

Fish Exports from the Great Lake to Thailand:

**An Analysis of Trade Constraints, Governance,
and the Climate for Growth**

Working Paper 27

Yim Chea and Bruce McKenney



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CAMBODIA DEVELOPMENT RESOURCE INSTITUTE

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**Cambodia Development Resource Institute
Phnom Penh, October 2003**

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Responsibility for the ideas, facts and opinions presented in this research paper rests solely with the authors. Their opinions and interpretations do not necessarily reflect the views of the Cambodia Development Resource Institute.

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Executive Summary

Fisheries play a vital role in supporting rural livelihoods throughout Cambodia, but especially around the Tonle Sap (Great Lake) area where more than one million people depend on the fisheries sector for employment, income, and food security. With large surpluses of fish caught during peak fishing periods, fish trade and export is critical to income growth in the sector. Presently, fresh and processed fish are traded widely within Cambodia, exported in significant quantities to neighbouring countries, and in some instances exported to more distant markets. However, beyond this general picture, much remains unclear about fish marketing and export.

With an inland fisheries catch of more than 400,000 tonnes per year, Cambodia's fisheries sector has been targeted as an important sector for export promotion. This promotion is occurring within the context of broader regional and international trade agreements, namely the ASEAN Free Trade Agreement and World Trade Organisation accession. While regional and international market integration is intended to spur "pro-poor" trade, to be effective, market integration and trade efficiencies will also need to be improved domestically, especially within and from rural areas.

Constraints on fish trade and export can negatively affect the livelihoods of the many small- and medium-scale fishers supplying exporters, as well as others working in the sector. When costs, fees, and risks associated with fish export make it difficult for exporters to earn a profit, they must reduce prices offered to fish suppliers in order to stay in business, which in turn can reduce incomes throughout the sector. Conversely, where policy changes can increase efficiencies and lower costs for trade and export, much of the benefit would be passed on to fishers (through higher prices for their fish) because exporters are intensely competing for fish supply.

To assess the current conditions under which fish are exported from Cambodia, the Natural Resources and Environment Programme of the Cambodia Development Resource Institute carried out a fish exports study from November 2002 to June 2003, with much of the fieldwork conducted during an intensive period in January 2003. The study focused on fish exports from the Great Lake to Thailand (via Poipet). Information and data were collected through more than 70 semi-structured interviews with exporters, wholesalers, traders, fishers, and government officials. In addition, researchers made three "follow the fish" trips with export shipments to directly observe trade conditions and crosscheck information gathered in interviews. Key objectives included identifying the typical market structure, describing credit and financing arrangements, assessing trade and export constraints, quantifying transaction costs (including fees), describing the official regulatory framework and actual practices, and identifying policy recommendations.

Market Structure

The market structure for fish exports from the Great Lake to Thailand involves thousands of fishers, traders, wholesalers, exporters, and Thai market distributors. Credit plays a critical role in this market structure with nearly all fishers and traders interviewed dependent on credit to support their businesses and activities. Vertical relationships based on credit ensure that fishers only sell to their trader/creditor, and traders only sell to their exporter/creditor, providing stability in the supply of fish for export.

In contrast to the stability created through credit and financing dependencies, a number of dynamic changes have been taking place within the market structure, as reflected in the collapse of KAMFIMEX's monopoly, rise of CDCO, and consolidation of unlicensed exporters. These changes are occurring in the context of intensified competition for fish due to a declining supply and pervasive fee charges that reduce profit margins.

Profit margins are also under pressure due to the weak price negotiation position of Cambodian exporters within the current market structure. With no other export options except to sell at Long Koeur market in Thailand, and the combined threats of repaying border fees, additional labour costs, and high spoilage levels if they do not sell on the day they cross the border to Long Koeur market, exporters often find themselves accepting lower prices than expected for their fish. Exporters suggest that the presence of fish distribution facilities in Poipet would allow them to store fish for several days if necessary, making it possible to negotiate better prices with Thai distributors.

Export Costs and Fees

Data collected on fish exports from the five landing sites studied indicate, with little variation, that exporters face significant fee charges that absorb a large proportion of their potential earnings. At \$83 per tonne, fees add more than 50 percent to the costs of exporting fish. Indeed, fees represent the highest component of export costs, followed by spoilage/weight loss (\$51 per tonne) and transportation (\$26 per tonne). Average profit margins are estimated to be about \$38 per tonne. The fact that fees levels are more than twice as much as the profit margin earned on fish exports is a strong indication of the widespread "rent-seeking" activity of government institutions and officials. Fee extraction is maximised to the point where exporters report their foremost goal is business survival; investment and business growth are not viewed as possible.

Closer examination of fish export fees (through a case analysis of a shipment from Chhnok Tru in Kompong Chhnang province to Long Koeur market in Thailand) reveals several striking findings. First, exporting fish along this route involves 27 different fee payments to 15 institutions in 16 different places. The most significant fees are paid for issuing and "checking" transport permits, followed by payments to customs, a road investment company, and a range of institutions with no legal basis for collecting fees. Second, of the institutions collecting fees, fisheries institutions collect the greatest amount but this represents only 20 percent of total fees. Institutions with no direct role in fisheries management collect 80 percent of fees. Third, more than half of all fees are collected at the border. In contrast, the provincial fisheries office of Kompong Chhnang, which is responsible for fisheries management in the area, collects only about three percent of all fees (one percent is recorded as an official fee and two percent is collected informally). Finally, when comparing actual payments to official fees (if enforced), it is starkly clear that prior to any efforts to improve official compliance, the fee system itself needs to be overhauled. Enforcement of current regulations and fees would triple the current payments made by exporters, which would surely cause a collapse in fish exports.

Regulatory Framework and Actual Practice

Actual practices undertaken to export fish bear little resemblance to what is required under the official regulatory system. Most fish shipped through Poipet are exported without a license, and exported throughout the year regardless of closed season regulations. This informal process involves numerous fee payments to a variety of institutions at the landing site, along the road, and at the border. Fees are either charged with no legal basis, or, where a legal basis exists, negotiated to support informal payments. Surprisingly, licensed exporters report that they make the same series of informal payments as unlicensed exporters, despite holding a license from the Ministry of Agriculture, Forestry and Fisheries and Customs Department in Phnom Penh.

Based on interviews with exporters and observations of fish shipments, there are no instances in which official fees are paid in accordance with the official rate. All fees are negotiated. Since most official fees are based on fish quantity and/or value of the fish shipment, the most common method used by officials to collect informal payments is to vastly underreport fish quantities in licenses and permits. For example, fisheries officials record only one-fourth to one-tenth of the actual shipment amount in transport permits. Such underreporting allows officials to negotiate an informal payment on top of the much-reduced official fee.

Since many payments have no clear legal basis and may differ from trip to trip, exporters complain that the arbitrariness of payments makes operating a business very difficult because of uncertainty about costs. In an interesting market response to this problem, brokers have begun providing the service of taking responsibility for checkpoint and border fee payments in return for a set price. Through their positions as current/past government officials, military, or military police, brokers have established relations with fee collecting institutions, making it possible for them to pay lower fees and have greater certainty about fee charges than exporters who pay directly.

Recommendations

In the promotion of fish exports, much of the focus has been on spurring investment in value-added processing, improving quality standards and control, and identifying high-value export markets. Given the lack of processing, problems with quality, and scant exports to countries other than Thailand and Vietnam, these efforts are clearly important. But investment and quality improvements are unlikely to come without first having significant changes in the climate for business and trade within the fisheries sector, including a substantial and credible reduction in current fees and transparency and certainty about the regulatory environment.

Based on the findings of this study, twelve recommendations are summarised below. They are grouped under three themes:

- **Improve governance and transparency; this must include a significant overhaul of the current license, permit, and fee system.**
 1. Remove the transport permit requirement for fish trade.
 2. Eliminate fees collected by checkpoints and institutions that have no clear legal basis for collecting fees.
 3. Make a public statement that “Sending Goods” letters from KAMFIMEX are no longer required for fish export.
 4. End the contract with Ban Sambath House.
 5. Eliminate the 4 percent fish distribution centre fees in Battambang province.

6. Revise downward the 10 percent export tax charged by the Cambodian Customs Department.
- **Increase linkages and accountability between fee payments and fisheries management.**
 7. Concentrate fee collection at fishing grounds to support fisheries management and enforcement; eliminate or sharply reduce fee collection elsewhere.
 8. Establish ‘one-stop’ fee payment service with transparent procedures and clearly defined fee levels.
 9. Consider re-imposing a fishing license fee on middle-scale fishers (if transparent fee collection is possible).
- **Facilitate the development of a more efficient fish trade, distribution, and export system.**
 10. Encourage investment in the establishment of fish distribution centres at Poipet.
 11. Remove barriers to export via Sihanoukville; support identification of new export markets.
 12. Support further study of the credit system in the fisheries sector.

Acronyms and Abbreviations

ACLEDA	Association of Cambodian Local Economic Development Agencies
ASEAN	Association of South East Asian Nations
Baht	Thai currency (42 Bath = 1 \$, January 2003)
CAMCONTROL	Cambodia Import Export Inspection and Fraud Repression Department (Ministry of Commerce)
CDCO	Import Export and Civil Development Construction Company
CDRI	Cambodia Development Resource Institute
DANIDA	Danish International Development Agency
DFID	Department for International Development
DoF	Department of Fisheries
GDP	Gross Domestic Product
KAMFIMEX	Kampuchea Fish Import Export Company
kg	Kilogram
MAFF	Ministry of Agriculture, Forestry, and Fisheries
PM	Military Police
PRASAC	Prasac Credit Association
R/Riel	Cambodian currency (3,950 R = 1 \$, January 2003)
SME Cambodia	Small and Medium Enterprise Cambodia
\$	US dollars

Khmer words

<i>Pheasi</i>	Fee that a private company is allowed to collect under an agreement with the government
<i>Prakas</i>	Announcements issued by the government ministries
<i>Balang</i>	Ferry boat

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Bruce McKenney and Yim Chea

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Chapter One

Introduction

With the adoption of free market principles a decade ago, Cambodia has been undergoing a rapid transition to a market economy. Recently, much focus has been on high profile regional and international market integration efforts, such as the ASEAN Free Trade Agreement and accession to the World Trade Organisation. These negotiated trade agreements are intended to spur “pro-poor” trade that in turn helps to reduce poverty. However, for such pro-poor trade efforts to succeed, more than regional and international agreements will be needed. Market integration, trade efficiencies, and the climate for small businesses must be improved domestically, especially within and from rural areas.

Trade is critical to income growth in rural areas. While rural life is sometimes portrayed as if a household or village survives in isolation, growing or collecting whatever is needed, for the vast majority of rural Cambodians this is simply not the case. Villages tend to have specialisations and comparative advantages, often based on the richness of their surrounding natural resources (e.g., productive fisheries, abundant forest resources, and/or fertile land).¹ Fishers, farmers, and forest product collectors generate surpluses from their activities that are then traded for cash, goods, and services. Where constraints and inefficiencies impose significant costs on trade, these costs can reduce prices paid to rural producers, which in turn lowers rural incomes.

Fisheries play a vital role in supporting rural livelihoods throughout Cambodia, but especially around the Tonle Sap (Great Lake) area where more than one million people depend on the fisheries sector for employment, income, and food security. Indeed, the inland fisheries catch has been estimated at more than 400,000 tonnes per year, making Cambodia’s inland fisheries the fourth most productive in the world. In economic terms, fisheries contributed about seven percent to Cambodia’s gross domestic product in 2002 (Kang and Chan 2003), though this estimate is only approximate due to a lack of data. Other estimates by the Department of Fisheries suggest fisheries accounted for 16 percent of GDP in 2002.²

Cambodia’s rich inland fisheries have been identified as an important sector for export promotion because the high level of fish production provides a comparative advantage over neighbouring countries (Ministry of Commerce 2001). Presently, fresh and processed fish are traded widely within Cambodia, exported in significant quantities to neighbouring countries, and in some instances exported to more distant markets. Official statistics on fish exports from Cambodia are not reliable due to underreporting and other data collection problems. No precise estimate has been developed but expert opinion suggests that total freshwater fish

¹ For example, a recent study of nine Cambodian villages by Chan and Acharya (2003) finds that villages tend to have high dependence on a specific area of production (agriculture, fishing, or forests), with seven out of nine villages earning income from fisheries or forests that is greater than or equal to income earned from agriculture.

² This estimate was presented by Nao Thuok, Director of the Department of Fisheries at a workshop conducted for the *Tonle Sap Environmental Management Project*, Department of Fisheries, Phnom Penh, 11-12 August 2003. The basis for this estimate was not available for evaluation.

exports may be about 50,000 tonnes (Zalinge *et al.* 2000) or from 30,000 to 100,000 tonnes including marine fish (Ministry of Commerce 2001).

As with fish export levels, much remains unclear about the conditions under which fish are exported from Cambodia, and how these conditions affect rural incomes. Important fish export issues for analysis include the market structure, costs, fees, profit margins, the regulatory system, and actual/informal export practices. To explore these issues, the Natural Resources and Environment Programme of the Cambodia Development Resource Institute conducted a study of fish exports from November 2002 to June 2003. Research focused on fish exports from the Great Lake to Thailand (via Poipet). Information and data were collected through more than 70 semi-structured interviews with exporters, wholesalers, traders, fishers, and government officials. In addition, researchers made three “follow the fish” trips with export shipments to directly observe trade conditions and crosscheck information gathered in interviews.

1.1. Research Objectives

Objectives of this study include identifying constraints, transaction costs, and market distortions in the export of fish, quantifying the costs of these constraints and assessing their impact, and making policy recommendations that support government objectives to reduce poverty and increase pro-poor trade. More specifically, the study aims to:

- Describe the typical market structure, including an assessment of credit and financing arrangements, for fish export from the Great Lake to Thailand via Poipet in Banteay Meanchey province (Chapter 2).
- Identify key challenges to exporting fish and quantify associated transaction costs. Estimate and analyse price margins, costs, fees, and profits involved with marketing from landing sites to the Thai market (Chapter 3).
- Describe how the formal legal and regulatory system (licenses, permits, and fees) governing fish trade and export is designed to function, and how the informal system works in practice (Chapter 4).
- Conduct an in-depth analysis of fee payments for fish export, including fee amounts, institutions involved, locations of payments, and comparison of actual payments to official fee rates (Chapter 5).
- Identify policy recommendations for reducing fish export costs and facilitating more efficient export activities (Chapter 6).

1.2. Methods

Research for this study focused on fish export activity from the Great Lake to Thailand via Poipet. Five major landing sites (i.e., areas where fish are landed from fishing grounds) were selected for study: Provincial Town and Chhnok Tru in Kompong Chhnang province, Kompong Luong in Pursat province, Prek Toal in Battambang province, and Chong Khneas in Siem Reap province (Figure 1.1). Using prepared questionnaires, more than 70 semi-structured interviews were conducted at the five landing sites and the Cambodian-Thai border area (Table 1.1). Although the focus was on collecting information from fish exporters through a comprehensive survey, interviews were also carried out with fishers, traders, wholesalers, and government officials active in the fisheries sector. By interviewing actors at each point in the marketing chain and key informants knowledgeable about fish exports, it was possible to gather more extensive information on fish trade and conduct a thorough crosscheck of information (e.g., prices, costs).

