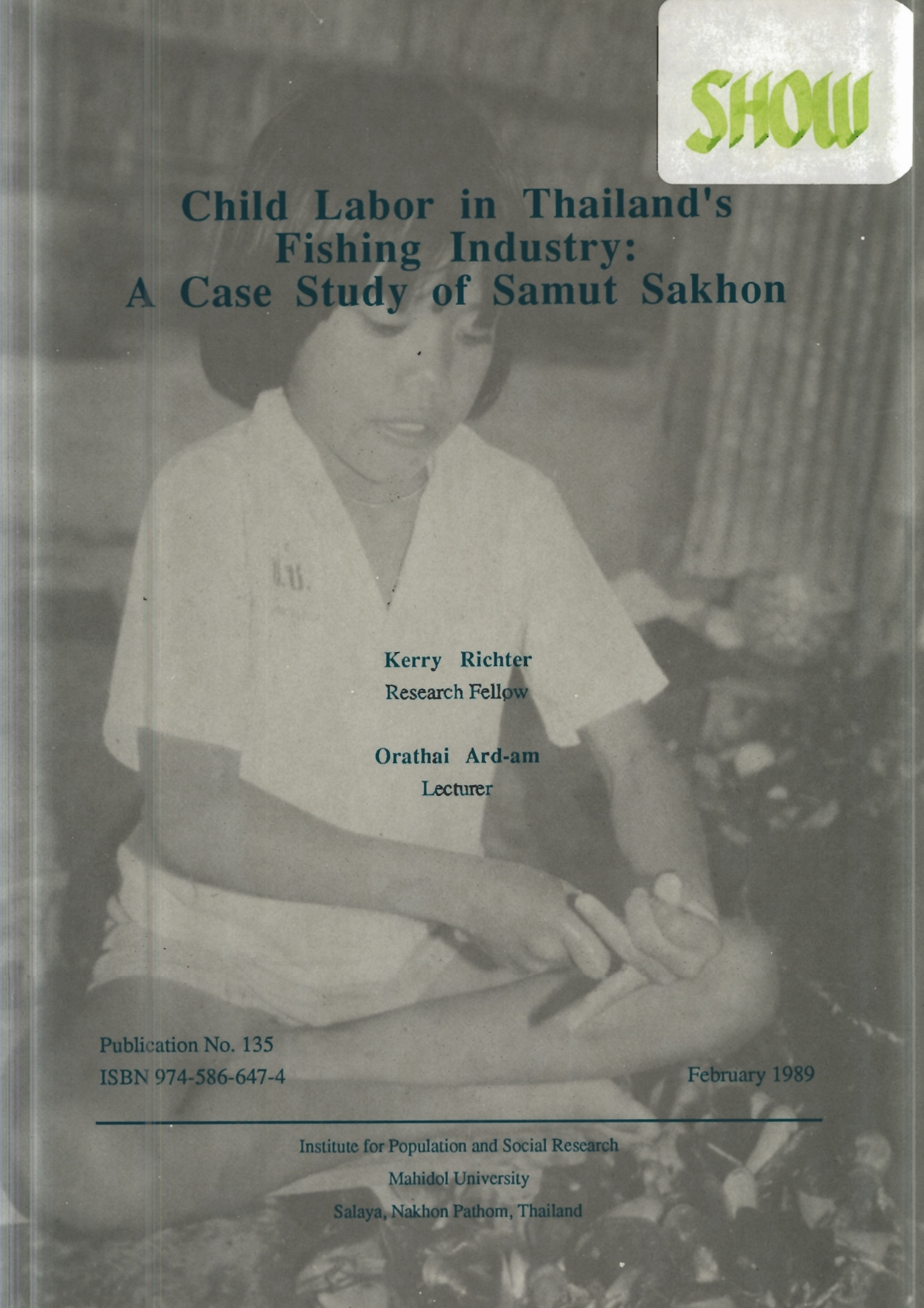
Child Labor in Thailand's Fishing Industry: A Case Study of Samut Sakhon



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1. Introduction and Location of the Study

This study examines children's labor force participation in Thailand's fishing sector from three perspectives. First, we analyze how various industries within the fishing sector utilize the labor of children age 11-17. Second, we examine the characteristics of households that determine children's activities. And third, we investigate the circumstances of children who have migrated to work in the fishing sector.

Fishing is a major part of Thailand's economy, contributing over 17 billion baht (U.S. $680 million) to the GDP in 1986.[1] Fishing activities are concentrated in the south and central regions of the country. Activities in the fishing sector, besides fishing itself, include fish processing, canning, freezing, the manufacture of fish sauce, boat building, and many others. Samut Sakhon province, the site of this research, is a major center of the fishing industry located about 40 kilometers southwest of Bangkok. It is difficult to estimate what proportion of the labor force in the fishing industry are under the age of eighteen, since the actual number of children who spend at least part of their day working in the fishing sector is likely to be much higher than is counted in official statistics. Besides the fact that the nature of children's involvement in many enterprises is informal, employers may try to cover up the fact that they hire underage workers. The legal limit for children's employment in Thailand is 12 except for jobs involving a high degree of risk, although this is currently being raised to 13. Fishing industries in the Samut Sakhon municipal area also employ many children who have migrated without their families from rural areas.

The age group 11-17 was selected for this study for several reasons. The compulsory level of education in Thailand is grade 6, and most children finish this grade at the age of 11 or 12. While some children drop out of school and begin to work at an earlier age, this is the time when most children are either finishing school and entering the labor force or moving up to secondary school. Age 17 was chosen as the older limit of focus because age 18 is traditionally considered to be the age of adulthood. Very few Thais marry before the age of 18, so those who leave home in this age group usually do so for employment reasons. It is a time of

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1 Department of Sea Fisheries, June 1988.

transition for young people that has important repercussions for how they spend the rest of their lives.

2. Conceptual Framework

One of the main motivations for doing research on child labor comes from a concern for child welfare. Children are extremely vulnerable to exploitation in the labor market, and often work long hours for very low wages. Exploitation is a greater risk when children shift from participation in family enterprises, such as farming, to a dependence on wage labor. Thus children's labor force activity, especially for the poorest children, may increase rather than decrease as economic development proceeds. Reasons for this include the need for children in agricultural areas to migrate for jobs; an increase in skilled jobs leading to lesser opportunities for parents; and negative social consequences (such as alcoholism, marital dissolution and the erosion of family ties) as adults, particularly men, are left out of a changing labor picture. Much of the theoretical literature on economic development is concerned with the notion that development proceeds unevenly: that wealth tends to be concentrated in a few hands, and that the poorest segment of society actually becomes worse off. Children whose families cannot afford to keep them in school and who begin working at a young age face a vastly different future from their peers who are able to attend high school and even university. Thus the situation for children reflects social inequalities that may be exacerbated by industrialization.

Another major motivation for examining child labor is to investigate changes in parental expectations for children's economic contribution. Socioeconomic development is associated with changes in the value of children to parents, or parental expectations for the "payoff" to having children. Caldwell (1982) has maintained that the transition to lower fertility occurs only when the intergenerational transfer of wealth, or net wealth flow, shifts to being from parents to children rather than from children to parents. When children are kept in school for a longer period their economic contribution to the family is reduced and the direct cost of children is increased. But this shift in expectations may include a difference in the timing of children's contribution; parents may be willing to invest in their children's education if they believe it will enable their child to better support

their parents (and themselves) when they are adults. In Thailand, the recent sharp drop in fertility means that parents have fewer children to provide needed domestic labor and bring in extra income. Yet if smaller family size is associated with higher aspirations for children, it would be predicted that children's educational attainment would rise.

Children's labor is thus better understood if it is viewed as part of a household survival strategy, which includes many decisions about the division of labor, investments in education, living arrangements and fertility. In this regard household structure, as measured by such variables as the number of working adults and the number, age and gender of the children, is a significant determinant of children's activities. The division of labor within the household is very important, as children's tasks are different by gender from a very young age. This applies both to domestic work and to the types of jobs that children are likely to pursue outside the home. The division of labor differs for older children and younger children as well. Family members, including siblings, may sacrifice in order to keep one child in school. This is usually a boy and may be the oldest son, but may be the youngest child if the labor of older children is needed. Children in nuclear household may be more likely to work than children in extended households, as there are fewer adults to support the family.

Thus both labor market and household factors must be considered in analyzing the determinants of child labor. As Thailand rapidly develops into an industrialized economy, children must be viewed as a vital resource for the future. If they are working, particularly at unskilled jobs, rather than studying or acquiring vocational training, they are likely to remain at poorly paying jobs for the rest of their working lives. Thailand has one of the largest child labor forces in Asia, and cases of exploitation are well documented (Banerjee 1980; Wun'Gaeo 1983; National Youth Bureau 1986; Chutikul 1986). Previous research has paid particular attention to the manufacturing sector in Bangkok, particularly for migrant children, and to children in rural areas. This is one of the first studies to focus on another municipal area, and to examine both one industry's use of child labor and household economic strategies. In this way we are able to show how supply and demand factors work together to determine children's activities.

3. Research Objectives

This study attempts to answer the following questions:

3.1. What is the extent of the participation of children age 11-17 in the fishing industries of the Samut Sakhon municipal area? What are employers' reasons for employing children? What are their reasons for employing only boys or only girls for particular jobs? How and why do they recruit migrant children?

3.2. What kind of jobs do children of this age group do? What are their wages and what hours do they work? What are the working conditions that children face, including health and environmental hazards? Do boys and girls face a different labor market and working conditions? What proportion of these children earn their own income, and what proportion work alongside a parent or sibling for no income?

3.3. What was the decision-making process that led to the child's entry into the labor force, and to their leaving school? What proportion are still attending school, and how many have completed grade 6? What are these children's and parent's aspirations for the future?

3.4. What are the characteristics of the households of child workers? How many are the oldest or youngest sibling in the family, and what are their other siblings doing? How do these households compare with the households of children still attending school?

3.5. To what extent are migrant children employed in the fishing industry in the Samut Sakhon municipal area? What types of jobs do they do? What are their working and living conditions, wages and hours?

3.6. What was the decision-making process that led migrant workers to migrate? How did they find their jobs? How much money do they remit to their families?

4. Previous Studies on Child Labor

Many of the reasons that industries employ child laborers are obvious, and many studies examining child labor practices document how children are exploited by employers. Children lack the power of adults to demand decent working hours, wages and working conditions. They are obedient, especially because those who are forced to work at a young age are those most in need. They either come from poor families or are forced by circumstances to support themselves. They often are required to do work that they are unprepared for physically, often under environmentally hazardous conditions. A recent collection documents how children are most often employed in "unregistered and undercapitalized productive enterprises, operating generally in a competitive and often highly volatile or seasonal market... Child labour is, more often than not, casual labour" (Bequele and Boyden 1988 p. 1-2).

