

Employment Income and Education of Northern Women¹

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The North is Thailand's second poorest region after the Northeast. Landholdings there are also among the country's smallest. The average landholding per household in the North was only 10 acres in 1981. Although irrigation is available in some areas, making multiple cropping possible, most agricultural production is rain-fed. Thus, northern farm families cannot rely solely on income from agriculture. They must also seek off-farm employment.

Off-farm employment first gained a significant economic role in the northern rural areas in the early 1980s. A 1983 study in the Chiang Mai area found that 49 percent of total household income was derived from off-farm employment. Agricultural employment has declined in step with the shrinkage in the size of landholdings, and even middle income farm families have to seek employment off-farm. It was estimated in 1982 that household members spent more than 250 man-days in off-farm employment and fully 35 percent of household income was derived from the non-agricultural sector.

This article explores the changes in the economic opportunities for women in the rural areas of northern Thailand. Traditional employment in agriculture will first be reviewed, followed by observations on emerging trends in other sectors. Next, women's contribution to household income will be examined and, finally, educational opportunities for girls will be investigated.

EMPLOYMENT

Agricultural Employment

Among those interviewed during this survey, agriculture was the main occupation, even though some derived higher earnings from their second or third occupations. Female workers are as active as male workers in agriculture, either on their own farm or off-farm ([Table 1](#)) and, for both men and women, off-farm employment starts at an early age. An important finding was that women are not only non-paid workers on family farms but also hire out their labor to other farms ([Table 1](#), column 4). For the age group 26-40 years, a higher proportion of women than men are engaged in paid agricultural employment.

In the Lower North villages, hired agricultural labor is common for sugarcane cutting and for the planting and harvesting of maize. In Don Rabiang, where the men are engaged in illegal logging, women are the main source of agricultural labor. Owing to relatively larger holdings in the Lower North, as compared to the Upper North, women participate equally with men in all agricultural activities, including pesticide spraying.

In the Upper North, the average holding is only one-third of a hectare. The women work in the fields mainly during the peak seasons, e.g., transplanting and harvesting. Collecting forest products is a common activity for both men and women: the young leaves of *tung* trees, used for wrapping food, are picked in early May; various types of mushroom and wild animals generate additional income from July through September.

In the Lower North, daily agricultural wages are the same for both men and women—about 30-50 baht per

day. In irrigated villages, wages are higher (60 baht per day) but are the same for both men and women. Sugarcane cutting, a popular employment for hired labor, is by piece rate with the same rates applicable for men, women or even children. Fifty baht will be paid for 100 bundles of sugar cane, each bundle consisting of 10 pieces of cane. If the sugar cane has been burned, making harvesting easier, the rate drops to 40 baht per bundle.

The Upper North has more employment alternatives and wages are higher (around 60 baht/day or more), but women earn 10-20 baht less per day than men. This is because the women tend to be hired in "light" employment, e.g., weeding and grading of tobacco leaf, while men are employed for the heavier work of land clearing and preparation. In irrigated areas wages are higher, ranging from 70-80 baht a day. Hiring-out labor for cattle raising is also common. These laborers receive no cash payment, but are entitled to half of the calves produced.

In many rain-fed agricultural villages, agricultural income is insufficient to sustain the livelihood of families. Forest products are important sources of supplementary income. In one village in the Upper North, where illegal logging is commonly practiced, both men and women are engaged in transporting sawn timber. The payment is by piece rate and varies according to the distance from the illegal mill to the transporting vehicles. Men carry two or three pieces of timber at a time on their shoulders. Women, of course, are unable to carry the same amount as men and generally earn far less (100 baht per day) than men (300 baht per day). This is still much higher, however, than wages in legitimate work or agricultural employment. In another village in the Upper North, illegal lumbering is paid by lump-sum. Villagers are provided with a cash advance from a local capitalist and the remaining sum is paid when the goods are delivered.