Figure 1.1. Map of Study Areas and Trade Routes

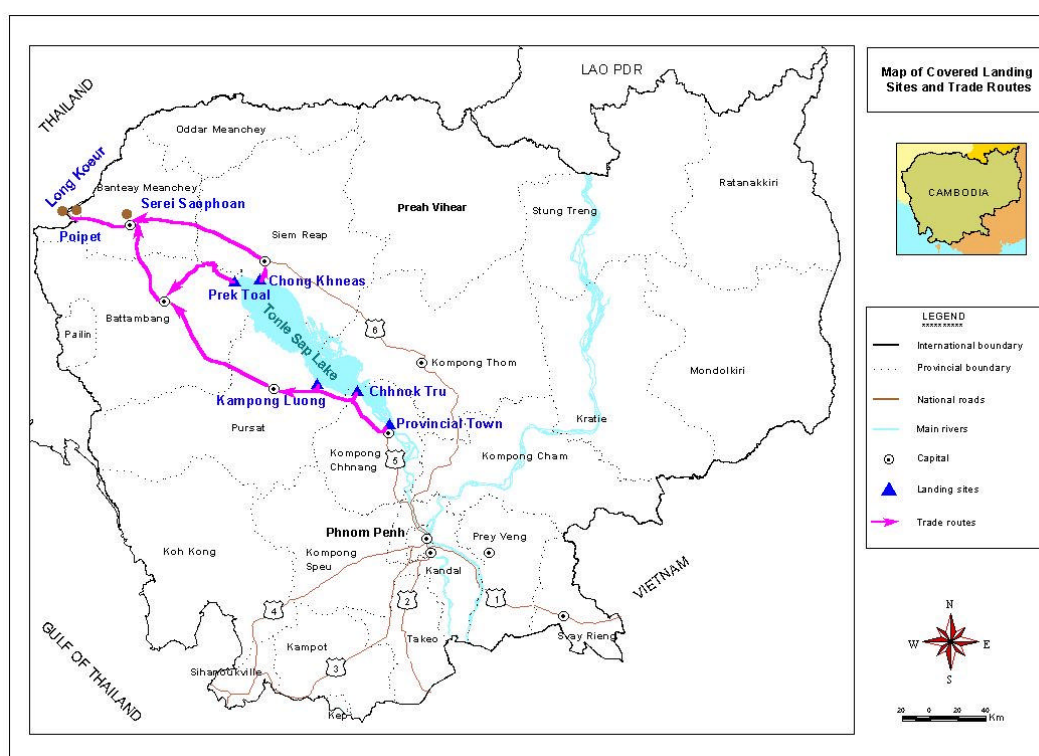


Table 1.1. Summary of Interviews Conducted for the Study

Interviewee	Number Interviewed	Remarks
Unlicensed exporters	16	Approximately 25 unlicensed fish exporters were identified at the five landing sites, of which 16 were interviewed. (For interview format, see Questionnaire A in <i>Appendix C</i>).
Licensed exporters	2	Kampuchea Fishery Import & Export Company (KAMFIMEX) and CDCO Import Export & Civil Development Construction Company (CDCO). (For interview format, see Questionnaires B and C in <i>Appendix C</i>).
Wholesalers	10	Focus was on wholesalers that sell to exporters (see section 2.3). (For interview format, see Questionnaire A in <i>Appendix C</i>).
Traders	5	Focus was on traders bringing fish from fishers to landing site; wide variety of small-scale trading activity not addressed. (For interview format, see Questionnaire D in <i>Appendix C</i>).
Fishers	25	Limited survey to gather indicative information on fishing costs, fees, and constraints (see section 3.3). (For interview format, see Questionnaire E in <i>Appendix C</i>).
Thai distributors	4	Distributors buy fish from Cambodian exporters; they are located at Long Koeur market in Thailand
Fee brokers	4	Brokers facilitate fee payments from landing sites to the border, and to cross the border from Cambodia to Thailand.
Government officials	5	Department of Fisheries, Banteay Meanchey fisheries office, Camcontrol of Ministry of Commerce, Customs Department of Ministry of Economy and Finance
Ban Sambath House	1	Obtained right from government to collect <i>Pheasi</i> at Poipet, Banteay Meanchey (see section 5.1).
Total	72	

Of the approximately 25 unlicensed fish exporters identified at the five landing sites, 16 were interviewed. An effort was made to interview all 25 exporters, but some were either unavailable or not forthcoming with information. Formal sampling methods were not used in selecting these interviewees due to a lack of prior information about fish exporter numbers, identities, and locations. Nonetheless, based on the wide coverage of interviewing activity (interviews with 64 percent of unlicensed exporters identified) and indications from these exporters that other exporters (not interviewed) operate in a similar manner, it is expected that study findings on export conditions are representative of conditions for all fish exporters.

In addition to unlicensed exporters, two major licensed exporters were interviewed – KAMFIMEX and CDCO. Interviews with all exporters (licensed and unlicensed) focused on understanding key constraints associated with exporting fish from the landing site to Thailand throughout the year, including transportation, spoilage risks, licensing and regulatory issues, formal and informal fees, and so on. To support information from interviews, three “follow the fish” trips were carried out in which researchers travelled in trucks with export shipments from the landing site to Long Koeur market in Thailand. These trips allowed researchers to directly observe trade conditions, collect price, cost, and fee data, and crosscheck this data and other information gathered in interviews. Trips were made from Chhnok Tru, Kompong Luong, and Chong Khneas landing sites.

Although the study was conducted over a period from November 2002 to June 2003, the bulk of fieldwork was carried out during an intensive 11-day period from 20-30 January 2003. This timeframe was selected because it is a peak fishing period, ensuring significant fish export activity. Five researchers working either in teams of two or independently

conducted 70 interviews at landing sites and the border area.³ In addition, after completing interviews at three of the landing sites, researchers arranged with an exporter to ride along with an export shipment from the landing site to Thailand (where border area interviews were later conducted). Prior to the intensive 11-day period, scoping research trips were made to Kompong Chhnang from 21-22 November 2002, and to Siem Reap from 24-27 November 2002, to support development of the study design.

A number of limitations of the study need to be noted. First, this study is not intended to cover all fish exports, only freshwater fish from major landing sites around the Great Lake exported to Thailand via Poipet. A range of other fish products (e.g., marine fish, processed fish products) and other trade routes/destinations (e.g., National Road 1 to Vietnam, Koh Kong to Thailand) are not included in the study.

Second, the “follow the fish” trips undertaken for this study were designed to provide a “snapshot” of fish export activity during a peak period of the fishing season, allowing for an assessment of price margin and cost information on a single trip from landing site to export market. It is recognised that different trips on different days would produce varying results. Nonetheless, the similarity of transaction costs across the three trips taken, and consistency with information about year-round activities collected in interviews, suggests that these “snapshots” provide a reliable picture of trade conditions throughout the year (regardless of price, seasonality, and species variability).

Third, some areas of research deserve more in-depth analysis, but this was not possible under this research due to resource limitations and lack of technical knowledge. For example, in this study fish spoilage costs only reflect cases in which fish have been *discarded*. No systematic analysis was conducted on how much fish quality declines during marketing, and how this reduction in quality correlates to (lower) prices received at the export market.

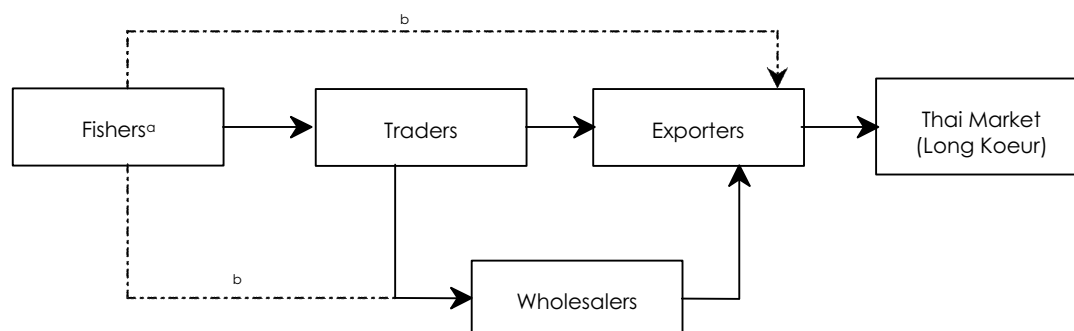
³ Two interviews with Department of Fisheries officials were conducted at a later time.

Market Structure for Fish Exports

Mapping the market structure of Cambodia's fish trade is a daunting challenge due to extensive fisheries, numerous landing sites, thousands of actors in the sector, and many different trade routes and methods (by road, waterway, and air). As described by Touch (2002), Cambodia's fish supply and marketing chain can be quite complex involving many intermediaries. Fish are supplied by small-, medium-, and large-scale fishers, illegal fishers, rice field fishers, and fish farms to a variety of traders, processors, wholesalers, distributors, and exporters, who then sell the fish to domestic retail markets or export markets.

Rather than a national assessment, this study focuses on developing a deeper understanding of a major trade route for fish export – from the Great Lake to Thailand via Poipet. For this trade, it is possible to describe a typical market structure involving fishers, traders, wholesalers, exporters, and Thai distributors at the export market (Figure 2.1). In general, traders purchase fish from fishers and sell to either exporters or wholesalers. Exporters transport bulk amounts of fish by pick-up trucks or large trucks to sell to Thai distributors at Long Koeur market. Informal credit and financing arrangements play a fundamental role in fish trade and export.

Figure 2.1. Flow of Fish Trade: Generalised Market Structure for Export from Great Lake to Thailand



^a Refers to people capturing fish inside or outside of fishing lots.

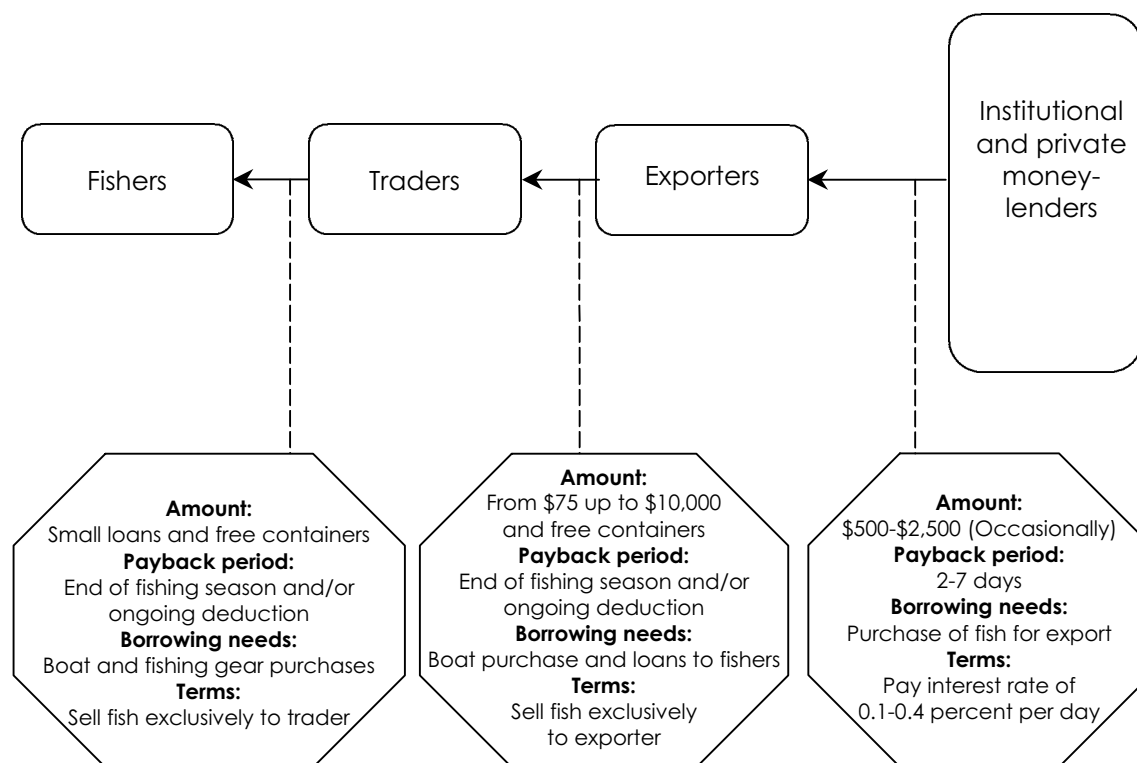
^b Indicates a less common approach for fish trade.

Credit is commonly provided from exporters to traders, and from traders to fishers (Figure 2.2). These financing arrangements, which have been established over time based on trust and experience, are widespread throughout the fish marketing structure. There appear to be very few fishers and traders who operate independently without debt. In contrast to the long-term debt of fishers and traders, exporters only occasionally borrow from institutional or private moneylenders on a short-term basis to address cash flow problems.

In return for credit, fishers and traders agree to sell their fish exclusively to their creditor, at what may be a somewhat discounted price (which can be viewed as an implicit interest rate on the loan). However, it is very difficult to ascertain the amount of this implicit interest rate based on price differentials because fish prices can vary so widely due to other

factors, such as supply, quality, and negotiation skills. Moreover, with most fishers and nearly all traders borrowing, it can be difficult to identify a “normal” market price offered to a non-borrower. Further description of each actor in the market structure, including the role of credit and financing, is provided in sections 2.1-2.5 below.

Figure 2.2. Flow of Credit for Fish Marketing from the Great Lake to Thailand



2.1. Fishers

Fishers are defined broadly here to include people catching fish through a variety of different methods and gear types (small-, medium-, and large-scale).⁴ In practice, however, most fish for export are supplied by the many fishers using small- and medium-scale gear. These fishers operate throughout the year regardless of whether it is the open or closed fishing season. Fishers may put fish in plastic containers with ice immediately after catching them, store fish in water at the bottom of the boat, or simply put the catch in the boat with no ice or water. Some fishers sort fish by species and size, while others just sell mixed fish. When catches are small (less than 20kg), fishers usually sell to traders at the fishing grounds (i.e., from boat to boat) rather than bring fish directly to wholesalers or exporters, as this reduces transportation costs. Prices are set through negotiation, with fishers relying on knowledge of the previous day's fish price and “word-of-mouth” information on prices from other fishers. In cases where the fish catch is large, fishers may transport fish directly to wholesalers or exporters in the hope of selling the catch for a better price.

Most fishers are in debt to a trader. Fishers usually borrow from traders (who themselves have been financed by exporters) to support boat and gear purchases, or when they need to get treatment for themselves or family members due to a serious health problem. Traders do not charge fishers an interest rate on loans, but require that fishers sell all fish exclusively to them at what may be a somewhat discounted price (implicit interest rate).

⁴ Categories of fishers (large-, medium-, and small-scale) are based on gear types used, as classified in the *Prakas on Determination of Fishing Gear Allowed for Use at Fisheries Domains* (Ministry of Agriculture, 9 June 1987).

Fishers payback the loan through regular deductions/payments, or in a lump sum at the end of the fishing season.



Fisher casting net at the Great Lake, Kompong Chhnang

2.2. Traders

Traders purchase small amounts of fish from fishers at villages and fishing grounds to sell to wholesalers and exporters. Most traders operate on a small-scale, working throughout the year. They have a boat and several plastic containers with ice for fish storage in which they collect about 100-300 kg of fish per day (though amounts can vary considerably depending on the day's catch). Many traders sort their fish in preparation for sales to wholesalers and exporters. Traders are often in contact with wholesalers and/or exporters by I-com or mobile telephone to get information on fish quantities demanded and prices. Price negotiations with fishers depend on this information as well as an assessment of fish quality, size, and overall fish supply/availability.