As mentioned above, most studies of child labor in Thailand have focused on rural migrants to Bangkok, particularly in the manufacturing and service sectors. The main demand for child labor is for jobs such as waiting on tables, delivery, street vending, domestic labor, construction, metal welding, and textile, candy and glass manufacturing (Children's Rights Protection Center undated). It is estimated that one third of rural children leave home by the age of 15 (Wun'Gaeo 1983). Children are "pulled" to Bangkok because of the availability of jobs, because the major forms of transportation lead to Bangkok and because brokers come to rural villages promising jobs. One study documents how the situation in rural villages also "pushes" children out: while 71% reported leaving school because their families needed their help, 42% stated they were bored by agricultural work. The majority (62%) had no income of their own, and 59% reported being beaten by their parents. Over one third (37%) reported that they would like to live elsewhere (Chutikul 1986). This finding is a reminder that exploitative relationships can exist within family labor as well, and that wage labor may in some cases give children more autonomy (Goddard and White 1982). The situation is particularly difficult for children age 11-14:

> "Numerous studies have been conducted related to the problems of nutrition of children age 0-5 years and to school attendance of children between 6 to 11 years of age. Moreover,

> many vocational training courses are offered mainly to those age 15 and over. Thus, children age 11 to 14 are mostly forgotten...The importance of this age group has been minimized even though its significance can not be under-estimated, considering the changes occurring in them physically and psychologically, and the adjustments they have to make in terms of their leaving school, their work or ways of seeking work and, generally, their life style." (Chutikul 1986 p. 11)

Much of the research on household strategies involving children's labor has focused on the agricultural sector. Several studies have analyzed differences in children's allocation of time, examining differences in the trade-off between children's time in school and time working among sub-groups (Cain 1977, DeTray 1983, Chernichovsky 1985). Others have examined the division of labor within households and whether household structural variables influence children's work status (Tienda 1979, Ennew 1982, Christenson and Juarez 1987). Three recent studies examine both the family and work circumstances of children in a particular type of enterprise. In a study of the quarries and brickyards of Bogota, Salazar (1988) found that most children work assisting their parents rather than being employed directly. These are industries using very low levels of technology, and employment for adults as well as children is unstable. While formerly whole families were employed, lower incomes have caused parents to seek employment elsewhere. For this reason children are taking over the more difficult jobs formerly assigned to adults. In the Philippines, a study of the wood-based and clothing industries interviewed employers, child workers and their parents (Institute of Industrial Relations 1988). In these industries also, children tend to work helping their parents, who are paid on a piece-rate basis. Parental employment status, educational attainment of the household head and household income were found to be the most important determinants of children's labor force participation. Another study in the Philippines examines the working and living conditions of children participating in a deep-sea fishing operation controlled by one corporation (van Oosterhout 1988). Boys as young as age 7-9 join their fathers in deep-sea fishing trips, becoming full-fledged fisherman by age 12-14. In this community families are entirely dependent on the fishing corporation, which in some cases prefers to employ children to their parents.

Aside from these studies focusing on a few specific industries, there have been few micro-level studies examining children's labor as a household survival strategy in relation to the larger labor market. This is unfortunate because an understanding of how the household economy changes in reaction to the process of development is crucial to decisions about alleviating poverty. This study is an attempt to add to the knowledge on child labor in Thailand from both a household and labor market perspective.

5. Research Design

5.1 Setting and sample groups

This study uses primary data collected from the municipal area in Samut Sakhon province, including Mahachai, Tachalom, Bang Ya Prak, Kokham, Tasai, Krokrak, and Tachin tambons (districts). This area was selected for several reasons. The first is that Samut Sakhon is a major center for the fishing industry in Thailand. Out of a total population of 334,170 (1987), about 50,000 live in the municipal area, and more than half of these have an occupation connected to the fishing industry.[2] The province was selected as a center for development of the fishing industry by the Ministry of Agriculture and Cooperatives. This program provides subsidies to encourage foreign investment in the area. Second, besides the fact that the fishing industry tends to use a large proportion of child workers, there are many types of child labor in the area. These include children who have migrated from faraway provinces on their own, those who commute daily from another district, those who help their parents only on weekends and are still going to school, and those who work full time and earn their own income. And third, we were fortunate to have a contact living in the area who works in the fishing industry and is knowledgeable about child labor, and who facilitated and coordinated the research.

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2 Samut Sakhon Provincial Industrial Office, June 1988.

The duration of the project was 8 months, from June 1988 to January 1989. There were four sample groups:

1. Owners or managers of a representative sample of fishing enterprises who employ workers age 11-17. The results of the survey and interview with these persons, along with researchers' observations of working conditions, are described in the enterprise study.

2. Children age 11-17 who work in these enterprises, either alone or with their parents, who either are from the local area or who migrated to the area with their parents. These children are referred to as local workers.

3. Children age 11-17 who work in these enterprises who have migrated to the area alone or with a sibling. These children are referred to as migrants.

4. Children age 11-17 who attend school in the area. This sample was drawn to provide a comparison to the households of children who work in the fishing industry, and is referred to as the schoolchildren sample.

5.2 Sampling procedure

The first stage in the sampling design was to obtain a representative sample, by size and type, of fishing enterprises in the area that employ children age 11-17. We first obtained a list of fishing enterprises from the Provincial Industry Office. This list was found to be quite incomplete, both because it was out of date and because it contained misinformation. It was supplemented by doing a survey first-hand of the fishing enterprises in the area and by interviewing key informants. In this way a complete listing of 272 enterprises in the municipal area was compiled, including information on size, type and presence of child workers, to use as a basis for sampling. We found that 177 of the 272 enterprises or 65% use child workers. Of the approximately 7100 workers in these enterprises, 1600 or about 23% were aged 11-17. These figures show how widespread the use of child labor is in the area.

The second stage was to obtain permission from the owners and/or managers of a representative sample of enterprises to do the study. This cooperation was needed both to consent to an interview for the enterprise study and to allow us to interview the child workers. While we attempted to cover as many different types of enterprises that employ children as possible, there were a few types of industries that we were unable to do because we were unable to obtain permission. These include shrimp drying, shrimp paste and several other small-scale enterprises. In all, we were able to study working conditions and interview child workers in 45 enterprises, covering 18 different types of industry of various sizes. The survey of the enterprise owner was completed for only 33 of these enterprises however, due to difficulty in contacting the person or a lack of cooperation.

In each enterprise we interviewed every child worker age 11-17. Those who had migrated from another area on their own or with a sibling and who did not live with their parents were administered the migrant questionnaire. This process resulted in a sample of 81 migrant workers. Those children who lived with their parents, even if they had migrated to the area as a family, were administered the local workers questionnaire. This process resulted in a sample of 331 local workers.[3]

The household questionnaire was administered to the mother of each local worker. If the mother worked at the enterprise, we were often able to interview her for the household questionnaire at that time. In other cases, we obtained the child's address and made an appointment with them to visit their home. We were able to successfully complete a household interview for 91% (N=300) of the local workers. A small number of parents (N=11 or 3%) refused to give an interview; in 3% (N=9) of cases the house was too far away, in 1% (N=3) the interviewers could not find the house and 3% (N=5) were not completed for other reasons. The mother was interviewed where possible because she was likely to know the most about the child, and for comparability purposes; if she was not available, we interviewed the father or other guardian. In 79% of the cases the respondent was

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[3] A small number of local workers (N=3) were from Samut Sakhon province but did not live with their parents because they lived at the enterprise. These were considered to be local workers rather than migrants because their situation was very different from children who had migrated to the area on their own, and because we were able to administer the household questionnaire to their parent.

the mother; the father, 6%; a grandparent 4%; an aunt or uncle 5% and a sibling 6%. Since more than one sibling often worked in an enterprise, this design resulted in a sample of 245 households. Information was obtained on each child in the household age 11-17, resulting in a sample of 516 children.

The household questionnaire was also administered to the mothers of a small sample of children who were attending school in the district. This sample was obtained by making contact with teachers in three schools in the area: a boy's secondary school, a girl's secondary school and a vocational school. Interviewers met the children at the school and either made an appointment with them or accompanied them to their home. In this way we obtained the schoolchildren sample of 53 households, containing information on 100 children age 11-17.

5.3 Data collection techniques

We used both qualitative and quantitative techniques to conduct the study, as described below.

1. Enterprise study: The owner or manager of the enterprise was interviewed, using both a questionnaire and informal discussion. The questionnaire contained questions about the number of workers by age and sex; hours worked and wages; reasons for employing child workers; reasons for employing migrant workers; and reasons for employing only one gender if this was the case (Appendix A.1). In addition, the interviewers observed and took notes on the working environment, especially for child labor.

2. The local workers questionnaire, administered to each child age 11-17 at the enterprise, contained only basic information on the local children and their job characteristics (Appendix A.2). At this time an appointment was made to come to the child's house for the household interview.

3. The migrant questionnaire collected more information than the local questionnaire, including questions about the child's characteristics, job characteristics, reasons for migration, characteristics of their household and family, and aspirations and plans for the future (Appendix A.3). The interview was conducted as an informal talk in a friendly atmosphere; since many of these children

were shy and fearful of their employers, it was important to make them relax in order to relate thoughts and ideas.

4. The household questionnaire contained questions on the characteristics of each member of the household, including their income and average contribution to the household; other measures of household income such as ownership of land, housing, vehicles etc.; and information on each child age 11-17 in the household as to their daily activities, educational status and plans, entry into the labor force and aspirations for the future (Appendix A.4). This interview was also often conducted as an informal talk about each child.

5. Key informants, especially at the enterprises, were also interviewed about hiring practices and working conditions. This information, as well as our own observations, served as a check on the information obtained from the enterprise owner or manager.

5.4 Definitions

fishing industry : all industry related to fish catching and processing, including boat building and repair, activities on shore such as buying and selling, and seafood cleaning and processing ranging from home-based to large, foreign-owned enterprises.

enterprise: a workplace that produces a product related to fish and seafood that has systematic management; may be either a business or family enterprise, and may be official (registered) or unofficial (not registered).

local workers: children working in the fishing industry who live with their family in Samut Sakhon province (no matter what district). This includes commuters.

migrant workers: children working in the fishing industry who have migrated to Samut Sakhon either alone or with siblings or friends, who do not live with their parents.

household: family with which the child lives, who commonly share food and the management and arrangement of household tasks and income; may be long-term residents of the area who own a house or recent arrivals who rent a room near the enterprise.

worker sample: the sample of local workers interviewed at their workplace and also the sample of their households.

student sample: sample of those age 11-17 who are attending secondary school in Samut Sakhon and also the sample of their households.

