyen Van Nung	
	Mr. Pham Van Ny	
	Mr. Nguyen Van Tai	
	Mr. Nguyen Van Truong	
	Mr. Tran Be Ton	
	Mr. Đang Thi Ngan	
	Mr. Nguyen Van Hoang	
Cage Culture	Mr. Nguyen Van Giau	Phuoc Tho village, Da Phuoc commune, An Phu district
	Mr. Nguyen Van Tuoc	
	Mr. Nguyen Van Thanh	
	Mr. Tran Van Vung	
	Mr. Pham Van Te	
	Mr. Nguyen Van Chat	
	Mr. Pham Van Sang	
	Mr. Nguyen Van Liet	
	Mr. Đang Van Be	
	Mrs. Le Thi Lan	
Mr. Nguyen Anh Kiet		