Most traders are in debt to an exporter. Traders typically borrow from exporters to purchase fish, boats, engines, and/or containers, to lend money to fishers, or to get treatment for themselves or family members due to a serious health problem. The amount of credit provided by exporters to traders varies considerably. Each exporter provides credit to anywhere from 5-40 traders, with each loan ranging from \$75 up to \$10,000. Typical loans are about \$500 to \$1,000. Traders payback loans through regular deductions/payments or in a lump sum at the end of the fishing season. However, some traders operate for many years without fully paying off their loan. Similar to the borrowing terms offered by traders to fishers, exporters do not charge an interest rate on loans, but require that traders sell all fish exclusively to them at what may be a somewhat discounted price.

2.3. Wholesalers

Wholesalers purchase fish from traders, store and aggregate them in containers, and then sell larger amounts to domestic markets and/or exporters. Most wholesalers own a house or shop at a landing site or floating village and operate year round. A few wholesalers specialise in the trade of particular fish species, but most will deal in any fish species.

Research for this study focused on wholesalers who sell to exporters. Such wholesalers operate in two of the areas studied (Provincial Town of Kompong Chhnang and Chong Khneas, Siem Reap province), but fish are sold directly from traders to exporters in the other three areas studied (Chhnok Tru, Kompong Chhnang province, Kompong Luong, Pursat province, and Prek Toal, Battambang province).

Wholesalers who buy from traders and sell to exporters in the Provincial Town of Kompong Chhnang maintain their intermediary role through strong relationships with traders. These relationships have been established through years of trade and are ensured through credit provided to traders by the wholesaler. Thus, traders continue to sell to wholesalers (perhaps at lower prices), even though there are exporters in the area willing to buy the fish. For the wholesalers' transactions (purchasing from traders and selling to exporters), wholesalers commonly seek a gross margin of about R100-R300 per kg (selling price minus buying price).⁵

At Chong Khneas, wholesalers transport shipments of fish to Svay Sisophon, Banteay Meanchey province, where they are sold to exporters who bring the fish to Long Koeur market in Thailand. However, if a wholesaler does not have enough fish for a truckload (typically a pick-up truck), or somewhat more fish than can be loaded into one truck, they usually call exporters in Mongkul Borei, Banteay Meanchey province. These exporters will contact other wholesalers at Chong Khneas to determine if they have fish for sale. If so, they travel to Chong Khneas, purchase fish from various wholesalers until they assemble a truckload, and then transport the fish to Long Koeur market.

2.4. Exporters

For export to Thailand via Poipet, most exporters around the Great Lake purchase fish directly from traders (rather than wholesalers), store and aggregate fish in containers, and transport for export. These exporters ensure their fish supply from traders through long-term relationships and the provision of credit, as described above. Exporters deal in approximately 20 different species of iced fresh fish (see *Appendix A: Species and Prices of Exported Fish*), as well as some live fish and processed fish products (e.g., *prahoc*). For iced fresh fish, exporters usually ship a mixture of several fish species, either by pick-up trucks carrying 2-4 tonnes or larger trucks capable of transporting from 6-15 tonnes.

According to fish exporters, prior to 1997-98, Thai distributors crossed the border into Cambodia to purchase fish from Cambodian exporters. But these distributors were frightened by violent conflict in the Poipet/Banteay Meanchey area in 1997-98 and stayed away. To sell fish, Cambodian exporters began bringing fish to distributors at Long Koeur market. Over time, conducting fish sales at Long Koeur market became the norm, especially after two large buildings were constructed at the market to support fish distribution.

By law, Cambodians are allowed to enter Thailand on a temporary permit that requires return to Cambodia by the end of the day. The terms of this permit, in combination with border fees, labour costs to transport fish across the border, and the threat of spoilage, all place Cambodian fish exporters in a weak position for negotiating prices (see Chapter 3). They must sell their fish to the Thai distributors even if the price they expected (and usually have agreed upon in advance) has dropped significantly. Thai distributors typically point to quality problems or a drop in demand in Bangkok as the reason for needing to lower their price.

According to Department of Fisheries officials, there are now more than 20 companies licensed to export fish from Cambodia. The two companies most well known for exports to Thailand via Poipet are the Kampuchea Fish Import Export Company (KAMFIMEX) and the Import Export and Civil Development Construction Company (CDCO). In addition to licensed exporters, this study identified about 25 unlicensed fish exporters operating informally to bring fish to the Thai market via Poipet. The roles and activities of KAMFIMEX, CDCO, and unlicensed exporters are described in more detail below.

⁵ Exchange rate: 3,950 riels = \$1 US.

2.4.1. KAMFIMEX

KAMFIMEX is a state-owned enterprise managed under the Ministry of Agriculture, Forestry and Fisheries (MAFF). It was established in 1981 to collect fish from fisheries solidarity groups and state fishing enterprises (Touch 2002). In 1990, MAFF authorised (through *Prakas* on the “Organisation and Functioning of the Fishery Company”) the official establishment of KAMFIMEX as a state-owned enterprise under the supervision of the Department of Fisheries. The stated objective of KAMFIMEX was to manage marketing, distribution and export of fisheries products through agents stationed at landing sites, provincial and border offices, and other key fish distribution areas.

Until recently, KAMFIMEX was the sole licensed exporter of fish products from Cambodia and played a major role in fish marketing and distribution throughout the country. Officially, all fish destined for export had to be sold to KAMFIMEX. Operating in this monopoly position, KAMFIMEX was known for high fee charges and a lack of services (Ministry of Commerce 2001, Enterprise Development Cambodia 2002).

Research conducted for this study, however, indicates that KAMFIMEX ceased to play an active role in fish marketing and export in late-2001. Interviews with KAMFIMEX and CDCO managers suggest that the collapse of KAMFIMEX occurred due to internal management conflicts. As a result, some high-level managers left KAMFIMEX to establish a new company for fish marketing and export in October 2001. The new company, named CDCO, was issued a license for fish export from MAFF, which allowed it to compete with KAMFIMEX.

The rise of CDCO appears to have had a major impact on KAMFIMEX’s monopoly position. Unlicensed exporters either began working with CDCO or simply decided they no longer needed to get “Sending Goods” letters from KAMFIMEX agents or stop at KAMFIMEX’s offices and distribution centres to pay fees. According to KAMFIMEX managers in Poipet, fish exports via KAMFIMEX fell to only 25 tonnes in December 2001, and then stopped completely. Interviews with fish exporters confirm that KAMFIMEX no longer plays a significant role in fish exports, though some KAMFIMEX agents stationed at landing sites continue to issue “Sending Goods” letters for a fee. Since institutions monitoring fish exports no longer request to see this letter, it is unclear why some exporters continue to pay for it. Possibly they are not yet aware that the letter is unnecessary.

With operations at KAMFIMEX largely ceased, government supervision of the company changed in 2002. Under the *Sub-decree on Public Enterprise for Fishery Company*



Inactive Kamfimek fish distribution center, Poipet, Banteay Meanchey, January 2003



Ice breaker purchased from Kamfimek by an unlicensed exporter after Kamfimek stopped operations

(13 September 2002), MAFF and the Ministry of Economy and Finance took over direct supervision of KAMFIMEX from the Department of Fisheries. Steps are also being taken to privatise the state-owned company by 2006 (Government Directive No. 2018 SCN.KS, 26 December 2002). The first step of the process will be to conduct an audit to determine the value of KAMFIMEX. Reportedly, a loan of \$35 million from the Asian Development Bank is contingent upon the privatisation of KAMFIMEX, as well as state-owned rubber plantations and an agricultural materials company (Phnom Penh Post, 6-19 June 2003).

2.4.2. CDCO

As noted above, a number of former KAMFIMEX managers founded CDCO in October 2001. Unlike KAMFIMEX, CDCO's strategy has been to play a more service-oriented role in fish exports, providing more support to its "agents" (i.e., wholesalers and exporters who have established a relationship with CDCO). CDCO provides its agents with information about price changes at Long Koeur market, while agents contact CDCO to inform about the status of fish supply. Through this communication, agents will agree on fish prices with CDCO and transport a shipment to Poipet for sale to CDCO. After which, CDCO takes the fish across the border to sell to Thai distributors at Long Koeur market. The relationship between CDCO and agents has the benefits of reducing risks for agents (fish prices are more stable because CDCO does not generally change prices once they have been agreed upon) and making cross-border trade more efficient (because, unlike many individual exporters, CDCO has established relationships with Thai distributors).

Although CDCO holds a license to export fish from Cambodia, one manager indicated the company might decide not to continue renewing the license in the future. The manager noted that CDCO pays all the same fees to export fish as unlicensed exporters, but CDCO also pays a high fee to MAFF in Phnom Penh for a license on top of those fees. This additional cost makes CDCO less competitive compared to unlicensed exporters.

2.4.3. Unlicensed Exporters

Many fish exporters operating around the Great Lake have no license to export. These unlicensed exporters operate year round, purchasing fish in bulk amounts, sorting by species and sizes, packing in plastic bags, and transporting with ice to Long Koeur market. None specialises in a particular fish species. Rather, they purchase fish based on price/demand information communicated by phone from Thai distributors at Long Koeur market. During peak fishing periods at the Great Lake (January to May), exporters may transport a fish shipment to Long Koeur market every 2-3 days. During the closed fishing season (June to September) and other non-peak periods (October to December), however, exporters often only ship fish every 7-10 days and these shipments may be comprised of fish collected by 2-3 exporters.

For the landing sites and trade routes covered by this study, approximately 25 unlicensed exporters were identified (Table 2.1). They describe themselves as self-employed, operating without a license and independent from CDCO or KAMFIMEX.⁶ While most exporters have fixed premises at landing sites, some are located along trade routes (Svay Sisophon), buying fish from wholesalers, or at distribution centres (Battambang), buying fish directly from traders.

⁶ However, in one case, an unlicensed exporter reported working frequently with CDCO. Interviewees indicated that another 2-4 unlicensed exporters occasionally export via CDCO.



Exporter and trader sorting fish at Chhnok Tru (Kompong Chhnang) floating village

According to interviews at *three* of the landing sites, over the past three years the number of unlicensed exporters has declined from 23 to 16 businesses (from ten to five at Chhnok Tru, five to three at Provincial Town of Kompong Chhnang, and ten to eight at Kompong Luong). Only three new export businesses have been started during this period, while ten exporters have gone out of business. Exporters indicate that the decrease in their numbers has occurred because of strong competition for a declining supply of fish and high fees and uncertainties in operating a business. When asked about the prospects for expanding their businesses in the future, exporters say they are trying to survive and see no potential for growth.

Table 2.1. Number of Unlicensed Exporters Identified: All Landing Sites and Trade Routes Studied (January 2003)

Location of Exporter	Number Identified
Provincial Town, Kompong Chhnang	3
Chhnok Tru, Kompong Chhnang	5
Kompong Luong, Pursat	7-8
Provincial Town, Battambang	1
Svay Sisophon, Banteay Meanchey	8-9 ^a
Total	24-26

^a Four exporters work year round, while the other 4-5 exporters work on a seasonal basis.

In comparison to the credit dependencies of fishers and traders, exporters tend to operate in a self-financed manner, only borrowing occasionally on a short-term basis (2-7 days) from institutional or private moneylenders. These short-term credit needs arise when they have run out of cash for fish purchases before transporters of shipments to the Long Koeur market have returned with revenue from fish export sales. In such instances, exporters typically borrow about R2-10 million (or \$500-\$2,500). At Chhnok Tru, exporters report that there are 7-8 private moneylenders, as well as two institutional lenders – Prasac (offering an interest rate of 3 percent per month) and Aceda (offering an interest rate of 2 percent per month). Exporters at Kompong Luong indicate that three private moneylenders provide credit to fish exporters at interest rates of 0.5-2.5 percent per week or 2-11 percent per month. In practice, interest on short-term loans to fish exporters is usually paid based on a daily rate (0.1-0.4 percent per day). Although private moneylenders may charge higher interest rates than institutional lenders, they remain popular with exporters. Exporters value the flexibility and ease of working with private moneylenders because, other than the interest rate, there are no terms. Terms and conditions are stricter for loans with institutional lenders. For example,

exporters claim that they must have official proof of land ownership to secure a loan from institutional lenders.

2.5. Fish Distributors at Long Koeur Market

Long Koeur is a large and busy market located less than a kilometre from the Cambodian-Thai border on the Thai side. Market shops sell all types of goods including clothes, electronics, household items and so on. Within the Long Koeur complex, two large buildings have been constructed to support distribution of fish imported from Cambodia. In total, there are about 30 fish distribution shops operated by roughly 60-90 distributors. Shops are rented from the distribution centre owner on a month-to-month basis.



Fish distribution center, Long Koeur market, Thailand

The business activity of distributors mainly consists of purchasing fish from Cambodian exporters, re-packing fish in containers with ice, and shipping fish by truck to Bangkok or provincial areas in Thailand. In some cases, fish are immediately processed at the shop before shipping out. This processing, which includes making fish balls, fillets, and other products, is usually carried out by Cambodian workers who have passed across the border on a daily permit. Workers can earn two baht per kilo of processed fish meat. Distributors also send some fish directly to manufacturing plants to be processed or frozen for re-export to third countries, such as the United States.



Inside the fish distribution center, Long Koeur market, Thailand

2.6 Summary

The market structure for fish exports from the Great Lake to Thailand involves thousands of fishers, traders, wholesalers, exporters, and Thai market distributors. Credit plays a critical role in this market structure with nearly all fishers and traders interviewed dependent on credit to support their businesses and activities. Vertical relationships based on credit ensure that fishers only sell to their trader/creditor, and traders only sell to their exporter/creditor, providing stability in the supply of fish for export.

Any interest rate charged on a loan is embedded in the fish prices offered to borrowers, making it difficult to estimate borrowing costs. The lack of transparent borrowing costs may make it difficult for fishers and traders to “comparison shop” when they are seeking a loan. But it should not be assumed that the current system is necessarily inefficient. Both creditors and borrowers benefit from the security of an assured fish supplier and fish buyer. Further research is needed on the workings of the informal credit and financing system to assess its positive and negative features, opportunities for improvement, and the potential for formal micro-finance institutions to play a role in future lending to fishers and traders.

In contrast to the stability created through credit and financing dependencies, a number of dynamic changes have been taking place within the market structure, as reflected in the

collapse of KAMFIMEX's monopoly, rise of CDCO, and consolidation of unlicensed exporters. These changes are occurring in the context of intensified competition for fish due to a declining supply and pervasive fee charges that reduce profit margins (see Chapter 3).⁷

Profit margins are also under pressure due to the weak price negotiation position of Cambodian exporters vis-à-vis Thai distributors. With no other export options except to sell at Long Koeur market, and the combined threats of repaying border fees, additional labour costs, and high spoilage levels if they do not sell on the day they arrive at Long Koeur market, exporters often find themselves accepting lower prices than expected for their fish. Exporters suggest that the presence of fish distribution facilities in Poipet would allow them to store fish for several days if necessary, making it possible to negotiate better prices with Thai distributors.



Workers from Cambodia making fillets at Long Koeur market, Thailand

⁷ Although it might be expected that greater competition for fish would result in higher fish prices for producers/fishers, no clear trend on prices can be drawn from interview responses on this subject.

Chapter Three

Overview of Costs and Fees to Export Fish

Fish exporters face many challenges and risks in purchasing, storing, aggregating, and transporting fish for export. As indicated in previous studies, key trade constraints include high transportation costs, fees, and spoilage rates (Enterprise Development Cambodia 2002, Ministry of Commerce 2001). To date, however, no quantitative assessment has been undertaken to determine the costs associated with these constraints. Without a quantification of costs, it is difficult to determine which problems – poor roads, fuel costs, fees, spoilage rates – are most burdensome and should be the highest priorities for policy interventions.