6. Findings

6.1 Enterprise Study

The information presented in this section is mainly based on information collected from the 33 enterprises where we were able to complete an interview with the owner or manager. It is supplemented by observations from an additional 12 enterprises where the information obtained was incomplete, either because the owner was uncooperative or only had a limited amount of time. Some enterprise owners were willing to allow us to interview the child workers but were evasive in giving us information about the enterprise as a whole. In the case of the freezing enterprises, the owners did not allow us into the plants at all, and workers were interviewed in front of the plants or at the outside cafeteria. The canning enterprise study is also partly drawn from observation and informal interviews, since we were unable to complete the enterprise questionnaire. At all of the enterprises, information collected from the owner or manager is supplemented by the observations of the research team.

6.1.1. Type of enterprise

The enterprises were divided into 18 types, as follows:

1) Fish cleaning (N=3)
2) Blaa sai tan (small fish) chopping (N=2)
3) Shrimp/squid shelling (N=4)
4) Crab shelling (N=1)
5) Mussel shelling (N=1)
6) Squid/fish drying (N=4)
7) Salt/fermented fish (N=5)

8) Sweet fish/fish cakes (N=5)
9) Fried fish (N=1)
10) Shrimp/fish balls (N=1)
11) Smoked fish (N=1)
12) Fish sauce bottling (N=1)
13) Canning (N=3)
14) Freezing (N=3)
15) Boat building/repair (N=2)
16) Fishing boat (N=5)
17) Dock work (N=2)
18) Net cleaning (N=1)

Some of the enterprises actually do several activities, such as cleaning fish and making salt/fermented fish. In these cases the enterprise was categorized by the main activity taking place.

6.1.2. Size of enterprise

The number of workers was estimated by using the number supplied by the owner supplemented by observation, since the owner sometimes did not have the exact number. The distribution of enterprises by size is as follows:

1. <10 workers (N=5)
2. 11-50 workers (N=20)
3. 50-100 workers (N=4)
4. 100-500 (N=3)
5. 500+ (N=1)

There was a wide range in the number of workers at these enterprises; we found several as small as 5 workers and the largest, a freezing plant, had 800. The large enterprises are mostly foreign owned corporations, from Taiwan, Singapore, Japan, Australia and elsewhere. The small enterprises include informal activities such as net cleaning and small-scale enterprises based in private homes, such as

crab shelling. Most of the enterprises that employ child workers are medium-scale, employing 11-50 workers.

6.1.3. Age of workers

Each owner or manager was asked for information on the number of workers by sex and age and the minimum age for workers in the enterprise. We found that there was no correlation between the age of the workers and the type of enterprise, i.e. two enterprises of the same type may employ different age groups. Most of the enterprises in the fishing industry employ young workers; the majority are age 18-25. Only a few enterprises said they had workers as old as 50 or 60, but we commonly observed older women who worked with their families.

Several types of enterprises were found to have a high proportion of workers age 11-17. Those with from one-third to one-half of the workers in this age group included the fish cleaning, blaa sai tan chopping, shrimp/squid shelling, squid/fish drying, salt/fermented fish, sweet fish/fish cakes and smoked fish enterprises. At the crab shelling enterprise, children mainly work after school, from the late afternoon to 8 or 9 p.m.; at this time about half of the workers were in this age group. As mentioned above, we were not able to directly observe the freezing plant operations. These are large scale enterprises with more than 100 employees; from observation in front of the plants and at the cafeteria, we estimate a high ratio of workers age 12-18. The canning enterprise study was also mostly done by observation and informal interview; we estimate that about 60% of the workers were age 11-17.

Other types of enterprises, such as mussel shelling, fishing boat, and shrimp/fish balls, use a medium level (from 15-25%) of child workers. Two types of enterprises use a small number of child workers. Boat building/repair involves skilled work; the few children (boys) that we met at this enterprise migrated with their father or other male relatives who want them to learn the skill. They are not earning their own income. The dock also uses a low ratio of child workers; this work involves buying, selling, pricing, and measuring fish, requiring skilled knowledge.

Most of the enterprises had no minimum age limit, and in many places we saw workers as young as 5 or 6 years old who came with their parent or relative. This was especially true of the mussel shelling, blaa sai tan chopping, and shrimp/ squid shelling enterprises. When asked the minimum age of their workers, owners tended to say that the workers are at least age 12 or 15 (the legal minimum age is 12). Although at most enterprises the minimum age of the workers ranged from age 11-15, the research team found 13 enterprises that use children less than age 10.

6.1.4. Gender

The vast majority of workers at the enterprises we studied were female. The exceptions were the smoked fish enterprise, which had the same proportion of males and females; and fishing boats, boat building/repair, and the dock, which mainly employs males. This applies to both adults and children. When we did see men working at the fish cleaning and shellfish enterprises, they were usually part of a family group where the whole family works together. Boys, especially aged 18-25, are employed to do heavy work such as loading fish onto trucks, but many girls (especially migrants) also do heavy work such as carrying racks of dried fish and squid. When asked why they employ mostly girls, enterprise owners frequently said that it was a women's/girl's job: that it was light work that men wouldn't do because it was not "exciting". Some said however that they preferred to hire girls because they were more obedient and easy-going.

6.1.5. Job characteristics and working conditions

For the most part, the children who work at these enterprises do the same types of jobs as adults. Both adults and children are doing unskilled jobs, with a few exceptions such as boat building and the dock. However, those with more experience at such jobs as fish cleaning and shelling can work faster and make more money, since they are paid by the unit. In some enterprises, there is a division of labor based on the way in which workers are paid. At the sweet fish/fish cakes enterprise for example, workers paid on a daily basis grind the fish, mix the batter, place it in a mold on a sheet of plastic and hang the plastic on a pole. Those paid on a monthly basis, who are mostly migrant workers, will take the plastic outside to hang to dry. At the shrimp/squid shelling enterprise, women and girls paid by the

unit shell and clean the shellfish, then men and boys paid on a monthly basis carry the containers of shellfish to weigh or transport to the freezing plant.

Most of the children we observed sit on a small bench on the floor or squat all day long, for up to 15 hours a day and sometimes longer. Only one enterprise had a great deal of flexibility in whether children could do their work sitting or standing. Workers take few breaks because they are paid by the unit. Even very young children use a sharp knife or shelling tool. We found that most workers have problems with their hands because they are in water and working with salty fish for long hours. This causes a skin disease, in addition to the cuts and scrapes that are commonly suffered. They cannot wear gloves for such jobs as peeling shrimp, and for other jobs gloves would slow down the work. Also, it should be remembered that these jobs are extremely tedious.

At the larger and more mechanized industries such as canning and freezing, workers are more formally hired. Workers must wear uniforms which they must buy themselves. The workers that we met could only afford to buy one uniform, but a fine is deducted from their pay if they do not wear it every day. Workers at the freezing plants are paid by the month, and they earn higher salaries than any other workers in the area. These enterprises are foreign owned. At the canning plant however, even though workers are formally hired and must wear uniforms, payment for some workers is by the unit and it is quite low; workers earn 0.25 baht (U.S.$0.01) for each tray of cans that they fill with fish, for example. The same company that owns this canning enterprise owns a fish cleaning enterprise, where workers must wear uniforms even though the pay is lower than at many other enterprises with the same work.

6.1.6. Working hours

In about half of the enterprises (16 out of 33) the workers work every day, with no weekend or day off. Enterprises open every day include shrimp/squid shelling, fish cleaning, squid/fish drying, salt/fermented fish, sweet fish/fish cakes, crab shelling, blaa sai tan chopping, fish sauce bottling, canning, and the dock. Workers are not paid for sick days or vacation days, since most are paid on a daily or unit basis. Many workers must take 2 or 3 days per month off due to hand

problems. However, some fish cleaning places are only open 20-25 days per month, and the work is uncertain since it depends on how much fish is caught. Exceptions to this are the fishing boat, which usually go out to sea for about 8 days per month, and net cleaning, which takes place about 15 days per month. Children who are also attending school usually come to help only on weekends (7-8 days per month), but crab shelling takes place every day after school and on the weekend.

Most enterprises are open more than 10 hours per day, and many are open 11 to 16 hours. More than half (N=18) have a night shift, and most workers will work at night to earn more money, since they are paid by the unit. For several types of enterprise the hours depend on the amount of the product; when they have a large catch, they are open longer. Some, such as the blaa sai tan chopping enterprise, are sometimes open 24 hours: women bring their children (including babies) and work 3-4 days without stopping until they run out of fish. Enterprises with the least amount of hours include net cleaning (3 hours per day) and the mussel shelling and sweet fish/fish cakes enterprises (7-9 hours). It should be noted that in many cases the hours the enterprise was open depended more on the owner than on the type of enterprise.

6.1.7. Migrant workers

Two-thirds of the enterprises we studied use migrant workers. They are mostly aged 12-24 and come mainly from nearby provinces and the Northeastern region. Some enterprises use more migrant children than local workers in this age group, including the canning, shrimp/fish balls, boat building/repair, salt/fermented fish and sweet fish/fish cakes enterprises. Some use only migrant workers, including the mussel shelling and fish sauce bottling enterprises. Most of these workers live at the enterprise or rent a cheap house or room nearby that they share with other workers. Often a deduction is made from their wages for room and board. Living conditions are below standard and crowded, and the fact that the children live at the enterprise means that they are constantly under supervision. We also met some workers from Burma and some Karen hill tribe people. These groups are particularly taken advantage of because the employer knows they are illegal immigrants; some work free just for food and housing.

When asked why they like to hire migrant workers, enterprise owners said that they are able to pay the migrant workers less and that the local workers are choosier about the type of work they will do; the local workers know the job market and will not accept low wages or do the roughest work. Migrant workers are recruited in various ways. In some cases children come on their own to look for a job; often they hear about the area from adults such as teachers or monks who know that there are jobs available. Owners sometimes go to rural areas themselves to look for workers, and sometimes other owners will request that they bring back workers for their enterprise as well. At at least one enterprise that we studied the owner hired the children through a broker, to whom he paid a fee to hire the children for one year. As will be discussed further below, in many cases it was difficult to ascertain how the migrant children got their jobs; the owners were reluctant to talk about it and children were afraid of their employers. It is likely that we were not given permission to study enterprises that had particularly bad conditions for migrant workers or who had hired them under an annual contract.

Commuters are also hired by the enterprise since they will accept lower wages and more difficult jobs than local workers. In several cases the enterprise owner hires a bus to bring in workers from other areas, and a certain amount is deducted from their pay in advance for this service. Some of them travel 4-5 hours per day, and the workers said that they often had to wait a long time for the bus. Many of the children who commute a long distance come from farming families, and some also must travel by boat to reach their homes.