Understanding export constraints and costs is important because they negatively affect the income earned by small- and medium-scale fishers and others working in the fisheries sector. This is a critical point. The costs, fees, uncertainty, and risks associated with fish export make it difficult for exporters to earn a profit. To stay in business, they must reduce prices offered for fish, which in turn lowers the income earned by fishers. If these costs, fees, and other constraints decreased, exporter profits would increase somewhat, but much of the benefit would be passed on to fishers because exporters are intensely competing for fish supply. As one exporter at Kompong Luong landing site put it when asked how he would respond to a reduction in fees,

I would increase the purchasing price I offer to traders and fishers if fees were reduced, of course, because of the high competition among exporters [for fish].

In this Chapter, the various costs of exporting fish are quantified based on interviews with exporters operating from five landing sites around the Great Lake and observations of their fish shipments to Long Koeur market in Thailand. Margin and cost analysis indicates that exporters operating from all five landing sites face similar problems – burdensome fees and thin profit margins (Table 3.1). There is little variation in prices, costs, fees, and profit margins across the five landing sites.⁸

For a typical mixture of several fish species exported in January 2003, exporters paid an average purchase price to traders/fishers of R4,370 per kg. These same fish could then be sold at Long Koeur market for an average price of R5,430 per kg, providing a gross margin of R1,060 per kg. However, after subtracting trade costs and fees, earnings to exporters dropped to only R148 per kg of fish (or about \$38 per tonne). Such earnings represent an annual rate of return of roughly 10-60 percent, depending on the exporter. This wide range reflects uncertainties about data collected on invested capital, amount of fish exports, and profit levels. Nonetheless, this range suggests that many fish exporters may be running marginal businesses since their returns are lower than the opportunity cost of capital (on an annual basis, borrowing rates for exporters average about 60-72 percent).

⁸ Appendix B: Detailed Margin and Costs Analysis of Fish Export in Cambodia for Five Export Routes (January 2003) provides more detailed information on prices, costs, fees, and profit margins.

Table 3.1. Margin and Cost Analysis of Fish Export in Cambodia for Five Export Routes: Great Lake to Long Koeur Market in Thailand (January 2003)

Margins, Costs, and Profit	Average for All Five Trade Routes		Range: Low and High Estimates ^a
	Riel/kg ^b	\$/tonne	\$/tonne
Buying price (landing site)	4,370	1,106	937 – 1,241
Selling price (Thai market)	5,430	1,375	1,223 – 1,499
Gross margin ^c	1,060	269	258 – 286
Trade costs ^d	586	148	131 – 182
Fees	326	83	76 – 90
Profit margin ^e	148	38	27 – 50

^a Estimates are based on the average calculated for each of the five trade routes studied (see Appendix B).

^b Exchange rate: 3,950 riels = \$1 US.

^c Gross margin is equal to selling price minus buying price.

^d Trade costs include all costs of conducting export business/trade (operating costs, capital costs, and weight loss and spoilage), excluding fees.

^e Profit margin refers to the net income earned by the exporter on the transaction. It includes profit to the business and an implicit salary for the exporter, which means actual profit is lower than what is estimated here. It was not possible to separate the exporter's business profit from his/her implicit salary.

3.1. Trade Costs

Costs incurred by exporters to store, aggregate, and load fish onto a truck at the landing site, and transport the fish for export to Long Koeur market, are referred to here as “trade costs”. All fees that exporters pay to officials (at the landing site, along the road, and at the border) have been *excluded* from trade costs. This has been done to allow for a cost analysis that separates typical business-related trade costs from fees and taxes imposed under various policies and regulations.

As noted in Table 3.1, trade costs averaged \$148 per tonne across the five landing sites studied in January 2003. To assess which trade costs were most significant, costs have been divided into three major categories – operating costs, capital costs, and spoilage/weight loss (Table 3.2). Operating costs refer to ordinary everyday business expenses, including transportation, labour, ice, materials, and financing (working capital and losses on loans provided to traders). Investments in long-term assets, such as vehicles and boats, are accounted for under capital costs.

Spoilage and weight loss refers to the reduction in fish amount/weight from the point of purchase at the landing site to the point of sale at Long Koeur market. While this cost estimate reflects the reduction in fish weight, costs associated with reduced quality (where fish have not been discarded) are not included. It was not possible under this research to analyse changes in fish quality or how these changes might affect prices received by exporters at Long Koeur market. Therefore, actual costs due to spoilage are likely to be higher than estimates provided in this study.

Table 3.2. Summary of Trade Costs

Items	Trade Costs		Percent of Total Trade Costs	
	Riel/kg of fish exported	\$/tonne of fish exported	Subtotal	Total
Operating costs	354	89.7		60%
Transportation	102	25.8	17%	
Working capital	85	21.6	15%	
Ice	85	21.5	15%	
Materials/other	38	9.6	6%	
Labour	25	6.3	4%	
Loan loss	19	4.8	3%	
Spoilage/weight loss	201	50.8		34%
Capital costs	31	7.9		5%
Total Trade Costs	586	148.4		100%

3.1.1. Operating Costs

Operating costs represent the greatest proportion of trade costs (60 percent) – the main costs being transportation, ice, and working capital. Exporters spend an average of \$26 per tonne on transportation, much of this due to the fuel costs involved with a long roundtrip. Transport costs vary among the five landing sites, from about \$13 to \$30 per tonne, depending on the distance travelled and the size of truck used for shipment (i.e., larger truck shipments reduce the cost per tonne). For example, transportation costs are the highest for small fish shipments (e.g., 2-3 tonnes) transported by pick-up trucks over long distances, such as from the Provincial Town of Kompong Chhnang to Thailand. Transport costs drop significantly for larger fish shipments transported over shorter distances, such as from Battambang to Thailand (see trade costs for each route in Appendix B).

Exporters require a great deal of ice to maintain fish quality, both to store fish while collecting enough for a shipment and for transport from the landing site to Thailand. On average, for every tonne of fish they export, exporters use about one tonne of ice for storage and transport. While ice prices range from \$16 to \$19 per tonne at four of the landing sites, exporters at Chong Khneas pay almost \$30 per tonne because no ice-making companies operate at the landing site. Ice is shipped to the landing site from the Provincial Town of Siem Reap, which is about 15 km away. This ice is of a somewhat higher quality because it is made from treated water, whereas ice-making companies located at landing sites use water directly from the Great Lake. It is unclear why no ice-making businesses have been established at Chong Khneas.

Working capital represents another important cost in the export of fish. Working capital is the amount of cash that exporters must keep on-hand to operate their business, whether it be to purchase fish and other materials, pay wages, or pay for transportation. There is an “opportunity cost” to working capital, since this cash could be used for other investment purposes but is instead held within the business. On average, exporters need about \$13,000 in working capital, but this amount can range from \$2,500 to \$25,000 depending on the exporter and the season (open or closed, peak or non-peak). Based on a typical lending rate at the landing sites of five percent per month, working capital costs are estimated to be about \$22 per tonne of fish exported.

Additional operating costs include hired labour, materials (e.g., containers, plastic sheets), and losses on loans to traders. Exporters provide loans to traders so they can purchase fish from fishers, and occasionally traders disappear before repaying loans. Annually, such loan losses for exporters amount to only about three percent of costs. Although most exporters complain about loan losses, it appears to be a minor problem compared to other business costs, such as transportation and spoilage/weight loss.

3.1.2. Spoilage/Weight Loss

On average, spoilage/weight loss accounts for 34 percent of trade costs, or about \$51 per tonne. Clearly, this is a major cost. From the time of purchase at the landing site to sale at Long Koeur market, exporters estimate that their shipment decreases by about 3-5% in weight due to spoilage, loss of internal fish matter, evaporation, and other factors. However, weight loss can vary depending on the fish species and the season. For example, weight loss may reach 10 percent of a shipment during fish spawning season as these fish tend to lose their eggs during transport.

Spoilage/weight loss occurs for several reasons. First, exporters may keep purchased fish in containers on ice for several days before making an export shipment, during which time fish begin to degrade. Second, exporters transport fish by taking them out of their storage containers at the landing site and loading them directly into pick-up trucks and trucks. Although ice is thrown/mixed in with the fish, no containers are used for transport, so ice melts rapidly during the trip. This approach contrasts with Thai distributors at Long Koeur

market. To maintain quality, Thai distributors immediately put fish imported from Cambodia into containers with ice for transport and distribution.



Fish pickup truck travelling from Chhnok Tru (Kompong Chhnang) to Poipet delayed by flat tire

Cambodian exporters indicate they would prefer to ship fish in containers as is done in Thailand, but they claim this will result in a steep increase in fee payments, as officials will argue that “high quality” fish in containers require a higher payment. Such an increase in fees would outweigh any benefits from reduced spoilage and weight loss. By loading fish directly into trucks, exporters can keep their fee payments down by arguing that they are only transporting low quality fish.

Third, in making a shipment from a landing site around the Great Lake to Long Koeur market, fish are loaded and unloaded several times. For example, fish may be transferred from an exporter’s storage containers at a floating village to a *balang* (ferry boat), from a *balang* to a truck at the landing site, and from a truck to a large pushcart at Poipet (as required for border crossing), before being pushed across the border to Long Koeur market. The amount of handling, transferring, and removing/adding ice is likely to contribute significantly to spoilage and weight loss.



Fish loaded into a ferry boat at floating village for transport to landing site



Fish at landing site being loaded into a pickup truck for export



Fish being transferred from a pickup truck to a pushcart, Poipet, Banteay Meanchey



Laborers pushing fish cart across the border at Poipet to Long Koeur market, Thailand

3.1.3. Capital Costs

Capital costs are generally low, averaging about five percent of costs. This may reflect reluctance among exporters to invest in fixed assets due to uncertainties about future business. On average, exporters have invested about \$8,000 (range from \$4,000-\$13,000) in capital equipment, such as trucks, boats, containers, and scales. Exporters who want to minimise capital costs may hire/rent trucks for fish transport rather than purchase their own.

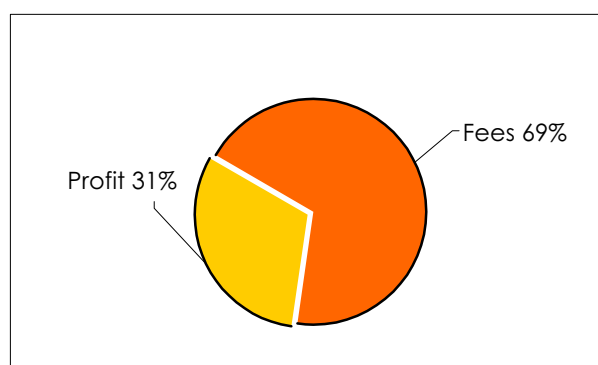
3.2. Fees (From Landing Site to Export)

Exporters make fee payments on shipments of fish at the landing site, at checkpoints along the road, and on both the Cambodian and Thai sides of the border, before reaching Long Koeur market. All fees are either informal payments or payments made on an official basis but not at the official rate (see Chapter 4 for a detailed discussion of the license, permit, and fee system). From the five landing sites studied to Long Koeur market, total fees range from \$76 to \$90 per tonne, with an average of \$83 per tonne (Table 3.1 above). Such fees add more than 50 percent to the total costs of exporting fish – from \$148 to \$231 per tonne. Indeed, fees were greater than the sum of the two highest business-related trade costs – spoilage/weight loss (\$51 per tonne) and transportation (\$26 per tonne). While there may be some scope for

lowering spoilage and transportation costs, a significant reduction in fish export costs cannot occur without a focus on reducing fees.

Fees dramatically reduce the amount of profit that can be earned on fish exports from the five landing sites. While fish exporters earn an average of \$38 per tonne, fees accounted for \$83 per tonne, suggesting that without fees profit could amount to \$121 per tonne – an increase in profit of more than 200 percent. Put differently, fees are effectively imposing a tax on exporter profits of close to 70 percent (Figure 3.1). This fee rate appears very high when compared to the tax rates imposed on the profits of other businesses (including those exporting). For instance, the *Law on Taxation* (1997) sets a range for tax on business profits from five percent up to a maximum of 20 percent.

Figure 3.1. Fees as Percentage of Potential Profit



3.3. Fees (From Fisheries to Landing Site)

The average fee of \$83 per tonne discussed in section 3.2 encompasses all payments from the landing site to Long Koeur market, but does not include fees charged on fishing activities before the fish catch reaches the landing site. Although a full assessment of these fees is beyond the scope of this study, interviews with a sample of 25 fishers operating in Kompong Chhnang and Chong Khneas, Siem Reap provide a useful indication of the fee types and amounts imposed on fishing activities.

Fees charged on fishing need to be viewed in the context of recent reform efforts. Initiated by the Prime Minister in October 2000, fisheries sector reforms have most notably resulted in the release of 56 percent of fishing lot areas, making these areas open to public access. The reforms have also aimed at eliminating licensing fees for middle-scale fishers (*Sub-decree on the Abolition of Tax on Middle-Scale Fishing Gears*, No. 24 Or-No-Kror, February 2001). However, middle-scale fishers are still required to obtain a license at no cost, as required under the *Law on Management of the Fisheries Sector of 1987* (No. 33 Kro-Chor). This law also requires large-scale fishers to obtain a license, but small-scale fishers do not need a license to fish.

Based on interviews with 25 small- and middle-scale fishers, fisheries sector reforms appear to have had some positive impacts on the livelihoods of fishers. Small-scale fishers in Kompong Chhnang and Chong Khneas noted that they now have more access to fishing grounds and fee levels are significantly lower than before the reform. For middle-scale fishers, the picture is somewhat more mixed. They continue to pay “sentimental” fees to get licenses for their fishing gear, despite the official elimination of these fees under the sub-decree. Middle-scale fishers also suggest that the release of the lot areas has not significantly affected their fish catches. These areas were known to be less productive before their release, and the decline in their productivity continues. Therefore, middle-scale fishers commonly pay for the right to fish in more productive (but legally restricted) fishing grounds such as fish sanctuaries (protected conservation areas).

Fishers pay fees to fisheries officials, economic police, military police, and water traffic police. For middle-scale fishers interviewed for this study, fees amounted to roughly \$18 per tonne of fish.⁹ This reflects payments for gear licenses, rights to fish in restricted fishing areas, rights to fish in public fishing areas, boat engine permits, landing site access, and license and permit “checking” by officials.¹⁰ The highest fees are for rights to fish in restricted areas, followed by fees for gear licenses.

Notably, a “one-stop service” has emerged recently at Kompong Luong for fee payments by middle-scale fishers for gear licenses and fishing rights. In the past, middle-scale fishers needed to approach each concerned institution to negotiate licenses, fees, and fishing rights on a frequent basis (e.g., fishing rights might be negotiated each fishing trip). Under the new “one-stop” approach, middle-scale fishers can save time by paying a lump-sum cash amount to high-ranking government officials, who will then negotiate/share the payment among all involved institutions. In return for this single payment, middle-scale fishers receive gear licenses and fishing rights in specified areas for a designated period (often six months to one year). The payment does not cover fees associated with boat engine permits, landing site access, and other permit “checking” activities.

3.4 Summary

Data collected on fish exports from the five landing sites studied indicate, with little variation, that exporters face significant fee charges that absorb a large proportion of their potential earnings. At \$83 per tonne, fees add more than 50 percent to the costs of exporting fish. Indeed, fees represent the highest component of export costs, followed by spoilage/weight loss (\$51 per tonne) and transportation (\$26 per tonne). Average profit margins are estimated to be about \$38 per tonne. The fact that fees levels are more than twice as much as the profit margin earned on fish exports is a strong indication of the widespread “rent-seeking” activity of government institutions and officials (see Chapter 5). Fee extraction is maximised to the point where exporters report their foremost goal is business survival; investment and business growth are not viewed as possible.

⁹ It is important to emphasise that, as this fee estimate is based on only a few middle-scale fishers out of thousands of fishers operating in the Great Lake, it should be viewed as indicative. Fees likely vary considerably around the Great Lake. It was not possible, within the scope of this study, to collect cost data that would support an estimate comparing fees to overall fishing costs.

¹⁰ In cases where fishers sell to traders on the lake, traders will be subject to the landing site fees and boat engine permit “checking” fees.

Regulatory Framework for Fish Exports

This Chapter describes how the official license, permit, and fee system governing fish exports is designed to function according to laws and regulations, and how the system actually works in practice. The focus is on overland exports from the Great Lake to Thailand. It is recognised that the system and practice may vary for fish exports by other means (air, boat) and by other routes to different destinations (Vietnam, other countries), but these export routes are not covered here.

4.1. The Official Regulatory System

Under the official system, a company that would like to export fish must apply to the Ministry of Agriculture, Forestry and Fisheries (MAFF) for a letter to support an export license. The application to MAFF includes an estimate of the quantity of fish, according to three quality classifications (Grade 1-3), that the company expects to export during the one-year license period. The application also includes estimates of the average purchasing price the company expects to pay for fish supply in each quality classification. This price information will be used by customs at the border to calculate the appropriate export tax for a shipment (i.e., 10 percent of the value of the shipment). After review and approval of the application, MAFF issues a letter to the Customs Department, Ministry of Economy and Finance. This Department reviews the application and, with approval, issues an export license.

At the landing site, before an exporter can make a shipment of fish, a transport permit must be obtained from the Provincial Fisheries Office and Provincial Department of Agriculture, Forestry and Fisheries, as required under the *Sub-decree on Transport of Fisheries Products* (No. 66 Or-No-Kror, 5 November 1988). The official rate for the permit is R30 per kg of fish in the shipment. According to Department of Fisheries officials, the purpose of the transport permit is to manage fish distribution, raise revenue, and maintain fish trade statistics.

Under the official system, no other licenses, permits, or fees are required until reaching the border. On the Cambodian side of the border, the Customs Department charges exporters a 10 percent tax on the value of the shipment (as discussed above). In addition, Camcontrol of the Ministry of Commerce charges 0.1 percent tax on the value of the shipment. Camcontrol is responsible for quality control of imports and exports.

4.2. The System in Practice

In practice, the vast majority of exporters operating around the Great Lake do not hold official licenses to export. Instead they work through an informal process involving numerous fee payments to a variety of institutions at the landing site, along the road, and at the border. Surprisingly, licensed exporters report that they must make the same series of informal payments as unlicensed exporters, despite having a license from the Customs Department in Phnom Penh. Since many payments have no clear legal basis and may differ from trip to trip, exporters complain that the arbitrariness of payments makes operating a business very difficult because of uncertainty about costs.

Based on interviews with exporters and observations of fish shipments, there are no instances in which official fees are paid in accordance with the official rate. All fees are negotiated. Since most official fees are based on fish quantity and/or value of the fish shipment, the most common method used by officials to collect informal payments is to vastly underreport fish quantities in licenses and permits. Such underreporting allows officials to negotiate an informal payment on top of the much-reduced official fee.

In contrast to the official system outlined in section 4.1 above, the actual requirements for exporting fish from landing sites around the Great Lake to Thailand include the following steps:

1. Exporters obtain a transport permit from the Provincial Fisheries Office and Provincial Department of Agriculture, Forestry and Fisheries before making a fish shipment. Although these officials charge the correct rate of R30 per kg, the rate is assessed on a much smaller quantity of fish than are actually present in the shipment. By reducing the quantity formally recorded, officials can negotiate with exporters for an additional informal payment. Based on interviews and observations, a transport permit commonly notes only about one-fourth to one-tenth of an actual shipment amount. For instance, a permit will generally indicate 300-500 kg for an actual shipment of 2-3 tonnes or 1-1.5 tonnes for a shipment of 4-6 tonnes.
2. Some unlicensed exporters continue to apply to KAMFIMEX agents stationed at landing sites for a "Sending Goods" letter, even though this requirement no longer appears necessary (see section 2.4.1). These exporters pay a fee of R200 per kg, but this is based on the small quantity recorded in the transport permit, not the actual shipment amount. An informal payment is made on top of this fee.
3. Exporters pay a number of other informal fees at the landing site. Economic police and provincial fisheries authorities (other than those who issued the transport permit) "check" the transport permit of exporters, and upon noting that the amount being shipped is much higher than what is recorded in the permit, extract a fee. Military police also collect fees.
4. Exporters often pay fees to companies that have invested in the rehabilitation of roads from the landing site to the national road. These companies have obtained contracts for specified periods from the government to repair and maintain the road. In return, they can collect a fee from users of the road. This fee is set at R40 per kg of fish being transported from Chhnok Tru and Kompong Luong landing sites, while exporters at Provincial Town of Kompong Chhnang pay R45 per kg to the local port authority. In practice, fee payments tend to be a little more than half of the official rate, depending on negotiations.
5. Following transactions at the landing site, exporters transport their fish by pick-up trucks or larger trucks to Poipet. In transit, they pay a number of informal fees to various institutions stationed at checkpoints. Exporters may deal with checkpoints directly or hire a "checkpoint fee broker" to facilitate fee payments along the road (see section 4.2.1. on the role of brokers).
6. At the fish transfer site in Poipet, fish are unloaded from trucks and loaded into pushcarts. Officials stationed at the transfer site from Department of Fisheries and Banteay Meanchey Provincial Fisheries Office "check" transport permits and collect fees.
7. In crossing the border, exporters may deal with fee payments directly or hire a "border fee broker" to facilitate payments. Fees are paid to Cambodian Camcontrol, as well as customs and immigration/military police on both the Cambodian and Thai sides of the border. As with other fees, these payments are negotiated. Finally, exporters pay an entrance fee at Long Koeur market where they sell their fish.

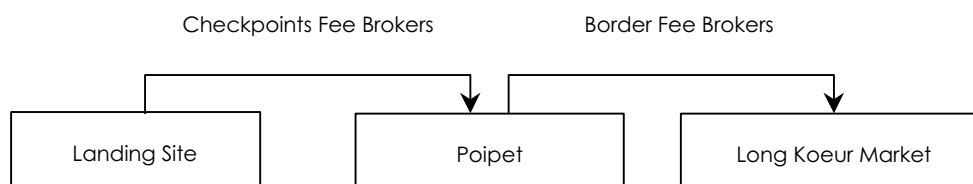
Altogether, the steps to export fish from the Great Lake to Thailand usually take about a day. Landing site activities are generally conducted during the afternoon and early evening (steps 1-4), fish are then transported at night (step 5), transferred to pushcarts in the morning (step 6), and taken across the border and sold by late-morning to early afternoon (step 7).

4.2.1. The Role of Fee Brokers

Two types of brokers facilitate fee payments for fish export activities – checkpoint brokers and border brokers. These brokers appear to have emerged in response to the arbitrariness of fees in fish export. Their services provide exporters with a level of certainty about export costs. As shown in Figure 4.1, checkpoint brokers take responsibility for all fee payments from the landing site to the fish transfer site in Poipet. They charge exporters three baht per kg (or \$70 per tonne) of fish in the shipment, with the shipment amount determined through negotiation (less than actual shipment amount).¹¹ Likewise, border brokers take responsibility for fee payments on both sides of the border, charging two baht per kg (or \$47 per tonne) for their services. Thus, in return for certainty about fees for a shipment from the Great Lake to Thailand, exporters can pay brokers \$117 per tonne. While the broker charge is \$34 per tonne more than the average fees for fish export (\$83 per tonne) estimated by this study, these two estimates should not be compared. The \$83-per-tonne estimate is based on *actual* shipment amounts, whereas broker charges are based on a *negotiated* shipment amount (i.e., less than the actual amount).

According to interviews, brokers are current or past officials in government, military, or military police (or they have relatives in these institutions). Through these positions, these individuals have established relations with fee collecting institutions, making it possible for them to pay lower fees and have greater certainty about fee charges than exporters who pay fees directly. While only some exporters use checkpoint brokers, it appears that all use border brokers. This study identified six border brokers operating in Poipet, but was unable to determine the number of checkpoint brokers working at landing sites around the Great Lake.

Figure 4.1. Illustration of the Activities of Brokers



4.2.2. Open and Closed Fishing Season: Official Regulation and Actual Practice

Regulation of the fisheries sector changes depending on whether it is “open” or “closed” fishing season. Officially, no large- or medium-scale fishing (as defined by fishing gear) is allowed during the closed season.¹² Small-scale fishing is allowed throughout the year (including during the closed season), but the law intends for this fishing to be for subsistence purposes, not commercial trade. To ensure that commercial trade of fish remains limited during the closed season, the requirements for a transport permit are stricter during this period. A permit is required for freshwater fish shipments of over 200 kg during open fishing season, but this drops to over 60 kg during the closed season.

Although official regulations are intended to limit large- and medium-scale fishing and trade activities during the closed season, these regulations appear to be commonly

¹¹ Exchange rate: 42 baht = \$1 US.

¹² The closed season for fishing is for four months each year, from June 1 to September 30 north of Phnom Penh, and from July 1 to October 31 south of Phnom Penh.

circumvented. In interviews with exporters and their suppliers (fishers, traders, and wholesalers), nearly all indicated that they operate year round. They note that during the closed season high water levels and other factors make fishing more difficult and less productive, which significantly reduces trade and export activity. Enforcement of closed season regulations, however, does not represent a significant impediment to those who want to fish, trade, and export.

For example, exporters commonly apply for a “fish stock license” during the closed season. Under the *Law on Management of the Fisheries Sector of 1987* (No. 33 Kror-Chor), this license allows exporters to hold a specified amount of fish in fish cages, either for fish raising purposes or to speculate on prices. When the exporter is ready to sell, the “stocked” fish can be legally shipped, even if it is the closed season. In practice, exporters holding fish stock licenses often have no stocked fish during the closed season. Rather they continue to buy fish from fishers, traders, and wholesalers, for export as they did during the open season. The fish stock license is simply used as a basis for trading and exporting these fish during the closed season.

4.3. Summary

Actual practices undertaken to export fish bear little resemblance to what is required under the official regulatory system. Most fish shipped through Poipet are exported without a license throughout the year, regardless of closed season regulations. Fees are either charged with no legal basis, or, where a legal basis exists, negotiated to support informal payments. For example, fisheries officials record only one-fourth to one-tenth of the actual shipment amount in transport permits so that they can negotiate informal payments with exporters. Due to the arbitrariness of fee charges, brokers have begun providing the service of taking responsibility for checkpoint and border fee payments in return for a set price. These broker services function similar to an informal insurance program – exporters can transfer risks of high fee payments to brokers in exchange for cost certainty (a set price).

Analysis of Fees for Fish Export¹³

The severe impact that fee payments have on the profitability of exporting fish warrants further analysis to assess which institutions are involved in fee collection, their legal/regulatory basis for collecting fees, the typical amount of these fees, the stages of trade at which most fees are collected, and how official rates compare to actual fee payments. To support this assessment, a detailed analysis is conducted below of a shipment from Chhnok Tru in Kompong Chhnang province to Long Koeur market in Thailand (see box).

Information on this shipment was collected through interviews with the exporter and his assistants, and through direct observations made while travelling with the shipment from the landing site to Long Koeur market. Based on analysis of interview information from five landing sites, and comparison to two other observed shipments from Kompong Luong and Chong Kneas, the shipment from Chhnok Tru to Long Koeur market can be viewed as “representative” – it is a typical shipment made under the conditions and constraints common to fish trade and export. For example, fees on the shipment amounted to \$76 per tonne, slightly less than the average for five landing sites of \$83 per tonne (see *Appendix B* for more information on fee levels for exports from different landing sites).

5.1. Detailed Summary of Fee Payments

Table 5.1 presents a detailed summary of fees encountered during the export of a 3.1-tonne fish shipment from Chhnok Tru to Long Koeur market. In addition to fee amounts, Table 5.1 indicates where fees were collected, the institutions collecting them, and the basis (if any) for collection. In total, fee payments of \$236 were made to export the 3.1-tonne shipment of fish (equal to \$76 per tonne). This involved 27 different fee payments to 15 institutions in 16 different places (i.e., landing site, 13 checkpoints, and two sides of the border). Of the many payments, the most significant fees are paid for:

- **Transport permit** – The transport permit requirement provides the most common basis for informal fee collection. It was established as a control mechanism for domestic trade across provincial boundaries under a planned economy (*Sub-decree on Transport of Fisheries Products*, No. 66 Or-No-Kror, 5 November 1988). Fees associated with the issuing and checking of the transport permit amount to \$17-\$20 per tonne.
- **Customs taxes** – Although the official fish export tax rate of Cambodian Customs Department is 10 percent, in practice exporters pay a little less than one percent (about \$7-\$8 per tonne). It is important to recognise, however, that compliance with the official rate would likely be impossible for exporters (see section 5.4 below). Exporters pay \$19 per tonne, the largest single fee of their trip, to the Thai Customs Department. Although an assessment of fees charged in Thailand was beyond the

¹³ Much of Chapter 5 was previously reported in Yim, C. and B. McKenney, “Great Lake Fish Exports: An Analysis of the Fee System”, *Cambodia Development Review*, Vol. 7, Issue 3, July-September 2003.

scope of this study, the significance of the Thai customs fee on fish imports from Cambodia may make it an appropriate topic for future trade discussions.

- **Road repair and maintenance** – Under contract with the government, an investment company holds responsibility for repair and maintenance of the road linking the landing site at Chhnok Tru to the national road. In return, the company charges road users a fee of about \$6-\$7 per tonne.
- **Issuance of “Sending Goods” letters by KAMFIMEX agents** – As noted in section 2.4.1, KAMFIMEX no longer plays a significant role in fish exports, but some KAMFIMEX agents continue to issue unnecessary “Sending Goods” letters for a fee of about \$5 per tonne.
- ***Pheasi* (Ban Sambath House)** – *Pheasi* refers to a fee that a private company is allowed to collect under an agreement with the government. Ban Sambath House has received licenses and approvals from the governor’s office of Banteay Meanchey and the Ministry of Economy and Finance to collect *pheasi* of 0.8-4 baht for every kg of fish exported. In practice, exporters only pay about 0.1-0.2 baht per kg (or about \$3 per tonne). In return, Ban Sambath House pays 10 million riels (about \$2,500) annually to the Banteay Meanchey provincial treasury. Exporters complained bitterly about Ban Sambath House because it only collects fees; there are no services provided.



Ban Sambath house where *Pheasi* payments are collected, Poipet, Banteay Meanchey

“Following the Fish”: Observations from a Fish Export Trip*At the Landing Site*

On the afternoon of 24 January 2003, two exporters were preparing to bring their fish from Chhnok Tru in Kompong Chhnang province to Long Koeur market in Thailand. Both exporters described themselves as self-employed, operating independently without a license or formal business establishment. However, as neither exporter had enough fish to fill a pick-up truck, they had decided to share a truck to reduce trade costs. In total, they had 3,100 kg of fish (one had 2,350kg and the other had only 750kg) comprising 12 species that had taken 2-3 days to accumulate through purchases from traders.