6.1.8. Discussion

Interviews with fishing enterprise owners confirmed many of the facts that we could see by observation: that young workers, especially girls, are preferred employees in most of the fishing enterprises. Many of the enterprise owners were defensive about their hiring practices. Since at some types of enterprises workers are not formally hired, owners said they have no control over who shows up to clean or shell fish. They said that mothers bring their children along to work because there is no one else to care for them; the decision for the child to work was made by the family. Some owners were candid in stating that they prefer to hire

girls because they are easier to manage, and/or that they hire migrants because they can pay them less.

Working conditions that we observed are perhaps not as adverse as many other child labor studies have described, in Thailand and elsewhere, but there is much room for improvement. In almost all of the enterprises children sat in the same position all day, and their hands and feet are wet for hours each day. Skin problems are common. Many of the older children, especially migrant workers, do heavy work such as carrying racks and loading the trucks. The children also work long hours with few days off, and the jobs are extremely tedious.

In sum, the enterprises use child labor in ways similar to that found by other studies in the world. Labor is informal and unskilled; most is light work easily done by children. It should be remembered that, although we attempted to select a representative sample of enterprises by size and type, consent of the owner was a pre-condition for selection. It is likely that we were not allowed to study enterprises with harsher working conditions. In addition, this profile of how enterprises use child labor must be supplemented by information about the children themselves and their families in order to obtain a full picture of the impact of the fishing industry in the community.

6.2 Local Workers Study

6.2.1. Characteristics of the sample

We were able to successfully interview 331 children age 11-17 at their workplaces. Characteristics of this sample are shown in Table 1. As discussed in the enterprise study, about 80% of these workers were girls. Although most of the workers are at least 12 years old, the mean age of the sample is only 14.5. When children's job descriptions are combined into nine main categories, it is seen that nearly three-fourths of our sample (71%) work at cleaning either fish or shellfish. (see Appendix B.1 for a detailed classification by job type.) These are menial tasks like cutting heads off fish, boning and skinning fish, and shelling squid, mussels, shrimp and crab. Squid shelling also requires that the children wash the squid to remove the ink. The other job categories each employ less than 6% of the sample.

Canning, freezing and drying fish each employ about 5%; sorting, weighing, checking and loading jobs (which are mainly done at the same enterprises where fish or shellfish are cleaned), seafood processing, and boat building and dock work employ about 4% each; and only 2% are working on a fishing boat. Since the enterprises were selected to give an accurate representation of children's employment in the fishing sector, these figures show that although children are working at a wide variety of enterprises the overwhelming majority work at the most menial jobs.

Table 1 : Characteristics of the Sample of Local Workers (in percents)

Gender	
Female	79.2
Male	20.8
	100.0
Age	
11	5.4
12	8.2
13	15.7
14	19.0
15	19.9
16	14.2
17	17.5
	100.0
Mean age = 14.5	
Job Type	
Fish cleaning	38.7
Shellfish cleaning	32.3
Fish & squid drying	5.4
Fish processing	3.9
Sorting/weighing/checking/loading	3.7
Canning	4.8
Freezing	5.1
Working on fishing boat	2.1
Boat building, dock work	4.0
	100.0
(N)	(331)

Table 2 shows average monthly income and daily hours by job type. This table presents information available from the larger sample of child workers in the fishing industry obtained from the household survey.[4] The highest incomes are earned by children working at the canning and freezing plants (average income 1703 and 2158 baht per month respectively).[5] These are the largest and most mechanized enterprises we studied, and they employ children on a more formal basis. Children working in canning and freezing also work long hours. Children doing sorting, weighing and loading jobs and boat building and dock work also tend to earn more (1656 and 1224 baht per month); this is likely because they are paid a monthly salary rather than being paid by the unit. Children doing fish and shellfish cleaning, drying and seafood processing are mainly paid by the unit (the weight of the fish or shellfish they have cleaned) and earn fairly low salaries (under 900 baht per month). Those working on a fishing boat work long hours (average 18.7 hours per day) but do not earn a correspondingly higher salary. This is likely because these children are working for their families and do not earn their own income. As discussed above, many of the children doing fish and shellfish cleaning also work around the clock when there is a large catch. To place these wage figures in perspective, the minimum wage in Thailand is 76 baht per day in municipal areas (about 2280 baht per month for those who work every day, 1520 baht for those working 5 days a week). Although almost all of these children are earning below the minimum wage, their earnings are still above most of those found in previous studies of child labor. One study of the manufacturing industry in Bangkok found that children made an average of 500 baht per month, although these were children under the age of 15 (Chutikul 1986).

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4 As outlined above, the household questionnaire was implemented with the parent (usually the mother) of each local child worker. This survey provided information on a larger sample of child workers in the fishing industry (N=427), since we obtained information on each child age 11-17 in the household. Most of these workers (N=420) are from the worker sample households, but a small number (N=7) come from the student sample households. An examination of the differences between the workers in our local worker sample and others in the household age 11-17 who worked in the fishing industry showed that they worked at similar occupations, with one exception. This is that a higher percent of children working on a fishing boat were found in the household study than were represented in the local worker sample. This is likely because it was more difficult to implement the enterprise study for fishing boats because they were often away at sea.

5 1 baht = approximately U.S.$0.04.

Table 2 : Monthly Income and Daily Hours by Job Type for Workers in the Fishing Industry

	Average Monthly Income (Baht)	Average Hours per Weekday	Percent Distribution
Fish cleaning	873	9.1	31.1
Shellfish cleaning	764	10.3	30.7
Drying	461	7.0	6.6
Seafood processing	571	8.3	6.8
Sorting, weighing, checking, loading	1,656	10.6	4.7
Canning	1,703	11.6	4.7
Freezing	2,158	10.3	3.0
Working on a fishing boat	1,095	18.7	8.2
Boat building, dock work	1,224	8.8	4.2
Overall	937	10.3	100.0
(N)	(427)	(427)	(427)

6.2.2. Age differences and entry into the labor force

We asked each local worker what age they started working and how they got their jobs (Table 3). About 15% started working before the age of 10, and more than one third before the age of 12 (the legal minimum age). The most common way that children found their jobs was through their parents (40%); combined with siblings and other relatives, 70% got their jobs through relatives. This is a reflection of the informal nature of children's employment in these enterprises. As seen in Table 4, it is mainly the younger children who are working alongside a parent or sibling. While 68% of 11-year-olds are working with a parent, two-thirds of the 14-year-olds are earning their own income, and only 5% of 17-year-olds are working with a parent. The percentage working in a family-owned business is fairly constant (at about 5%) by age. While fully 79% of 11-year-olds are attending school as well as working, this figure drops to 16% for 13-year-olds. So although children begin working in the fishing industry at a young age by helping their parents, it should be emphasized that they become full-time workers earning their own income soon after leaving school. From our observation, most 14- and 15-year-olds were working on their own (without their parents).

Table 3 : Children's Entry into the Labor Force

Age child started working	%	Cumulative
Less than 8	6.7	6.7
8-9	8.2	14.9
10-11	22.0	36.9
12-14	48.5	85.4
15-17	14.6	100.0
	100.0	
How child got the job		
Employer came to home	3.3	
Through parents	39.6	
Through siblings	19.6	
Through other relatives	10.6	
Through friends	5.8	
Through other non-relatives	21.1	
	100.0	
(N)	(331)	

Table 4 : Children's Earning Status and Work Status by Age (percents)

	Age							
	11	12	13	14	15	16	17	Total
Earning Status								
Family business	4	8	4	3	6	5	6	5
Alongside parent or sibling	68	67	49	32	27	21	5	32
Earning own income	28	26	47	66	67	74	89	63
	100	100	100	100	100	100	100	100
Work Status								
Attending School & working parttime	79	38	16	8	1	5	3	14
Working parttime only	0	1	2	1	4	3	0	2
Working fulltime	21	58	83	91	95	92	97	84
	100	100	100	100	100	100	100	100
(N)	(28)	(40)	(58)	(80)	(82)	(61)	(78)	(427)

Further information on how the work situation differs for older and younger children is shown in Table 5. Only 14% of these children are still attending school, and 43% left school before completing grade 6. This is an extremely low level of educational attainment: in municipal areas in Thailand as a whole, as of 1983 89%

of those age 12-14 and 62% of those age 15-19 were still attending school; and 61% of those age 12-14 and 83% of those age 15-19 had completed grade 6 (National Statistical Office 1983). Nearly two-thirds of those age 11-13 in our sample have already left school, with 37% having left without completing grade 6. Only about half of those 14 and older completed grade 6 before leaving school, and few went beyond grade 6. There are also differences in the types of jobs that children are doing by age. Older children are less likely to work at the cleaning, drying and processing jobs because they are employed in sorting, weighing and checking, canning, freezing, and working on a fishing boat. These are more skilled and heavier jobs which pay more. Younger children work less hours; those age 11 to 13 work an average of less than 8 hours per day, likely because many of them are still in school, while those age 14 and up work about 11 hours per day.

Table 5 : Children's Educational Attainment and Job Characteristics by Age (percents)

	Age			
	11-13	14-15	16-17	Total
Educational Status				
Still in school	37	4	4	14
Completed less than grade 6	37	46	43	43
Completed grade 6	25	47	45	40
Completed more than grade 6	1	3	9	4
	100	100	100	100
Job type				
Cleaning fish	38	32	25	31
Cleaning shellfish	33	30	30	31
Drying fish	10	6	5	7
Fish processing	7	7	6	7
Sorting, weighing, checking	2	3	9	5
Canning	2	5	7	5
Freezing	0	3	6	3
Fishing boat	3	11	10	8
Boat buiding, dock work	4	5	4	4
	100	100	100	100
Average income per month (baht)	365	950	1,440	937
Average hours per weekday	7.7	11.4	11.3	10.3
(N)	(126)	(162)	(139)	(427)

The household questionnaire included many questions on the decision-making process that led the child to begin working in the fishing sector, and to leave school for those who have done so. As seen in Table 6, just over half of these children (54%) decided on their own to start working, while for 32% the mother decided, with the father or both parents deciding in only 6% of the cases. The most common reason given for leaving school is that the family needed money, mentioned for 67% of the children. Nearly one-quarter (23%) said that the child didn't like school or that there was no point in their continuing. Other reasons listed included family crisis, migration and health.