At the floating village of Chhnok Tru, it was 4:00 p.m. when exporters started transferring fish from containers, where the fish had been stored on ice, to a *Balang* (ferry boat). The boat then brought the fish to a pick-up truck waiting at the landing site almost a kilometre away. While fish were transferred and loaded into the pick-up truck, one of the exporters applied for a transport permit issued by the Provincial Fisheries Office and the Provincial Department of Agriculture, Forestry and Fisheries. After some negotiation, only 300 kg of fish (about one-tenth of the actual amount) and three species were accounted for in the permit. According to the exporters, this is the common practice. Official fees were paid in accordance with the quantity written in the permit (300 kg) plus an additional informal fee paid to the officials issuing the permit. Next, the exporter paid fees for a "Sending Goods" letter issued by Kamfime agents and paid fees to other institutions as well. With permits in hand and a pick-up truck loaded with 3.1 tonnes of fish, a driver and the exporters' assistant left Chhnok Tru at 8:00 p.m.

Along the Road

The pick-up truck traveled through Kompong Chhnang along national road No. 5 without incident. But upon reaching Pursat province, the first of many checkpoints was encountered. In all, from Pursat to Poipet in Banteay Meanchey province, a total of 13 checkpoints were observed, manned by people from various institutions such as economic police and provincial fisheries officials. Some checkpoint operators placed temporary barricades across the road to stop all traffic, while others simply emerged from roadside areas to collect fees. Occasionally, the people operating checkpoints were asleep. The driver and assistant viewed this as “lucky” and quickly passed by without paying. In one instance, however, checkpoint operators appeared to be asleep, but were not and quickly gave chase, catching up on their motorbike. They made the driver stop and pay a fee of B100 (payments are typically made in Thai Baht at checkpoints and the border).

For most checkpoints, fees were paid quickly without comment. But in a few cases, the shipment was delayed by intense negotiations over the fee amount. In such instances, checkpoint operators argued that the assistant must pay a higher fee due to the large quantity and high quality of fish on the truck. The assistant would counter by claiming that it was a small load of low quality fish, until eventually they would arrive at an agreed fee amount.

At the border

The pick-up truck reached a parking lot at the Poipet border area around 6:30 a.m. the next day. Fees were paid to officials from Provincial Fisheries Office and Department of Fisheries, and then the assistant hired a team of ten labourers to transfer the 3.1 tonnes of fish from the pick-up truck to a large cart, push the cart to Long Koeur market, and unload it. The assistant also hired a “broker” to facilitate fee payments at the border to Camcontrol, and the customs, immigration police, and military police of Cambodia and Thailand. The fish arrived at Long Koeur market at 11:00 a.m. and were unloaded by 1:00 p.m., about 21 hours after leaving the floating village of Chhnok Tru.

Table 5.1. Summary of Fee Payments: Fish Shipment of 3.1 Tonnes from Chhnok Tru to Long Koeur Market in Thailand (January 2003)

Location	Items	Fee Collecting Institutions	Basis	Actual Fees	
				\$/tonne	\$/shipment
Kompong Chhnang	Chhnok Tru Landing Site	Provincial Fisheries	Issue Transport Permit	2.4	7.3
		Kamfimek	Issue Sending Goods Letter	4.9	15.2
		Economic Police	Check Transport Permit	1.2	3.8
		Military Police (PM)	No clear basis	0.8	2.5
	Road fee	Investment Company	Agreement with gov't allows for fee collection in return for road maintenance	6.5	20.3
Pursat	Check-points #1	Economic Police	Check Transport Permit	0.8	2.3
	2	Economic Police	Check Transport Permit	1.5	4.7
		Customs	No clear basis	0.8	2.3
Battambang	3	Economic Police	Check Transport Permit	N/A	a
	4	Military Police, city bridge	No clear basis	N/A	b
	5	Economic Police	Check Transport Permit	0.8	2.3
		Provincial Fisheries	Check Transport Permit	0.4	1.2
	6	Police (Unidentified)	Undetermined	N/A	c
Banteay Meanchey	7	Economic Police	Check Transport Permit	N/A	d
	8	Traffic Police	No clear basis	0.3	0.9
	9	Provincial Fisheries	Check Transport Permit	2.3	7.0
		Svay Taxi Station	No clear basis	0.4	1.2
	10	Economic Police, Teuk Thlar	Check Transport Permit	1.5	4.7
	11	Economic Police, O-Chrov	Check Transport Permit	1.5	4.7
	12	Ban Sambath House	Agreement with gov't allows for collection of pheasi (fee)	3.0	9.3
	13	DoF & Provin. Fish., Poipet	Check Transport Permit	5.3	16.3
Border	Khmer side	Camcontrol	0.1% Duty Tax	1.5	4.7
		Customs	10% Export Tax	7.5	23.3
		Immigration Police, PM	No clear basis	4.5	14.0
	Border broker		Profit on services after fees paid	7.5	23.3
	Thai side	Customs	Undetermined	18.8	58.2
		Immigration Police, PM	Undetermined	1.2	3.7
		Long Koeur Market	Entrance Fees	0.9	2.8
Total fee per shipment	16 locations	27 payments, 15 institutions		76.1	235.9

Note: Fees at four checkpoints were not paid because officials were sleeping, but typical fees were B150 or \$3.6 per tonne at a, B10 or \$0.2 per tonne at b, B10-B50 or \$0.2-\$1.2 per tonne at c, and B100 or \$2.4 per tonne at d. If collected, these fees would have added about B290 or \$7 per tonne.

5.2. Total Fees Collected by Different Institutions

Table 5.2 presents the total fees paid to each fee collecting institution, some of which collect fees in several different places. For example, fisheries officials stationed at Chhnok Tru landing site, roadside checkpoints, and the Poipet border area collected a total of five fee payments. Six payments were made to economic police (and two additional payments would have been made had checkpoint operators been awake). Fees paid to fisheries officials (Department and Provincial) accounted for only 20 percent of the total fees collected on the shipment in Cambodia. The remaining 80 percent of fees were collected by institutions that have no direct role in fisheries management (e.g., customs, economic police, and a road investment company).

Table 5.2. Total Fees Collected by Different Institutions: Fish Shipment of 3.1 Tonnes from Chhnok Tru to Long Koeur Market in Thailand (January 2003)

Fees Collecting Institutions	Number of different payments	Total Actual Fees		
		\$/tonne	\$/shipment	% of Fees (Cambodia)
Fisheries	5	10.3	31.8	20%
Customs	2	8.3	25.6	16%
Economic Police	6	7.2	22.4	14%
Investment Company	1	6.5	20.3	13%
Kamfimex	1	4.9	15.2	10%
Ban Sambath House	1	3.0	9.3	6%
Camcontrol	1	1.5	4.7	3%
Others ^a	6	9.8	30.2	19%
Sub Total (Cambodia)	23	51.5	159.5	100%
Thai Side of Border	4	24.6	76.4	
Total Cambodia & Thai	27	76.1	235.9	

^a Includes military police, traffic police, svay taxi station, immigration police and profit on broker services at border.

5.3. Fee Payments at Different Stages of Trade and Export

In Table 5.3, fee payments are grouped by the stage of trade and export, including landing site, checkpoints, Cambodian side of border, and Thai side of border. Notably, over half of the fees paid on the fish shipment from Chhnok Tru to Long Koeur market were collected at the border (23 percent on the Cambodian side and 32 percent on the Thai side). This suggests that any policy interventions aimed at significantly reducing fees need to address fee collection activities on both sides of the border.

Also of note, only about 21 percent of total fees were collected at the landing site – the place where fee revenue can directly support fisheries management activities. Moreover, most of this revenue is collected by institutions that are not directly involved in fisheries management. The provincial fisheries office of Kompong Chhnang – the institution responsible for fisheries management in the area where the shipment's fish were caught – only collected a very small fraction of the total fees paid on the shipment (\$7.30 or 3 percent). Of this revenue, only about \$2.30 is collected as an official fee (for issuance of the transport permit), the remainder is an informal payment.

Table 5.3. Fee Payments at Different Stages of Trade and Export: Fish Shipment of 3.1 Tonnes from Chhnok Tru to Long Koeur Market in Thailand (January 2003)

	Fees		
	(\$/tonne)	(\$/shipment)	Average %
Landing site	15.8	49.1	20.8
Checkpoints	18.3	56.8	24.1
Cambodian border	17.3	53.6	22.7
<i>Sub total (Cambodia)</i>	51.5	159.5	67.6
Thai border	24.6	76.4	32.4
Total	76.1	235.9	100.0

5.4. Actual Fees Compared to Official Fees (If Enforced)

As discussed in Chapter 4, for all fish export trips observed (including the fish shipment from Chhnok Tru to Long Koeur market), there were no instances in which official fees were paid according to the official rate. All fees were negotiated. One response to the lack of enforcement of official fee collection might be to recommend improved enforcement, but as Table 5.4 makes clear, such enforced compliance with official fees would likely put most (if not all) fish exporters out of business. For example, a profit of \$79 was earned on the fish shipment from Chhnok Tru to Long Koeur market after payment of \$236 in fees. However, if official fees had been enforced according to official rates, the fees collected on the shipment would have amounted to \$681, resulting in a loss of \$366 for the shipment. Moreover, this estimate assumes that all informal fees have been eliminated, such as fees paid to institutions that “check” the transport permit or have no clear basis for fee collection. If some informal payments continued, the loss would be even greater. Clearly, prior to any efforts to improve compliance with official fees, the fee system itself needs to be revised so that its enforcement does not result in the collapse of fish exports.

Table 5.4. Actual Fee Payments Compared to Official Fee Payments (if enforced): Fish Shipment of 3.1 Tonnes from Chhnok Tru to Long Koeur Market in Thailand (January 2003)

Fee Collecting Institutions	Official Fee Payments		Actual Fee Payments	
	\$/tonne	\$/Shipment	\$/tonne	\$/Shipment
Provincial Fisheries	7.6	23.5	2.4	7.3
Kamfimex	50.6	157	4.9	15.2
Road Investment Company	10.1	31.4	6.5	20.3
Ban Sambath House	55.9	173.3	3	9.3
Kamcontrol	0.7	2.2	1.5	4.7
Customs	70	217	7.5	23.3
Payments with no official basis ^a	0	0	25.9	79.5
<i>Subtotal in Cambodia</i>	194.9	604.4	51.7	159.6
<i>Subtotal Thailand^b</i>	24.6	76.4	24.6	76.4
Grand total	219.6	680.7	76.1	235.9
Profit before fees are paid	101.4	314.5	101.4	314.5
Profit after payment of fees	-118.2	-366.3	25.3	78.6

^a Payments made to economic police, military police, police, immigration police, provincial customs, provincial fisheries, and taxi station.

^b No information available on official rates; actual payments are assumed to reflect official rates.



Laborers unloading fish from pushcart, Long Koeur market, Thailand

5.5. Summary

Most of the findings in this Chapter are based on a case analysis of fish export fees from Chhnok Tru to Long Koeur market in Thailand. While the focus is on a specific case, the findings are consistent with information on export conditions collected in interviews at the five landing sites studied, as well as with conditions observed during two trips with export shipments from other landing sites. Thus, the case study reflects the typical conditions under which fish are exported from the Great Lake to Thailand.

Findings from the case analysis are striking. First, exporting fish from Chhnok Tru to Thailand involves 27 different fee payments to 15 institutions in 16 different places. The most significant fees are paid for issuing and “checking” transport permits, followed by payments to customs, a road investment company, and a range of institutions with no legal basis for collecting fees. Second, of the institutions collecting fees, fisheries institutions collect the greatest amount but this represents only 20 percent of total fees. Institutions with no direct role in fisheries management collect 80 percent of fees. Third, more than half of all fees are collected at the border. In contrast, the provincial fisheries office of Kompong Chhnang, which is responsible for fisheries management in the area, collects only about three percent of all fees (one percent is recorded as an official fee and two percent is collected informally). Finally, when comparing actual payments to official fees (if enforced), it is starkly clear that prior to any efforts to improve official compliance, the fee system itself needs to be overhauled. Enforcement of current regulations and fees would triple the current payments made by exporters, which would surely cause a collapse in fish exports.

Recommendations

In the promotion of fish exports, much of the focus has been on spurring investment in value-added processing, improving quality standards and control, and identifying high-value export markets. Given the lack of processing, problems with quality, and scant exports to countries other than Thailand and Vietnam, these efforts are clearly important. But they may put the proverbial “cart before the horse”. Investment and quality improvements are unlikely to come without first having significant changes in the climate for business and trade within the fisheries sector, including a substantial and credible reduction in current fees and transparency and certainty about the regulatory environment.

The combination of fees and uncertainty create enormous disincentives for investment, innovation, entrepreneurship, value-added processing, quality improvements, and even the effort to identify new markets (since new trade routes may involve establishing costly new relationships with fee collectors). According to exporters, the higher the value or quality of fish being exported, the greater the fees that will be charged. So exporters must ask themselves why they should invest in business improvements when additional profit from the investment is likely to be lost to higher fees. Consider that exporters do not want to even make the quality improvement of putting fish in containers during transport (as is done in Thailand) because they know that doing so will result in higher fees that will outweigh any additional profit earned on the quality improvement. Likewise, exporters who have investigated the cost and fees of exporting directly from Sihanoukville have decided to route fish through Bangkok where costs are lower.

Based on the findings of this study, a number of policy recommendations are highlighted below. Their implementation could lead to improved conditions and lower costs for fish trade and export, which in turn could raise income levels of small- and medium-scale fishers and others working in the fisheries sector. Recommendations are grouped under three themes: (section 6.1) improve governance and transparency, including a significant overhaul of the current license, permit, and fee system; (section 6.2) increase linkages and accountability between fee payments and fisheries management; and (section 6.3) facilitate the development of a more efficient fish trade, distribution, and export system.

6.1. Improve governance and transparency; this must include a significant overhaul of the current license, permit, and fee system

Recommendation #1

Remove the transport permit requirement for fish trade. Fish traders and exporters are currently required to obtain a transport permit to trade fish, as stipulated under the *Sub-decree on Transport of Fisheries Products* (No. 66 Or-No-Kror, 5 November 1988). The transport permit requirement was established as a control mechanism for trade in a planned economy, but appears to serve no useful purpose in Cambodia’s free market economy of today. The permit plays no effective role in fish management and data collection (due to widespread underreporting of fish quantities), while its costs and requirements run counter to policies intended to increase trade and economic growth.

Eliminating the transport permit, and all fee collection based on permit issuance and “checking”, could reduce fees by as much as \$17–\$20 per tonne, as well as reduce shipment delays and aggravations.

Recommendation #2

Eliminate fees collected by checkpoints and institutions that have no clear legal basis for collecting fees. Although strong statements by the Prime Minister have called for the removal of unauthorised checkpoints, this study identified numerous checkpoints operating on fish trade routes to Thailand. To decrease the impact of these checkpoints on fish trade (as well as other forms of trade), regular monitoring of roads is needed to identify and remove unauthorised checkpoints, and to ensure authorised checkpoints are operating in accordance with their legal mandate. Such actions could reduce fees by about \$9–\$11 per tonne.

Recommendation #3

Make a public statement that “Sending Goods” letters from KAMFIMEX are no longer required for fish export. Exporters need to be made aware through a public announcement that “Sending Goods” letters are no longer necessary for fish export because KAMFIMEX no longer functions as the sole licensed authority for fish export. This could reduce fees for some exporters by about \$5 per tonne.

Recommendation #4

End the contract with Ban Sambath House. Ban Sambath House holds licenses and approvals from the governor’s office of Banteay Meanchey and the Ministry of Economy and Finance to collect fees on fish exports. But Ban Sambath House provides no services and plays no role in fisheries or trade management; it only collects fees, making it very unpopular with fish exporters. According to the Department of Fisheries, the Ministry of Agriculture, Forestry and Fisheries is in the process of negotiating with the Banteay Meanchey governor’s office to terminate the Ban Sambath House contract. Termination would reduce fees by about \$3 per tonne.

Recommendation #5

Eliminate the 4 percent fish distribution centre fees in Battambang province. A fisheries study by the Ministry of Commerce (2001) states that “traders who distribute to the domestic market, and who transport fish through a province, pay the provincial distributor a 4 percent fee.” Two years later, this study found no such distribution fees at five landing sites around the Great Lake, except in Battambang province. Consistent with actions taken in other provinces, Battambang province should eliminate this fee.

Recommendation #6

Revise downward the 10 percent export tax charged by the Cambodian Customs Department. In practice, fish exporters currently pay an export tax of about one percent to the Cambodian Customs Department, far less than the official rate. Compliance with the official rate is impossible for most (if not all) fish exporters. For example, exporters paid \$7.50 per tonne in export tax on the shipment from Chhnok Tru to Long Koeur market, but to be in compliance with the official rate, they should have paid \$70 per tonne. Such a high payment would make most fish export unprofitable. Clearly, the fish export tax needs to be revised sharply downward to better fit exporting realities. Otherwise, continued non-compliance can be expected. Such a reduction in the export tax would also be consistent with the government’s wider efforts to promote exports.

6.2. Increase linkages and accountability between fee payments and fisheries management

Recommendation #7

Concentrate fee collection at fishing grounds to support fisheries management and enforcement; eliminate or sharply reduce fee collection elsewhere. When asked about fee payments, interviewees recognise the need to provide revenue to fisheries authorities to support management activities. Where they can see a direct linkage between their fee payments and fisheries management services, they are more willing to pay fees. In contrast, interviewees are not pleased about paying fees to institutions that have no role in fisheries management, operate far from the fisheries on roads or at the border, and provide no services. Currently, institutions with no direct role in fisheries management collect about 80 percent of all fish export fees, compared to three percent collected by fisheries officials responsible for managing the local landing site area and fishing grounds. This is a striking contrast. Given widespread concern about the sustainability of Cambodia's fisheries, it seems sensible to concentrate fee collection activities at the landing site and fishing grounds where the revenue can more directly and visibly support local fisheries management.

Recommendation #8

Establish a 'one-stop' fee payment service with transparent procedures and clearly defined fee levels. For any remaining fee requirements on fish exports, an effort should be made to establish a one-stop fee payment service. As noted in section 5.1, exporters from Chhnok Tru to Thailand made 27 different fee payments to 15 institutions in 16 different places. Establishing one-stop fee payment services with transparent procedures would help to eliminate the uncertainty and arbitrariness of the current fee collection system and reduce delays.

Recommendation #9

Consider re-imposing a fishing license fee on middle-scale fishers (if transparent fee collection is possible). In comparison to small-scale fishers, middle-scale fishers have greater capital to make higher investments in fishing gear that brings larger catches. Therefore, their fishing tends to have a greater impact on the health of fisheries than small-scale fishing activities. But under the *Sub-decree on the Abolition of Tax on Middle-Scale Fishing Gears* (No. 24 Or-No-Kror, February 2001), middle-scale fishers officially no longer have to pay tax on their fishing license, formally making their access to public fisheries as free as it is for small-scale fishers. Providing commercial fishers with free access to public fisheries resources appears to run counter to concerns about over-fishing and destructive fishing. Currently, middle-scale fishers continue to pay "sentimental" fees for licenses despite the abolition of the tax. Since these payments are informal, they do not help to build a system of accountability between tax payments and fisheries management services. Due consideration should be given as to whether an official licensing fee, collected in a transparent manner, can be re-established as this would be more consistent with good governance and sustainable fisheries management than current practices.

6.3. Facilitate the development of a more efficient fish trade, distribution, and export system

Recommendation #10

Encourage investment in the establishment of fish distribution at Poipet. Cambodian fish exporters strongly complain about their weak bargaining position for selling fish at Long Koeur market in Thailand. The combined threat of repaying border fees, incurring labour costs to transport fish across the border again, and high spoilage rates place

enormous pressure on exporters to sell their fish at the Thai market, even if the agreed upon price has dropped. A wholesale market in Poipet for fish distribution would place Cambodian exporters in a stronger negotiating position, since they would be able to store fish on ice for several days if necessary, and would not face the threat of repaying border fees or labour for fish transport across the border. The government could encourage private investment in fish distribution at Poipet by waiving distribution centre licensing requirements and fees for any willing investors. If a distribution centre is established, it should be operated according to free market and service oriented principles; there should be no *requirement* that exporters use it to export.

Recommendation #11

Remove barriers to fish export via Sihanoukville; support identification of new markets for export. Citing road fees and port costs, a major fish exporter in Cambodia indicated that the cost to export a container of fish (roughly 20 tonnes) through Sihanoukville was \$5,000 more than the cost to ship the same container from Bangkok. Currently, large amounts of fresh fish are exported through Poipet to Long Koeur market, from which Thai distributors ship a significant amount to Bangkok for domestic consumption and re-export to other markets abroad. Cambodia is in a position to export fish directly to these markets abroad, but first the markets must be identified and the costs to export through Sihanoukville must be reduced to a level competitive with Bangkok.

Recommendation #12

Support further study of the credit system in the fisheries sector. Across the fisheries sector, most fishers are in debt to traders, and most traders are in debt to exporters/wholesalers. These fishers and traders are required to sell fish exclusively to their creditors, at what may be a discounted price. This credit arrangement plays a fundamental role in the fisheries sector and warrants further study. For instance, some key issues for research include: (a) building a better understanding of the rates, terms, services, and benefits of the existing informal credit system; (b) identifying opportunities for improving the current system (e.g., through better information on fish prices, implicit interest rates, and creditor services); and (c) identifying the risks and constraints that currently inhibit formal micro-credit institutions from providing credit to traders and fishers, and assessing the potential for lending from these institutions in the future.

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Appendix A: Species and Prices of Exported Fish

No.	Species ^a	Size (Heads/Kg)	Price (R/Kg) ^b		Remarks
			Landing Sites	Long Koeur ^c	
1	Bandaul Ampov/Chang-va	Similar size for all	400-500	966	
2	Kes I	>200g/h	10,000-13,000	11,960	
	II	100g-200g/h	6,000-6,500	7,360	
	III	<100g/h	4,000-4,500	5,980	
	IV	4-5h/kg	2,000-2,500	4,232	
3	Prama I	>2.5kg/h	11,500-12,500	13,340	
	II	1kg-2.5kg/h	5,000-8,000	4,600	
	III	<1kg/h	3,000-4,500	N/A	
4	Kramom I	5-6 Heads/kg	2,500	3,680	
	II	Smaller	1,000	1,840	
5	Klanghai	Similar size for all	2,500-3,000	4,140	
6	Kcheung I	>300g/h	5,000-6,000	6,440	
	II	>200g/h	1,500-2,200	1,840	
	III	<100g/h	1,000	N/A	
7	Kampleav	Similar size for all	1,000	1,840	
8	Chhlang I	800g/h	2,000-2,500	3,220	
	II	4-5 Heads/kg	1,000-1,500	1,840	
9	Kray I	>3kg/h	3,700-4,000	4,600	
	II	1kg-2kg/h	3,000-3,500	3,680	
	III	<1kg/h	3,000	N/A	
10	Chhlaunh I	Bigger	2,500	3,680	
	II	Smaller	1,500	N/A	
11	Kanh Chruk I	Bigger	2,000-2,500	3,220	Red tail
	II	Smaller	500	1,564	Red tail
	Kanh Chruk Chhmoul		N/A	1,840	Striped body
12	Ros I	>0.5 Kg/Head	2,000-2,500	5,060	Live
	II	<0.5Kg/Head	1,500	4,600	Live
13	Chek	Similar size for all	4,000	4,600	
14	Antung Sre	20 Heads/Kg	N/A	2,760	
15	Andeng	8-9 Heads/Kg	N/A	4,600	Live
16	Slat I	4-5 Heads/kg	2,800-4,500	4,232	
	II	30 Heads/kg	2,000	3,450	
	Chiv	Smallest size	1,000	N/A	
17	Kampleanh		N/A	690	
18	Sandai I	>2kg/h	4,500-5,500	N/A	
	II	<2kg/h	2,000-3,000	N/A	
	III	<1kg/h	1,500	N/A	

^a Fish categories/classed based on fish weight and/or length

^b Fish prices identified at landing sites and Long Koeur market during research conducted from 20-26 January 2003.

^c Price at Long Koeur market in baht, converted to riel at 1 baht = 92 riels (January 2003 rate)

Appendix B: Detailed Margin and Costs Analysis of Fish Export in Cambodia for Five Export Routes (January 2003)

Margin and Cost	Export Route 1: Provincial Town/ Kompong Chhnang-Thai Market		Export Route 2: Chhnok Tru/ Kompong Chhnang-Thai Market		Export Route 3: Kompong Luong/ Pursat- Thai Market		Export Route 4: Battambang- Thai Market		Export Route 5: Chong Khneas/ Siem Reap- Thai Market		Average		Range of Averages (\$/T)		
	Riel/kg	\$/tonne	Riel/kg	\$/tonne	Riel/kg	\$/tonne	Riel/kg	\$/tonne	Riel/kg	\$/tonne	Riel/kg	\$/tonne			
Buying price (landing site)	4,724	1,196	4,903	1,241	4,154	1,052	N/A	N/A	3,699	936.5	4,370	1,106.3	936.5	-	1,241.3
Selling price (Thai market)	5,746	1,455	5,923	1,499	5,223	1,322	N/A	N/A	4,830	1,222.8	5,430	1,374.8	1,222.8	-	1,499.4
Gross margin	1,022	259	1,020	258	1,069	271	N/A	N/A	1,131	286.3	1,060	268.5	258.1	-	286.3
Trade costs ^a	528	134	583	148	517	131	595	151	717	181.6	586	148.4 ^d	130.8	-	181.6
Fees	318	81	330	83	355	90	305	77	301	76.3	326	82.6 ^d	76.3	-	90.0
Profit margin	176	45	107	27	197	50	N/A	N/A	112	28.4	148	37.5	27.1	-	49.9
Fees as % of grand total cost ^b	38%		36%		41%		34%		30%		36% ^e		30%	-	41%
Fees as % of "potential" profit ^c	64%		76%		64%		N/A		N/A		69% ^e		64%	-	76%
^a all costs related to conducting business (operating costs, working capital costs, capital costs, and spoilage/weight loss), excluding fees															
^b trade costs plus fees															
^c Profit margin plus fees															
^d average of export route 1, 2, 3 and 5 only															
^e percentage based on average figures															

Appendix C: Questionnaires

Questionnaire A

Exporter/Wholesaler Survey

Date: (DD, MM, YY).....
Interviewer's Name:.....

Code No.:

Contextual statement: Interviews for this questionnaire were carried out in a semi-structured format. Questions were not necessarily asked/answered in the order presented in the questionnaire. To begin the interview, CDRI researchers made an introduction to each interviewee to make him/her feel comfortable as follows: "We are researchers at the Cambodian Development Resource Institute (CDRI). The CDRI is a local non-governmental organization, which was established in 1990 to enhance human resource capacity in Cambodia, and to undertake research and analysis contributing to the formulation of sustainable development policies and strategies. Currently, the CDRI is doing a study on *Fresh Fish Export* by looking at constraints and challenges in this trade, and examining alternative ways to improve trade policy to benefit all stakeholders-fishers, traders, wholesaler/agent and exporters. Regarding this, we interview many other fish stakeholders and now we would like to seek your kind co-operation in giving us a short time to talk to us."

1. Background

- 1.1. Name:..... Age:.....years, Sex:.....
- 1.2. Address (commune, city/province): Tel.:.....
- 1.3. Main occupation:
- 1.4. What export company are you affiliated with?
a. Kamfimec b. CDCO c. Independent/other
- 1.5. How long have you been in this business?Years or since:
- 1.6. Do you do this business year round, seasonal, opened/closed fishing season?
.....
- 1.7. Where and who do you usually buy fish from (fishing lot or outside fishing lot) at different times of the year? How many traders/fishers who sell fish to you at different times of the year and who are they (with contact information)?
.....
- 1.8. Do you sell fish to an export company exclusively or to many exporters? Do you sell fish in Poipet or sell at Thai market (whether they cross the border or not?/end of business transaction)
.....

Marketing Chain Flow Chart

(Reminder: Links in chain and how they differ based on place, person, species, season, etc.)

- 1.9. What are typical fish species purchased during different times of the year? (List down a few)
 - a) Specialized:.....
 - b) Any species:.....

2. Fish Buying

- 2.1. How do you decide which fish to buy from fishers/traders?
 - whatever is available, I buy it
 - focus on specific species
 - knowledge of demand/request from *export company* compared to what I have to pay fisher/trader
 - knowledge of *prices at Poipet/Thai markets* compared to what I have to pay fisher/trader
 - Other (specify)
- 2.2. How long does it take to buy enough fish to fill your truck (or other transport)? How often do you transport fish to sell in Poipet or Thai markets? (trucks/tons per days)
- 2.3. What are the main factors that affect fish price? How do you set prices with the export company or Thai distributors at market?
- 2.4. How do you get price information? Do you face constraints in getting price information?
- 2.5. What is the trend for fish trade over the past three years? (by species traded, by small vs large fish)
 - a. Are fishers/producers providing more or less fish catch?
 - b. Are there more or less fishers/producers?
 - c. Are there more or less traders in fish trade?
 - d. Are there more or less wholesalers/agents like you?
 - e. Is the fish price generally higher or lower?

3. Loan

- 3.1. Do you offer loans to fishers/traders as part of your fish wholesale business? (circle *Yes* or *No*)
Yes (go to "a") or No (go to 3.5.)
 - a. Number of fishers/traders who you have lent cash to:.....persons
 - b. Loans per fishers/traders range from to
 - c. Common loan per fishers/traders
- 3.2. Do fishers/traders who borrow money from you sell to you exclusively? If so, why?
- 3.3. Are there any fishers/traders who are not borrowers that sell to you?
- 3.4. How many fishers/traders who borrowed money from you and run away with loans in your business experience? Can you take any action?
- 3.5. Do wholesalers/agents typically borrow money from the export company or others? How much do they typically need to borrow to support their business?
- 3.6. What is the typical structure of these loan arrangements?

(When and why do you typically get loans? {need money to buy fish, ceremonies, health costs, other expense}, Do you sell fish at a different price to export company/any difference in prices for borrowers compared to non-borrowers, How much time do you have to pay back the loan (with cash, fish)?, What is the interest rate (IR)?)

.....