Table 6 : Decision to Work and to Leave School

Who made decision for child to work	
Child alone	54.3
Mother	31.8
Father	2.8
Both parents	3.6
Other	7.5
	100.0
Reasons for Leaving School*	
Family needed money	67.2
Didn't like/no point	23.3
Family crisis	4.7
Migration	1.9
Health	1.9
Other	18.7
Unknown	1.7
(N)	(427)

*Since more than one reason could be given, percentages do not sum to 100.0

6.2.3. Job satisfaction

We also asked about children's satisfaction with their jobs. Only 40% of the children said that they liked their job or that it was OK, and another 10% had no feeling either way. Half the children, then, disliked their jobs, with 35% saying they would like to do something else. Others (13%) complained of boredom, but only 2% said the job was hard work. Table 7 shows how job satisfaction varies by age, work status and job type. Older children are slightly more likely to be satisfied with their job, although there is little difference by age. Most children (62%) working for their families like their jobs. Children who earn their own income are

more likely to say they are satisfied with their jobs than those working alongside a parent (42% vs. 32%); in fact over half (56%) of those working with a parent dislike their jobs. Job satisfaction also varies a great deal by job type. Children at the higher paying and more skilled jobs like sorting, weighing and checking, freezing, and boat building and dock work generally like their jobs, although this is not true of canning. Most children working on a fishing boat, which are mainly family-owned, also like their jobs. The greatest dissatisfaction is found among children at the most menial jobs: fish and shellfish cleaning, drying, and fish processing. A substantial minority state that they have no feeling, indicating perhaps that they feel they have no choice in the work that they do. These results show that when children have more autonomy, when they are working on their own and particularly when they are making good wages, that they are more likely to be satisfied with their jobs.

Table 7 : Job Satisfaction Among Child Workers By Various Characteristics (percents)

	Feeling about job:				
	Like job/ O.K.	No Feeling	Dislike	Total	(N)
Age					
11-13	39	10	51	100	(122)
14-15	38	12	50	100	(162)
16-17	43	8	49	100	(139)
Work Status					
Family business	62	0	38	100	(21)
Alongside parent	32	12	56	100	(135)
Earning own income	42	10	48	100	(265)
Job type					
Fish cleaning	37	8	55	100	(131)
Shellfish cleaning	29	13	58	100	(130)
Drying	35	12	54	100	(26)
Fish processing	46	4	50	100	(28)
Sorting, weighing, checking	63	5	32	100	(19)
Canning	45	15	40	100	(20)
Freezing	69	15	15	100	(13)
Fishing boat	57	3	40	100	(35)
Boat building, dock work	61	6	33	100	(18)
Total	40	10	50	100	(420)

6.2.4. Gender differences

Because many of the jobs in the fishing industry are segregated by gender, we were interested in seeing how the working situation differed for boys and girls. As discussed in the enterprise study and seen in Table 8, certain jobs are more segregated than others. Working on a fishing boat and boat building and dock work are almost exclusively boys' jobs, and canning and freezing employ almost exclusively girls. While some boys do work at the fish and shellfish cleaning jobs, these jobs are predominantly performed by girls and women. Girls are more likely to work full time than boys, mainly because boys are more likely to combine work and school. Average educational attainment is about the same for boys and girls, however, at about 5 years of schooling. About the same percentage of boys and girls (30-33%) work alongside a parent. Boys work slightly more hours than girls, mainly due to the long hours worked by boys working on fishing boats. We find that girls earn more on average than boys (973 vs. 841 baht per month). This is mainly due to the different jobs that they do: girls who work in canning and freezing earn relatively higher incomes, and boys on fishing boats are often working for their family without wages.

Table 8 : Differences by Gender of Workers in the Fishing Industry (percents)

	Girls	Boys	Total
Jobtype			
Fish cleaning	37.7	14.3	31.1
Shellfish cleaning	35.7	17.6	30.7
Drying	4.9	10.9	6.6
Seafood processing	6.2	8.4	6.8
Sorting, weighing, checking, loading	4.2	5.9	4.7
Canning	5.8	1.7	4.7
Freezing	4.2	0.0	3.0
Working on a fishing boat	0.6	27.7	8.2
Boat building, dock work	0.6	13.4	4.2
	100.0	100.0	100.0
Work status			
Full time	85.7	80.7	84.3
Part-time or occasional	1.6	3.3	2.1
Both work and school	12.7	16.0	13.6
	100.0	100.0	100.0

(Cont.)

Table 8 (Cont.)

	Girls	Boys	Total
Average years of schooling	5.0	5.2	5.1
Percent who work with a parent	32.8	30.2	32.1
Average hours working			
- weekday	10.1	10.8	10.4
- weekend	2.2	3.5	2.6
Average monthly income (baht)	973	841	937
(N)	(308)	(119)	(427)

6.2.5. Household decision-making and division of labor

Previous research has shown that some children may be more likely to work than others, based on such characteristics as their gender and their position within the family. Because we are interested in household strategies used to make decisions about children's work, it is of interest to compare children working in the fishing industry with others in their household (mainly siblings) of the same age who do not. As seen in Table 9, 19% of the children in this age group who are not working in the fishing industry are working full time at another occupation. These include sales work, manufacturing and construction. Another 11% are working part time or combining work and school. But most significantly, over half of these children (53%) are attending school only. Additionally, a substantial proportion (18%) are neither working nor attending school; most of these are doing household work. Some of these children may want to work but are unable to do so, or may take over domestic responsibilities so that their mothers may work. Children who do not work in the fishing sector are much more likely to be boys (54% vs. 28%) and they are younger (13.1 vs. 14.5 years) than children in the same households who work in the fishing sector. They tend to have higher educational status than those working in the fishing sector, and 20% have gone beyond grade 6. They are also less likely to be the oldest sibling in the family (18% vs. 26%). These findings indicate that girls may take jobs in the fishing sector so that the family may keep another child in school, and that this child is likely to be a boy and one of the younger children in the family.

Table 9 : Comparison of Workers in the Fishing Industry with Others in Their Household Age 11-17 (percents)

	Fishing Workers	Non-Workers
Work Status		
Full-time	85.2	8.8
Part-time or occasional	2.2	4.2
Both work and school	12.6	6.3
Attending school only	-	53.1
Other (household, looking for work)	-	17.7
	100.0	100.0
Gender		
Female	71.7	45.8
Male	28.3	54.2
	100.0	100.0
Mean age	14.5	13.1
Educational attainment		
Less than grade 6	48.1	43.8
Grade 6	45.5	36.5
More than grade 6	6.4	19.8
	100.0	100.0
Percent who are oldest sibling	26.2	17.7
Percent who are youngest sibling	26.0	28.1
(N)	(420)	(96)

6.2.6. Differences between the local worker and student sample

As outlined above, the household questionnaire was also implemented in an additional sample of households where a child age 11-17 was attending secondary school. This was done to compare such factors as household structure and financial need that help to determine children's labor force participation. Characteristics of the two samples of households are shown in Table 10. As expected, nearly all measures of income and wealth show that households in the student sample are better off than those with a child working in the fishing industry. Total household income is 7826 baht for the worker sample and 12,984 baht for the student sample,

and per capita income is 1128 and 2064 respectively. In municipal areas in Thailand as a whole in 1986, average per capita monthly income was 1594 baht (National Statistical Office 1986). While income in the worker sample households is below average, it is far above the poverty line of 486 baht per capita per month set by the World Bank (Hutaserani and Jitsuchon 1988). A much higher percentage in the student sample own a vehicle (68% vs. 13%) and own land (77% vs. 38%), but home ownership is about the same in the two samples (79% vs. 76%). Most significantly, the adults in the student sample households have a much higher educational level than those in the worker sample (8.1 vs. 3.6 years). Households from the student sample are more likely to be long-term residents; 79% have lived in the district for ten years or more, and none have arrived in the past year. Still, two-thirds of the worker sample household have also lived in the area for ten or more years.

Table 10 : Comparison of Worker Sample and Student Sample Households (Percent of Households)

	Worker Sample	Student Sample
Measures of wealth and income		
Mean household monthly income (baht)	7,826	12,984
Mean per capita monthly income (baht)	1,128	2,064
Mean education level of adults	3.6	8.1
Percent who own land	38.4	77.4
Percent who own a house	75.6	79.2
Percent who own a vehicle	13.4	67.9
Length of residence in the area		
Less than 1 year	4.9	0.0
1-4 years	16.3	7.5
5-9 years	11.8	13.2
10 or more years	66.9	79.2
	100.0	100.0
Household Structure		
Single parent	10.8	7.8
Nuclear	42.0	41.5
Extended-with grandparent	37.1	47.2
Extended-other	10.0	3.8
	100.0	100.0

(Cont.)

Table 10 (Cont.)

	Worker Sample	Student Sample
Household Size		
Mean number of children 0-17	3.5	2.6
Mean number of adults 18-59	3.4	3.7
Mean number of adults 60+	0.3	0.3
Mean household size	7.2	5.6
Mean number of working men age 18-59	1.43	1.34
Mean number of working women age 18-59	1.19	0.92
Dependency Ratio*	1.79	1.68
(N)	(245)	(53)

$$\text{*Dependency ratio} = \frac{\text{(number of members age 0-17, 60+)}}{\text{(working adults 18-59)}}$$

An examination of household structure shows that households with a child worker in the fishing sector are somewhat more likely to be headed by a single parent (11% vs. 8%). Households from the sample of students are more likely to contain a grandparent (47% vs. 37%) and less likely to contain other extended family members, such as aunts, uncles, and sons- and daughters-in-law (4% vs. 10%). These differences in household structure may reflect differences in length of residence or of assets such as land ownership, since families more often live in the home of the older generation when they own a house or land. Households in the worker sample have more children under age 18 than those in the student sample (3.5 vs. 2.6); the number of adults age 18-59 and age 60 and over is about the same however. Adults in the worker households have a higher number of both working men and working women, but the dependency ratio (ratio of children and old people to working adults) is still higher for worker households. This indicates that these households have a greater need for children age 11-17 to go to work, as has been found by other studies of child labor in the developing world.

Further evidence of the division of labor within the two samples of households is shown in Table 11. This table shows the work status of various household members by age and gender; children under age 11 are not included in

this table because few of them work in either sample. Most striking is the difference in the two samples in the age at which young people begin to make an economic contribution to the household. In the worker sample, 83% of girls and 69% of boys age 11-17 are working either for the family or for a wage; in the student sample households only 8% of girls and none of the boys are doing so. Even at age 18-24, only 45% of females and 41% of males in the student sample households are working. Thus young people age 11-17 are making a substantial contribution to the household income in the worker sample, as shown graphically in Figure 1. On average this age group earns 18.9% of the household income, 15.3% earned by girls and 5.6% earned by boys. It should be noted that this figure actually underestimates children's contribution, since many of them are working for their families without wages. In the student sample households, even those age 18-24 are making a negligible contribution to household income (3.1%). Thus in the student sample households support of the family is concentrated in the 25-59 age group, and men contribute the majority of this income (56.3% vs. 37.0% for women). In the worker sample households the burden is spread more evenly among household members, and there is less difference between the contribution of males and females. These findings confirm those of other household studies who describe how low-income households tend to rely on many family members for support, and tend to include extended family members who will contribute to the household. Since the student sample had an equally high percentage of extended households, it may be that these families are able to support family members who do not work.