4. *Economic Aspects*

Items	Variables	Current	Typical
Purchasing expense	Amount of fish transported per trip (opened & closed season) Price at which fish are bought from fishers/traders		
Operating cost	Means of transportation		
	Labor to load fish into truck		
	Liters of gasoline used for trip to/from your stance/house to Poipet/Thai market, gasoline cost		
	Typical wage of hired transport drivers & assistants (per truck) and other paid expenses (food & drink)		
	Amount of ice needed to preserve fish		
	Amount of plastic bags to pack fish		
	Baskets, bags, strings, mates		
	Telephone & other expense relative to export		
Capital cost	Truck		
	Annual repairing cost for the truck		
	Container, scale		
	Other capital equipment & annual repair cost		
Formal fee	Annual fee -- Transport license		
	Landing site		
	Custom		
	Fisheries		
	Economic Police		
	PM		
	CDCO/KAMFIMEX		
	Other official fee – tax per unit		
Informal fee	Checkpoint fee per trip		
	Other informal fee		
Spoilage and Waste	Wastage: spoiled fish & other lost weight (drying) during preserving & transportation & selling		
Selling Price	Price at which fish are sold to Export Company or Thai distributors		

5. *Information on Poipet transactions*

- "Actual" tonnage of fish:
- "Actual" value of fish:
- Tonnage recorded on permit:
- Formal fee as recorded on permit:
- Other informal fee paid in provinces & Poipet:

6. *Of the various problems you face, which are the biggest constraints/challenges you face in running your business and how do you manage/overcome with them?*

.....

7. *In the next two years, do you plan to*

- a) maintain current business
 - b) expand business or
 - c) reduce export activities
 - c) close business/stop exporting?
-(explain if possible)

8. *What types of change would you like to see in your fish export/wholesale business in the future?*

.....

Thank you very much for your kind cooperation.

Questionnaire B

Questionnaire for KAMFIMEX

KAMFIMEX address:

Date: (DD, MM, YY).....

Interviewer's Name:.....

Code No.:

Contextual statement: Interviews for this questionnaire were carried out in a semi-structured format. Questions were not necessarily asked/answered in the order presented in the questionnaire. To begin the interview, CDRI researchers made an introduction to each interviewee to make him/her feel comfortable as follows: "We are researchers at the Cambodian Development Resource Institute (CDRI). The CDRI is a local non-governmental organization, which was established in 1990 to enhance human resource capacity in Cambodia, and to undertake research and analysis contributing to the formulation of sustainable development policies and strategies. Currently, the CDRI is doing a study on *Fresh Fish Export* by looking at constraints and challenges in this trade, and examining alternative ways to improve trade policy to benefit all stakeholders-fishers, traders, wholesaler/agent and exporters. Regarding this, we interview many other fish stakeholders and now we would like to seek your kind co-operation in giving us a short time to talk to us."

1. Background:

- 1.1. Name:..... Age:.....years, Sex:..... Position/relationship to the owner:
- 1.2. Address (city/province):..... Tel:.....
- 1.3. How long have you invested in this business?Years or since:
- 1.4. Would you allow us to know a brief history of the Company existence? (When and how it exists, How do you have the right to export fish? A license/sub-decree was issued? Which government ministries/departments interact with your business?)
.....
- 1.5. How is your Company functioning, where does your Company serve fish from (provinces, landing sites) at different times of the year, and where do you sell fish to?
.....
- 1.6. How do you recruit wholesalers/agents?
- 1.7. How many wholesalers/agents are affiliated with your Company and where are they located?
.....
- 1.8. Are there any other export companies, besides you and CDCO, whether they (other exporters) are currently operating?
.....

2. Similarities and differences with CDCO

- 2.1. What is your company's approach in managing fish export compared to CDCO?
.....
- 2.2. What are the opportunities and constraints you face in running your fish export and how do you manage them compared to CDCO?
.....
- 2.3. How do you have access to *new* wholesalers/agents and buyers compared to CDCO?
.....
- 2.4. How is export license arranged compared to CDCO?
.....
- 2.5. Have you seen a letter dated Dec. 26 2002 from the Council of Ministers to the Ministry of Agriculture, Forestry and Fisheries, which says KAMFIMEX should be divested in 2006, leaving its function to private sector? How do you think about the letter? What is your future plan/do you plan to become a private investor/exporter? How do you think such things or divestment might take place and how might it affect KAMFIMEX's current business?
.....

2.6. Other issues of important similarities or differences with CDCO?

3. **Trend for Fish Trade**

3.1. What is the trend for fish export over the past three years?
(by species exported, by small vs large species)

f. Are more or less fish coming to here, *Poipet*?

g. Is the fish price in *Poipet* generally higher or lower?

4. **Economic Aspects**

We are not seeking to learn specific business information about your company, but we would be grateful to understand some general business aspects of your business. By the way,

4.1. How many people do you employ seasonal or year round? persons

4.2. Other than labor, what are some major cost factors of operating your business? Have you made any large capital purchases (trucks, ice-maker, freezer, refrigerator, containers, others)?

4.3. What is your roughly estimated annual/monthly/daily (seasonal) amount of fish you trade for export at *Poipet*? (A range would be helpful)

4.4. What are the spoilage/waste and weight loss of fish during border crossing to Thai market and selling (average for all species/for some species)?

4.5. How is fish price set when you purchase from your wholesales/agents and when you sell to Thai distributors at markets? Would you give us some examples of your typical buying prices from wholesalers and typical selling prices to Thai distributors for some species (Interviewee may tell us a range of gross margins for different species)

5. **Loans (Optional)**

We understand from our research that much useful lending of capital occurs within the fish marketing chain, loans from traders to fishers, from wholesalers to traders, and so on. This lending activity is important for supporting many of the fisheries sector businesses.

5.1. As part of your business, do you offer loans to your wholesalers/agents? (circle *Yes* or *No*)

Yes (go to "a") or No (go to 6)

a. # of wholesalers/agents who have borrowed cash from you:persons

b. Loans range from: To:

c. Common loans:

5.2. What is the typical structure of these loan arrangements? (When do you typically offer loans?, What advantages do you have from money lending?, How much time do borrowers have to pay back the loan and how to pay back (with cash, fish)?

5.3. What happens if borrowers cannot pay back the loan and run away?.....

5.4. How many wholesalers/agents who borrowed money from you and run away with loans in your business experience? Amount?

6. **Fee**

We know that it is common for people to pay formal and informal fee to do businesses in various sectors. Our understanding about the cost of doing business in fisheries sector would also be broadened if you would not mind allowing us to know about your fee. By the way,...

6.1. What are the formal fee (fee that have receipts or is publicly set) associated with your fish export?

a) DoF:

b) Customs:

c) Economic Police:.....

d) PM:.....

e) Other (specify):

6.2. What are the informal fee associated with your fish export?

a) DoF:.....

b) Customs:

c) Economic Police:

d) PM:

e) Other (specify):

7. **What types of change would you like to see in your fish export business in the future?**

.....

Thank you very much for your kind cooperation.

Questionnaire C**Questionnaire for CDCO**

CDCO address:

Date: (DD, MM, YY).....

Code No.:

Interviewer's Name:.....

Contextual statement: Interviews for this questionnaire were carried out in a semi-structured format. Questions were not necessarily asked/answered in the order presented in the questionnaire. To begin the interview, CDRI researchers made an introduction to each interviewee to make him/her feel comfortable as follows: "We are researchers at the Cambodian Development Resource Institute (CDRI). The CDRI is a local non-governmental organization, which was established in 1990 to enhance human resource capacity in Cambodia, and to undertake research and analysis contributing to the formulation of sustainable development policies and strategies. Currently, the CDRI is doing a study on *Fresh Fish Export* by looking at constraints and challenges in this trade, and examining alternative ways to improve trade policy to benefit all stakeholders-fishers, traders, wholesaler/agent and exporters. Regarding this, we interview many other fish stakeholders and now we would like to seek your kind co-operation in giving us a short time to talk to us."

1. Background:

- 1.1. Name:..... Age:.....years, Sex:..... Position/relationship to the owner:
- 1.2. Address (city/province):.....Tel.:.....
- 1.3. How long have you invested in this business?Years or since:
- 1.4. Would you allow us to know a brief history of your company existence?
(When and how it exists, How do you have the right to export fish? A license/sub-decree was issued? Which government ministries/departments interact with your business?)
.....
- 1.5. How is your Company functioning, where does your Company serve fish from (provinces, landing sites) at different times of the year, and where do you sell fish to?
.....
- 1.6. How do you recruit wholesalers/agents?
- 1.7. How many wholesalers/agents are affiliated with your Company and where are they located?
.....
- 1.8. Are there any other export companies, besides you and KAMFIMEX, whether they (other exporters) are currently operating?

2. Similarities and differences with KamfimeX

- 2.1. What is your company's approach in managing fish export compared to KamfimeX?
.....
- 2.2. What are the opportunities and constraints you face in running your fish export and how do you manage them compared to KamfimeX?
.....
- 2.3. How do you have access to *new* wholesalers/agents and buyers compared to KamfimeX?
.....
- 2.4. How is export license arranged compared to KamfimeX?
.....
- 2.5. Other issues of important similarities or differences with KamfimeX?

3. Trend for Fish Trade

- 3.1. What is the trend for fish export over the past three years?
(by species exported, by small vs large species)
 - a. Are more or less fish coming to here, *Poipet*?
 - b. Is the fish price in *Poipet* generally higher or lower?

4. Economic Aspects

We are not seeking to learn specific business information about your company, but we would be grateful to understand some general business aspects of your business. By the way,

- 4.1. How many people do you employ seasonal or year round? persons
- 4.2. Other than labor, what are some major cost factors of operating your business? Have you made any large capital purchases (trucks, ice-maker, freezer, refrigerator, containers, others)?
.....
- 4.3. What is your roughly estimated annual/monthly/daily (seasonal) amount of fish you trade for export at Poipet? (A range would be helpful)
.....
- 4.4. What are the spoilage/waste and weight loss of fish during border crossing to Thai market and selling (average for all species/for some species)?
.....
- 4.5. How is fish price set when you purchase from your wholesales/agents and when you sell to Thai distributors at markets? Would you give us some examples of your typical buying prices from wholesalers and typical selling prices to Thai distributors for some species (Interviewee may tell us a range of gross margins for different species)
.....

5. Loans (Optional)

We understand from our research that much useful lending of capital occurs within the fish marketing chain, loans from traders to fishers, from wholesalers to traders, and so on. This lending activity is important for supporting many of the fisheries sector businesses.

- 4.6. As part of your business, do you offer loans to your wholesalers/agents? (circle *Yes* or *No*)
Yes (go to "a") or No (go to 6)
 a. # of wholesalers/agents who have borrowed cash from you:persons
 b. Loans range from: To:
 c. Common loans:
- 4.7. What is the typical structure of these loan arrangements?
(When do you typically offer loans?, What advantages do you have from money lending?, How much time do borrowers have to pay back the loan and how to pay back (with cash, fish))?
.....
- 4.8. What happens if borrowers cannot pay back the loan and run away?
- 4.9. How many wholesalers/agents who borrowed money from you and run away with loans in your business experience? Amount?

5. Fee

We know that it is common for people to pay formal and informal fee to do businesses in various sectors. Our understanding about the cost of doing business in fisheries sector would also be broadened if you would not mind allowing us to know about your fee. By the way,...

- 5.1. What are the formal fee (fee that have receipts or is publicly set) associated with your fish export?
 a) DoF:
 b) Customs:
 c) Economic Police:
 d) PM:
 e) Other (specify):
- 5.2. What are the informal fee associated with your fish export?
 a) DoF:
 b) Customs:
 c) Economic Police:
 d) PM:
 e) Other (specify):
6. **In the next two years, do you plan to**
 a) maintain current business b) expand business or
 c) reduce export activities c) close business/stop exporting?
(explain if possible)
7. **What types of change would you like to see in your fish export business in the future?**

Thank you very much for your kind cooperation.

Questionnaire D**Questionnaire for Traders**

Date: (DD, MM, YY).....
 Interviewer's Name:.....

Code No.:

Contextual statement: Interviews for this questionnaire were carried out in a semi-structured format. Questions were not necessarily asked/answered in the order presented in the questionnaire. To begin the interview, CDRI researchers made an introduction to each interviewee to make him/her feel comfortable as follows: "We are researchers at the Cambodian Development Resource Institute (CDRI). The CDRI is a local non-governmental organization, which was established in 1990 to enhance human resource capacity in Cambodia, and to undertake research and analysis contributing to the formulation of sustainable development policies and strategies. Currently, the CDRI is doing a study on *Fresh Fish Export* by looking at constraints and challenges in this trade, and examining alternative ways to improve trade policy to benefit all stakeholders-fishers, traders, wholesaler/agent and exporters. Regarding this, we interview many other fish stakeholders and now we would like to seek your kind co-operation in giving us a short time to talk to us."

1. Background

- 1.1. Name:..... Age:.....years, Sex:.....
 1.2. Address (commune, city/province): Tel.:.....
 1.3. Main occupation:.....
 1.4. How long have you been in this business?Years or Since:.....
 1.5. Where and who do you usually buy fish from (fishing lot, outside fishing lot, or community fisheries) at different times of the year? Where and who do you sell fish to?.....

Marketing Chain Flow Chart

.....
 (Reminder: Links in chain and how they differ based on place, person, species, season, etc.)

- 1.6. How often do you sell fish to wholesalers and at what amount at different time of the year? (kilos/trip in how many days?)

2. Buying and selling price for fish in January

Species	Buying Price (R/KG)	Selling Price (R/KG)	Size (Total Length/ Number per kilo)	Remarks

3. Fee associated with fish trade

- 3.1. What kinds of formal fee do you pay for your business (formal fee are fee for which you receive a receipt or publicly regulated)?
 a. License (from whom/what institution? License for what (transport, trade, other)
 b. Provincial Fisheries Office
 c. Sangkat Nesaat (Fisheries Section)
 d. Landing site
 e. Other (please specify)
- 3.2. What kinds of informal fee do you pay for your business?
 a. Fisheries Department
 b. Provincial Fisheries Office
 c. Sangkat Nesaat (Fisheries Section)
 d. Landing site
 e. Local authority
 f. Checkpoints
 g. PM (military police)
 h. Economic police
 i. Other (please specify)

Thank you very much for your kind cooperation.

Questionnaire E**Fisher Survey**

Date:..... Interviewer name:

1) Interviewee name:..... Age:years Sex:

2) Occupation: Experience:years or since: Address:

3) How do you know about total fee per year to fish: fee for gear, for fishing ground, and for landing site?

4) What is total catch per year?

5) Fishing ground:

6) Institutions charging fees:

For an identified fisher (a few different gears may be used)

No.	Gear Type	Gear Size	Fee per year/fishing period (R)				Fishing Period	Catch per year /fishing period
			For gear	For different fishing ground from the allocated one	For landing site	Total		

Thank you for your kind cooperation.

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Fish Exports from the Great Lake to Thailand: An Analysis of Trade Constraints, Governance, and the Climate for Growth

Fisheries play a vital role in supporting rural livelihoods throughout Cambodia, but especially around the Tonle Sap (Great Lake) area where more than one million people depend on the fisheries sector for employment, income, and food security. With an inland fisheries catch of more than 400,000 tonnes per year and large surpluses of fish caught during peak fishing periods, fish trade and export is critical to livelihoods and income growth. The fisheries sector has recently been targeted as an important sector for “pro-poor” export promotion. However, much remains unclear about the current conditions under which fish are exported from Cambodia, and how these conditions affect rural incomes. Where fish trade and export constraints exist, such as high transport costs, spoilage factors, and regulatory requirements and fees, they can negatively affect income generation and economic growth.

This paper assesses the current conditions under which fish are exported from the Great Lake to Thailand, including an examination of the typical market structure and credit/financing arrangements, analysis of key trade and export constraints, quantification of transaction costs, and assessment of the official regulatory framework in comparison to actual practices. Following which, a number of policy recommendations are provided that aim to support improvements in trade efficiency, governance, and the climate for economic growth.

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