Of course, adults in the student sample households are able to support other family members because they earn high enough incomes to do so. As seen in Table 12, the occupations of adults in the two samples of households vary greatly. The most important distinction between the two samples is in the proportion who work in the fishing industry; only 9% of women and 19% of men in the student sample do so, while 60% of women and 67% of men in the worker sample have jobs in the fishing sector. Most notable is that 43% of adult men in the worker households work on a fishing boat. Women in this sample largely do the same types of jobs that the children in our sample do, as 40% are doing fish and shellfish cleaning. Most adults in the student sample households have professional, administrative and sales jobs.

Figure 1 Average Percentage Contribution of Household Members to Monthly Income by Sample, Age Group and Gender

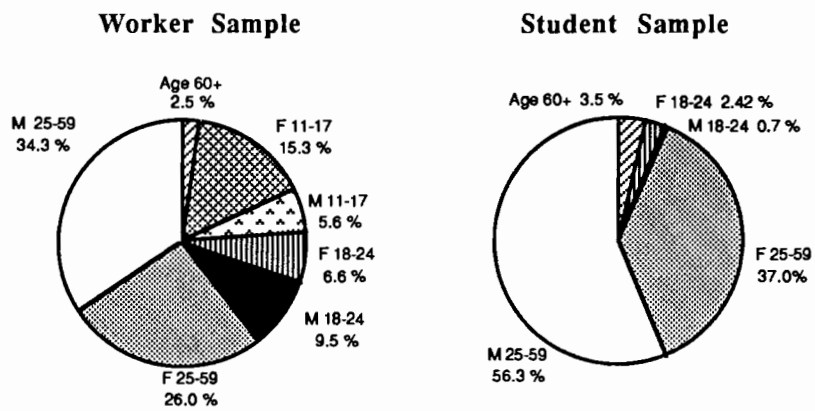

Table 11 Work Status and Average Monthly Contribution to Household Income by Gender, Age and Sample

	Work Status					Contribution to Household Income			
	percent working for wage	percent working for family	percent working in household	percent inactive	total	average monthly contribution (baht)*	average number of persons	average percent of total income**	(N)
Worker Sample									
Female :									
Age 11-17	60	23	3	14	100	485	1.41	15.3	(345)
Age 18-24	73	9	13	5	100	505	0.58	6.6	(143)
Age 25-59	68	5	23	5	100	1002	1.56	26.0	(283)
Age 60+	23	10	26	42	100	69	0.13	0.2	(31)
Male :									
Age 11-17	48	21	2	29	100	359	0.70	5.6	(171)
Age 18-24	85	11	0	4	100	742	0.57	9.5	(140)
Age 25-59	87	5	1	8	100	1396	1.09	34.3	(268)
Age 60+	41	2	0	57	100	606	0.18	2.5	(44)
								100	(1425)
Student Sample									
Female :									
Age 11-17	5	3	0	92	100	8	1.23	0.1	(65)
Age 18-24	31	14	3	52	100	388	0.55	2.4	(29)
Age 25-59	65	16	16	3	100	2497	1.28	370	(68)
Age 60+	36	0	14	50	100	1143	0.26	3.5	(14)
Male :									
Age 11-17	0	0	0	100	100	0	0.66	0.0	(35)
Age 18-24	30	11	0	59	100	117	0.51	0.7	(27)
Age 25-59	89	4	3	4	100	3644	1.34	56.3	(71)
Age 60+	0	33	0	67	100	0	0.06	0.0	(3)
								100.0	(312)

* Average contribution for persons of that gender and age group.
** Weighted by the average number of persons of that gender and age group per household.

Table 12 : Comparison of Occupations of Adult Women and Men in Worker Sample and Student Sample Households (percents)

	Women		Men	
	Worker Sample	Student Sample	Worker Sample	Student Sample
Fishing Sector				
Fish cleaning	17.3	0	3.4	0
Shellfish cleaning	23.4	2.6	5.2	0
Drying	3.4	0	1.0	0
Fish processing	4.6	2.6	2.1	2.5
Sorting, weighing,checking	3.4	0	5.5	0
Canning	2.7	2.6	0.3	0
Freezing	1.2	1.3	0	1.3
Fishing boat	2.2	0	42.8	7.4
Boat building, dock work	1.9	0	6.8	7.6
Total fishing sector	60.0	9.1	67.1	18.8
Professional, technical, teachers	0	11.7	0.5	25.3
Administration, management	0.7	6.7	2.1	10.1
Self employed sales, entrepreneur	1.0	16.9	1.3	16.5
Sales employee	7.7	20.8	3.9	7.6
Farming-own land	1.2	1.3	1.3	0
Agricultural labor	0.2	1.3	0.3	2.5
Manufacturing/transport/laborer	4.1	6.5	15.6	11.4
Crafts, dressmaking etc.	0.7	5.2	4.2	2.5
Religious	0.2	0	0.5	2.5
Domestic service	1.2	1.3	2.9	0
Household	22.8	19.5	0.5	2.5
Total	100.0	100.0	100.0	100.0
(N)	(414)	(77)	(384)	(79)

6.2.7. Children's and parents' aspirations for the future

We also asked both children and parents their aspirations for the future. Table 13 shows differences in the two samples both in parents' aspirations for their children and children's aspirations for themselves. Both children and parents in the worker sample tended to give job-oriented answers; they are mainly focused on getting a better job, training for an occupation or staying at the same job. Only 12%

more education. In contrast, nearly half (49%) of children in the student sample stated that their aspiration was to continue their education as high as possible. Parents from the student sample are more reluctant to give a specific aspiration for their child, with half of them (51%) saying it depends on the child's needs and desires. This implies a much greater degree of choice for these children. Significantly also, twice as many children in the worker sample as in the student sample say that they have no plan (24% vs. 12%). In informal discussions with the child workers, many indicated that they would like to learn another skill, such as hairdressing or dressmaking. Parents often stated that although the family's financial need meant that the children must work now, they would like them to be able to train for another occupation or get more education in the future. But other parents could not foresee any change for their children or see much point in further education, since the jobs available are unskilled

Table 13 : Child's Aspirations and Parental Aspiration for Child for Worker Sample and Student Sample (percent)

	Worker Sample		Student Sample	
	Child	Parent	Child	Parent
Continue education or get more education	12	21	49	34
Training for an occupation	10	10	13	9
Stay at the same job	18	16	0	0
Have same occupation as parent	5	7	3	6
Get a better job, here of elsew here	22	13	8	0
Soldier	2	0	5	0
Own business	2	1	7	0
Domestic work, get married	0	6	0	0
Depends on child's needs	1	20	2	51
No plan	24	3	12	0
No answer	4	4	1	0
	100	100	100	100
(N)	(516)	(516)	(100)	(100)

Several of the households in the worker sample were interviewed in depth about their attitudes towards further education for their children. We found that attitudes varied greatly by the economic composition of the district where the family lived, but that both the poor and the better-off residents had reasons why they did not value education. These include the following:

1) Poverty: these households could only be concerned with survival, and needed the income the children were earning. They also had no money for educational expenses.

2) No pay-off to education: many residents, even in middle class households, saw that education was an investment that would not pay off in the long run. Educational expenses, such as buying books, are high. They have seen that those who obtained higher education, including vocational training, were overqualified for jobs and either were unemployed or had to leave the area.

3) Immediate pay-off of working: both poor and better-off households had reasons why they felt it was better for their children to earn money than to be in school. Those living in more urbanized areas stated that their household expenses were high, and that children's income could be used to buy consumer goods, such as vehicles, that are necessary now. Children are also more interested in earning money than attending school.

In only one district did people express that they could see an increasing need for education. This was an area of mostly long-term residents who formerly worked in traditional small-scale fisheries. Although they felt in the past that education was unnecessary for their children, they see the economic changes occurring in the area as bigger industries and more factories open. There is now a greater division of labor and hierarchical structure in the types of jobs available, such as quality control jobs, and hiring practices are more formal. Parents see that education will help their children get jobs which pay a monthly wage and include benefits. It is interesting that this view was not found among residents of the more urbanized areas of Samut Sakhon, who did not believe that there is a pay-off to higher education even when asked about vocational or informal programs. This attitude implies that these children will stay in the same menial jobs that their parents do, and will be left out of new opportunities as the labor market changes.

6.3. Migrant Study

6.3.1. Migrant children characteristics

As outlined above, in each enterprise we interviewed each child age 11-17 who had migrated without their family, yielding a sample of 81 workers. It should be noted that most migrant workers in these enterprises were found to be over age 17, and this was especially true for boys doing heavy jobs like carrying and loading. Interviews with the migrant children were more difficult than those with the local workers. Many were fearful of their employers and did not want to stop working to talk to us. Also, many were unsure or reluctant to say how much they are earning, how much is deducted from their wages for room and board, or how much they send to their families. In some cases they may have an annual contract, and may not really understand the details of their payment. At one enterprise we met children who had come to Samut Sakhon under contract to an enterprise where they were badly treated; they had "escaped" this enterprise to find a job elsewhere, but were fearful that their previous employer would find them. For these reasons the information obtained from the migrant children is less detailed than that from the local children.

As seen in Table 14, none of the migrant workers were under age 13, and the mean age was 15.6. The sample was two-thirds female; a greater proportion are male than are the local workers in part because the migrant children do heavier jobs. Somewhat surprisingly, educational attainment was higher for the migrant workers than the local workers, with almost 90% having completed at least grade 6. This is likely because children stay at home until they have completed grade 6 and migrate afterwards. As was indicated in previous research, rural children often continue to go to school in the absence of income-earning opportunities.

Table 14 : Charactertics of Migrant Workers

Gender	
Female	67.9
Male	32.1
	100.0

(Cont.)

Table 14 (Cont.)

Age	
13	4.9
14	12.3
15	25.9
16	29.6
17	27.2
	100.0
Mean age	15.6
Educational Attainment	
Less than grade 6	11.1
Grade 6	81.5
More than grade 6	7.4
	100.0
(N)	(81)

6.3.2. Origin and household characteristics

Figure 2 shows the origin provinces of the migrant sample; it is seen that they come from all over the country, and that many travelled long distances to migrate to Samut Sakhon. The largest proportion of children is from the Northeast (61%), with 24% from the Central region. Many come from Ratchaburi, a nearby province, and from Buriram and Sakhon Nakhon, two very poor provinces in the Northeast. Other than this, there is little indication of a specific migrant stream to the area. More than three-quarters said that this was their first migration, indicating that they did not go to Bangkok or elsewhere first and that they had not yet returned home. As seen in Table 15, more than half had been in the area less than 6 months, but 30% had been there more than one year. Only a small percentage of the children (8%) said that they got their job through a broker or that their employer came to their village. About one-third (34%) got their jobs through siblings, and another third through other relatives. This indicates that many are drawn to the area through a sibling or other relative who has already migrated. But as mentioned above, it was difficult to obtain this information and a larger proportion of the children may have actually gotten their jobs through a broker. When asked the reasons that led them to migrate to the area, the majority (69%) gave a financial reason. Another 23% said that there was nothing to do at home and 8% said they wanted to try something new.

Figure 2 : Origin Province of Migrants to Samut Sakhon

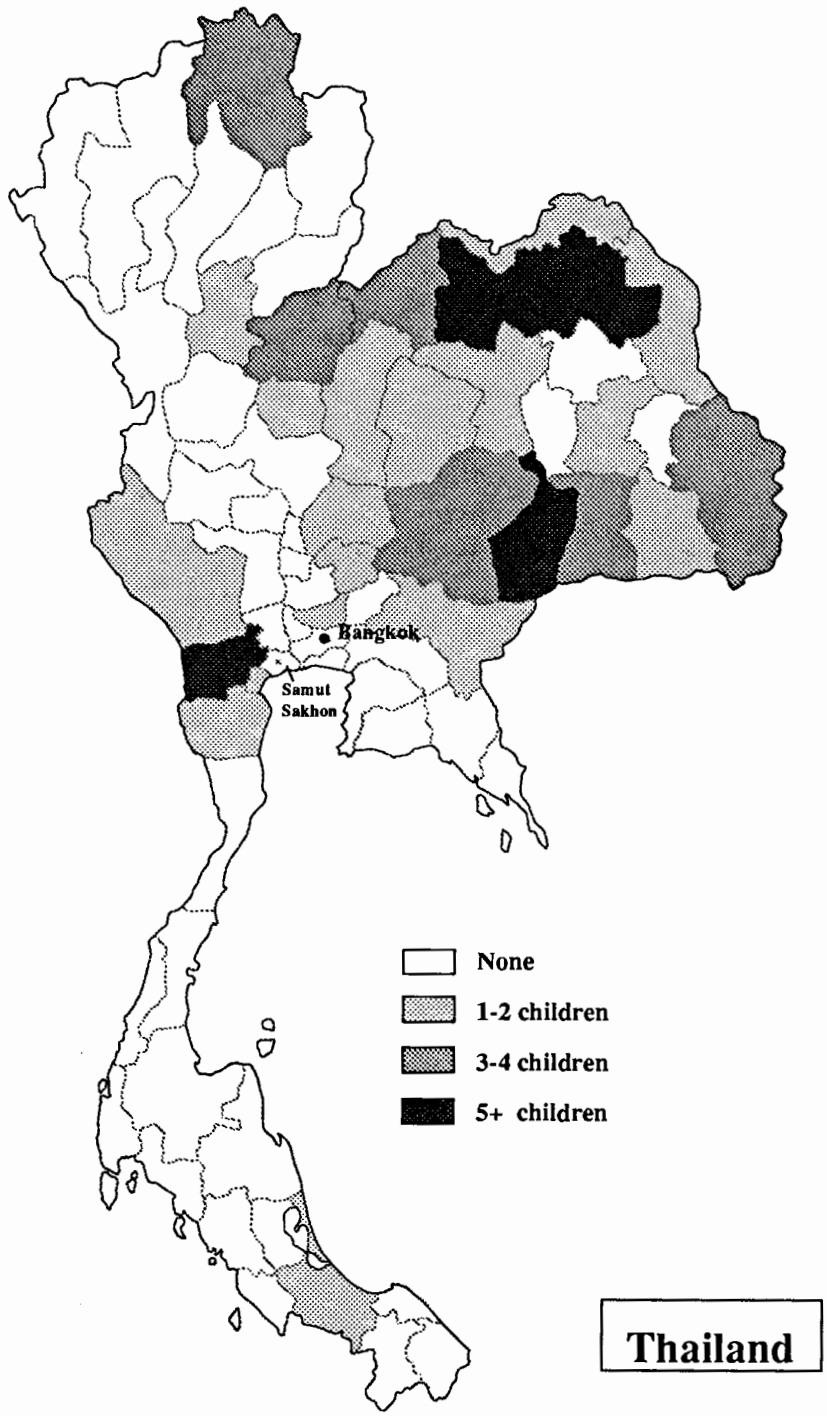

Table 15 : Origin and Migration Characteristics of Migrant Workers (percents)

Region of origin	
North	13.8
Northeast	61.2
Central	23.5
South	1.5
	100.0
Number of months since migration	
One or less	21.2
2-6	33.3
7-12	15.2
13-23	13.6
Two years or more	16.7
	100.0
How child found the job	
Broker or employer came to village	8.2
Parents	2.7
Siblings	34.2
Friends	12.3
Other relatives	32.9
Others	9.7
	100.0
Reasons for migration	
Family needed money	69.2
Nothing to do at home	23.1
Try something new	7.7
	100.0
(N)	(81)

The migrant questionnaire inquired as to the characteristics of the migrant children's families at home, as seen in Table 16. Most of the migrant children (81%) come from agricultural families, and most of their families own land. Many children did not know how much land their family owned however and these may be small amounts. The majority of their families do not own an ox, buffalo or plowing machine. Mean household size of their family at home is 6.7 persons, somewhat less than that of the local workers. About 24% of the children are the oldest child in their family and 19% are the youngest; this indicates no clear pattern about which child in the family is most likely to migrate. Fully 42% say that their families are in debt. More than one-quarter of the children (27%) had as yet sent no

money to their families, and another one-quarter (26%) were unsure of the amount that they would send. The half of the children who had sent money mainly sent small amounts, the majority less than 1000 baht. These figures indicate that migrant children come from families without many resources, and that they are unable to send much money to help them.

Table 16 : Characteristics of the Households of Migrant Workers

Parent's occupation	
Farmer (own land)	75.9
Agricultural labor	5.1
Fishing sector	2.6
Other	16.4
	100.0
Land ownership	
None	19.8
Less than 20 rai*	26.2
20 or more rai	21.2
Own land - amount unknown	38.8
	100.0
Percent who own ox	25.0
Percent who own a buffalo	39.2
Percent who own a plowing machine	6.3
Mean household size	6.7
Percent who are the oldest child	23.8
Percent who are the youngest child	18.5
Percent whose families are in debt	42.0
Amount of remittance sent	
None	27.2
Not sure or not yet	26.0
Less than 500 baht	9.9
500-999	24.7
1000-1999	6.4
2000 or more	6.2
	100.0
(N)	(81)

* One rai = .40 acre.

6.3.3. Job characteristics

Table 17 shows the types of jobs that migrant children do.(see Appendix B.2 for a detailed classification by job type.) They are less likely than local children to be employed for fish or shellfish cleaning, probably because these jobs are taken by local people. A large number of migrant children are employed drying fish and squid, in seafood processing, canning, and bottling (which employs no local children). Most of these children (66%) live at their workplace, with a third renting a room with friends or relatives. For the majority, room and board was included in their salary, but most children were unsure as to whether a deduction was made for room and board.

Table 17 : Job Characteristics of Migrant Workers

Type of Job	
Fish cleaning	8.6
Shellfish cleaning	14.8
Fish and squid drying	22.2
Seafood processing	23.5
Sorting, weighing, checking, loading	4.9
Canning and bottling	14.8
Freezing	3.7
Boat building, dock work	7.4
	100.0
Place of residence	
At workplace - same building	43.0
At workplace - separate building	22.8
Rents a room with other workers	16.5
Rents a room with relatives	17.7
	100.0
(N)	(81)

Table 18 compares the monthly income and daily working hours of migrant children and local children who work full time and earn their own income by job category. We had expected that migrant children would tend to work longer hours and be paid less than children whose parents live in the area. This is both because local children would be protected from exploitation by their parents and because migrant children usually live at their workplace and are thus constantly supervised

by their employers. Migrant workers for the most part take jobs where they are paid by the month rather than by the unit, and where they are more formally hired by the employer. At these types of jobs, such as drying, seafood processing, sorting, weighing and checking, and canning and bottling, the migrant children do earn considerably less than the local children. At the freezing and boat building and dock work jobs however migrant children earn more than local children, though they also work longer hours. Migrant children also work significantly more hours than local children at the drying jobs, but for fish cleaning and sorting weighing and checking they work less hours. Thus while we do find that migrant children earn lower pay than local children, overall both migrant and local workers work long hours.

Table 18 : Comparison of Migrant Workers and Local Workers by Job Category

	Migrant Workers			Local Workers		
	income per month	hours per day	(N)	income per month	hours per day	(N)
Job Category						
Fish cleaning	1,407	10.2	(6)	1,521	11.5	(72)
Shellfish cleaning	1,523	11.8	(12)	1,350	12.0	(68)
Drying	736	12.0	(18)	993	9.4	(13)
Seafood processing	840	11.5	(19)	1,109	11.2	(11)
Sorting, weighing, check, load	1,525	9.5	(4)	1,656	10.6	(20)
Canning and bottling	1,163	11.3	(12)	1,904	11.4	(18)
Freezing	2,433	12.0	(3)	2,158	10.3	(13)
Fishing Boat	-	-	-	1,489	22.1	(20)
Boat building, dock work	1,650	10.0	(6)	1,588	8.6	(13)
Total	1,177	11.3	(80)	1,498	12.1	(248)

Note : Includes only local workers who work full time and earn their own income

We also asked the migrant workers about their satisfaction with their jobs and plans for the future. As seen in Table 19, the majority (61%) do not like their jobs. Over one-third (36%) say that they want to return home, with 14% saying they want to switch jobs and 11% having no plan. When asked what they would like to do in the future, only 4% said that they wanted to get another job in Samut Sakhon. Over half (56%) wanted to get a different job either at home or elsewhere,

and 18% wanted to get training in another occupation. A substantial percentage (19%) had no real plan.

Table 19 : Job Satisfaction and Plans for the Future of Migrant Workers

Job Satisfaction	
Like job or job is O.K.	38.8
Doesn't like - wants to go home	36.3
Wants to get another job	13.8
No plan	11.1
	100.0
Aspirations for the future	
More education	2.5
Training in another occupation	17.5
Return home to work	22.9
Different job in Samut Sakhon	3.6
Different job somewhere else or not sure where	33.7
No real plan	19.3
	100.0
(N)	(81)

7. Summary and Discussion

Employment of child workers age 11-17 in the fishing enterprises of the Samut Sakhon municipal area is widespread. We found that 65% of the fishing enterprises in the area employ child workers, and about 23% of the total work force is in this age group. Most of the jobs in these enterprises are unskilled and tedious, and most of the workers are young women and girls. These jobs are seen by the community as women's jobs that men will not take, but employers also state that they prefer to hire girls because they are obedient. Migrant children also are preferred to local workers at some enterprises because they accept lower wages and because they are easily managed by the employers.

We found that children predominantly work at fish and shellfish cleaning jobs, which are paid by the unit. However, it should be remembered that we found that children are employed at a wide variety of jobs and that children can be found in all aspects of the fishing industry in Samut Sakhon. Children work long hours,

at least 10 hours per day, and many work seven days a week. They mainly squat in the same position all day long and skin problems are common. Boys and girls face a different labor market; girls more commonly work at the menial fish cleaning jobs, but they also are exclusively hired for the better paying jobs at the freezing and canning plants. Boys often work on fishing boats with their fathers, but do not earn their own income for this work.

Only about half of the children decided on their own to begin working in the fishing industry, and in the rest of the cases their mother or someone else decided. Younger children are often working alongside a parent, but by age 14 most are earning their own income. Most have left school, many before completing grade six, and most left because the family needed money. There is some evidence to suggest that the brothers of girls working in the fishing industry are staying in school longer, particularly for younger children in the family. In this way there is a division of labor within the family which may reflect the sex-segregation of the fishing industry. It may be that boys are not working because most of the jobs available are seen as girls' jobs, and a number of the children in the worker sample households are neither working nor attending school. Families employed in the fishing industry are likely to have less assets, to have less income, and to have little education compared with those of children who are attending school. Most parents and children employed in the fishing industry felt that they will not have the opportunity to further their education, and most did not see the point of higher education. Yet, the majority of children say they do not like their job and would like to do something else. Our findings suggest that there are two very different types of households in the Samut Sakhon municipal area, since the majority of adults in the local worker sample households work in the fishing industry and those in the student sample do not. It is easy for children to begin working in the fishing industry because their parents already do so, and it appears that these children will not attain any more education than their parents did. Children age 11-17 make a significant contribution to their families, earning over one-fifth of household income.

Migrant children come from all over Thailand to work in Samut Sakhon, but particularly from the Northeast. They mainly come from agricultural families without many assets, many of whom are in debt. However, they are unable to send

very much money home to their families because their wages are so low. We found that both local and migrant children work long hours, but that migrant children earn lower wages. Interviews with the owners of the enterprises confirm that migrant workers accept less pay and accept jobs that local children will not take.

Studies of child labor usually consider one of two issues: the exploitation of children in the labor market and the household characteristics that determine children's participation. The fishing industry in Samut Sakhon depends upon the labor of children to a very great extent. Fish and shellfish are brought in every day and must be processed immediately while they are fresh. If wages were raised so that children were paid the minimum wage, it would have a serious impact on the profits made by the industry. While we have found that children make an above average salary compared to other workers in this age group, they work very long hours to earn this salary. And while working conditions are not as severe as have been reported by other studies, children do have health problems caused by their work.

It is likely that the local workers are protected from exploitation to some extent because many of them work with their parents. In this way this form of child labor is similar to that found in traditional societies, where children begin working to help their parents at a very young age. Although it is beneficial for families that children are able to contribute to household income, their labor can have deleterious long-term effects. Most disturbing is the fact that these children leave school at such an early age, meaning that they will likely work at unskilled jobs for the rest of their lives.

There also are important differences between the labor market in Samut Sakhon and those in traditional society. While formerly most of the fishing enterprises were small-scale and family owned, bigger and bigger industries are dominating the economy. Small family-owned fishing boats for example are unable to compete with the larger ships that can go further out to sea. Multinational corporations who have recently invested in the area have opened large-scale, mechanized plants of a completely different character than was previously known. Key informants cite that many of the parents of the child workers have become more and more materialistic, competing with their neighbors for consumer goods

such as televisions. It should be remembered that the parents of the children in the fishing industry have little education or capital resources that would help to improve their quality of life, and that adult workers for the most part are not unionized in Thailand. In contrast, many of those in the student sample are likely to go on to university; the area is close enough to Bangkok for there to be a significant "brain drain", and many educated people leave the area.

Two final points about the fishing industry have crucial importance for Thailand's economic development. The first is that migrant children are particularly vulnerable to exploitation, and it is likely that we were unable to interview those who are working under particularly harsh conditions. As rural poverty pushes many young people to migrate to cities, it is vital that these children receive protection from the enforcement of labor laws and aid from advocacy groups, and it should be remembered that not all of these children go to Bangkok. Secondly, we have seen that the fishing industry is dominated by female workers, mainly young girls. Though it is the family or the girl herself who decides that these girls will work, the fact remains that these jobs are low-paying "women's jobs". Policies to improve the quality of life for workers, including education and training programs, must consider gender issues in order that girls may attain their full potential in the labor force.

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Appendix A.1

Enterprise Questionnaire (English translation):

For each gender and age group

For each gender and age group (1)	Number of of workers (2)	Number of days worked per month (3)	Number of hours worked per day (4)	Average monthly wage (5)	Average wage by the unit (6)	Do they work a night shift (after 8 p.m.) (7)	Do they live at the enterprise (8)	Type(s) of jobs that they do (9)
Male : All								
age 10 and minimum								
11-13								
14-15								
16-17								
18-19								
20-24								
25-34								
35-49								
50+								
Female : All								
age 10 and minimum								
11-13								
14-15								
16-17								
18-19								
20-24								
25-34								
35-49								
50+								

Appendix A.2

Worker's questionnaire (asked of each child age 11-17): (English translation)

ID number	Name	Sex (1)	Age (2)	Education (3)	Type of job (4)	Age started working (5)	Hours worked (6)	How child got the job (7)	Where child lives (8)

Appendix A.3

Migrant questionnaire (English translation):

ID number	Name	Sex	Age	Education	Province and district of origin	Number of siblings	Sibling order of this child	Number of persons in the household of origin	Parent(s)' occupation	Ownership of land and amount	Ownership of ox, buffalo, plowing machine	Does the family have debt; amount	When child migrated	Reason for migration	Type of job	Salary; amount of deductions	Number of hours worked per day and time schedule	How child found the job	Amount of remittance to family	Wher child resides	Job satisfaction	Aspirations for the future

Appendix A.4

Household Questionnaire

1.1 Household census:

ID Number	Name	Relationship to head	Sex	A ge	Marital status	Residence status: 1. Permanent 2. Temporary 3. Temporarily absent 4. Away per month e.g. at sea	Education	School status	Work status*	Occupation	Income per month	Contribution to the household per month	If the person is not present in the household now: where they are reason for absence	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1)														
2)														
3)														
4)														
5)														
6)														
7)														
8)														
9)														
10)														

ID Number	Name	Relationship to head	Sex	A ge	Marital status	Residence status: 1. Permanent 2. Temporary 3. Temporarily absent 4. Away per month e.g. at sea	Education	School status	Work status*	Occupation	Income per month	Contribution to the household per month	If the person is not present in the household now: where they are reason for absence	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
11)														
12)														
13)														
14)														
15)														
16)														
17)														
18)														
19)														
20)														

1.2 Income in kind: If household members ever receive food or other things as income:

Name of household member	Item received	Amount received	Approximated price
1)			
2)			
3)			
4)			
5)			

1.3 Ownership of assets and means of production:
1) House: amount of rent.....
2) Land: Number of rai.....
( ) live there..... ( ) rented to other..... ( ) grow crops.....
( ) other uses
3) Motorcycle
4) Car
5) Pickup
6) Small truck
7) Large truck
8) Boat: by self..... rent.....
9) Other things used for production.....

1.4 Length of residence in this sanitary district
1) Less than one year
2) 1-4 years
3) 5-9 years
4) 10 or more years

1.5 If less than five years:
Province and district of origin.....
Reason for migration.....

1.6 Plans to migrate in the future:
1) No
2) Yes:
Province and district.....
When.....
To do what.....

2.1 Daily activities for each child age 11-17:

Name	Weekday	Weekend/holiday	School vacation
1)			
2)			
3)			
4)			
5)			

2.2 Educational attainment and aspirations for each child 11-17:

ID Number	Name	If in school, how far will they go (1)	If not in school, reasons for (2)	Plans for more education leaving (3)	If working: 1. Family business 2. With parent or sibling (no income) 3. Own income 4. Worked before but not now; reasons (4)	Who made decision for child to work (5)	Job statisfaction (6)	Parent (7)	Aspirations for the future: Child (8)
1)									
2)									
3)									
4)									
5)									

2.3 History of migration of each child 11-17 (not including children who are away at sea or working with fishing companies situated in Samut Sakorn)

Children left for more than three months but has returned / Child is not here currently (not counting those away at sea)		Name	when did they go, and how long (1)	destination (2)	lives with whom (3)	Reason for migration: 1. Work 2. School 3. Family 4. Health 5. Other (4)	Occupation per month (5)	Income of remittance (6)	Amount (7)	Reason to come back (8)	do they visit yes (9)	reason (10)	no (11)
1. Child left for more than three months but has returned	1)												
	2)												
	3)												
2. Child is not here currently (not counting those away at sea)	1)												
	2)												
	3)												

Table B.1 Local Workers Primary Job by Specific Activity

	%	(N)
Fish cleaning	**37.5**	**(124)**
Cutting head off fish	12.7	(42)
Boning, skinning fish	20.2	(67)
Taking meat from head	2.7	(9)
Cutting in pieces	1.8	(6)
Shellfish cleaning	**32.0**	**(106)**
Shelling squid	6.0	(20)
Shelling mussels	5.8	(19)
Shelling shrimp	19.3	(64)
Shelling crab	0.9	(3)
Drying	**5.4**	**(18)**
Laying fish to dry	0.3	(1)
Laying squid to dry	5.1	(17)
Fish processing	**3.3**	**(11)**
Making fish cakes	2.1	(7)
Hanging fish cakes on rack	0.6	(2)
Making fish balls	0.3	(1)
Decorating crab	0.3	(1)
Sorting, weighing, checking, loading	**4.2**	**(14)**
Sorting fish by size	3.4	(11)
Checking	0.6	(2)
Loading truck	0.3	(1)
Canning and bottling	**4.8**	**(16)**
Putting fish in can	1.5	(5)
Putting tomato sauce in can	0.3	(1)
Putting labels on can	0.9	(3)
Cleaning cans	0.6	(2)
Stamping can lid	0.3	(1)
Carrying cans	0.3	(1)
Counting and checking cans	0.6	(2)
Miscellaneous canning	0.3	(1)
Freezing	**5.1**	**(17)**
Boning, skinning for freezing	1.5	(5)
Washing, sorting for freezing	0.9	(3)
Packing for freezing	1.5	(5)
Making seafood, plastic	0.9	(3)
Quality control	0.3	(1)
Fishing	**2.1**	**(7)**
Boat building, dock work	**5.4**	**(18)**
Boat building	0.3	(1)
Cleaning net	0.6	(2)
Dock work	4.5	(15)
Total	**100.0**	**(331)**