Interviews with farmers revealed that the agricultural work force is aging rapidly, as the younger generation refuses to work on the farm. From 1987-1991, the high demand for labor following the boom in the construction industry, and to a lesser extent the manufacturing industry, drew many young workers away from the fields. In a secondary school in the heart of the San Pa Tong rice lands, Chiang Mai Province, not a single student chose to enroll in elective agricultural subjects. In more remote villages, intense suppression of illegal logging has forced young agricultural workers to leave their villages. At the time of our interviews in 1991, one out of every three households in Koh Thung, Lampang Province, had sent a young man to look for a job in the cities or elsewhere. In one out of five households, a young girl was working as a domestic maid in an urban area.

Our evidence suggests relatively equal opportunities for agricultural employment and payment for both men and women. Agricultural employers are more interested in output and achievement than in gender. Where tasks are specific and uniformly distributed, the day rate system of payment is often preferred. When the work load is uneven or spread over time, the piece rate system is often used. Moreover, excess demand for labor tends to equalize wages for both men and women. Hence, the wage structure is determined by the need for labor which, in turn, depends on the factors of production, i.e., land and water resources. In irrigated areas of the Lower North, for example, wages for the same task are equal for both men and women. In the Upper North, where holdings are small, women's wages are lower, as the tasks assigned are generally heavier for men than for women. The use of payment by the piece rate system is used whenever and wherever possible.

Village-based and Handicrafts Employment

Home-based activities can also be classified into three types. The first is making products for consumers in the rural areas. This is the Linder type of trade, where goods are exchanged between communities of similar taste and income. Products include household utensils, such as bamboo baskets, pots and earthenware, agricultural and hand tools, and knives. To a certain extent, these activities rely on raw materials which are relatively accessible to the villagers.

The second type of village-based manufacturing activity can be explained by the principle of relative advantage. One village will be better endowed with the resources needed to produce a particular product,

whereas another village will find it cheaper to make other products. Products are then traded between communities. Products under this category include home decorations, arts and crafts, hand-made textiles, and garments.

The third type of activity is manufacturing products with the underlying advantage depending on labor rather than local raw materials. Inputs can be imported as long as they can be profitably combined with local labor and expertise.

In general, village-based activities are seasonal, lowest during the rainy season from June to October. Home-based and village-based manufacturing and handicraft activities in our sample in the Lower North tended to rely on local inputs, while those in the Upper North relied on imported inputs.

Monetary returns for village- and home-based activities cannot be accurately calculated from our large-scale survey as it used a standard questionnaire for all the sample villages. Available information on income from home-based activities in Chiang Mai, which investigated time allocation over the rainy and the dry seasons in 1991, however, suggests that daily wages from home-based activities are generally lower than from agricultural employment. Villagers who engage in home-based activities as subsidiary or part-time employment earn much less than those who make full-time employment their major occupation. The former generally earn less than 30 baht per day, the latter from 50-90 baht per day. The former group's products tend to be arts and crafts, while the latter tend to produce every-day utensils.

Villagers tend to prefer hiring out as laborers in village-based non-farm employment because of the higher wages, bringing cash to the family straight away. Handicrafts, home-made products, or village-based production, in contrast, require cash investment for acquiring raw materials. Finished goods will generally have to be stocked for some time before they are sold and there is the risk of unsold products.

Our survey shows that more women are engaged in village-based or home-based activities than men ([Table 1](#)). This is partly because the women can combine housework with home-based employment. Village-based production also helps to economize on transport and food costs. In our sample villages, home-based activities were also found in villages not classified under village-based activities. Village-based manufacturing activities do, however, tend to be more prevalent in those villages poorly endowed with agricultural resources (land and water). Products include brooms, salt, bamboo products, hand tools, and garments.

The future of village-based activities of the Linder type seems to be bleak as local resources, especially forest resources, are diminishing. The increase in rural income has tended to shift the rural household demand pattern from village-based to urban-based manufacturing. Traditional bamboo containers, for example, are being replaced by plastic containers. Home-woven fabrics are losing out to cheaper mass-produced materials. The future of the relative advantage type of village-based manufacturing, on the other hand, depends on the labor situation.

Manufacturing Employment

The most outstanding feature of manufacturing employment in sample villages is that the manufacturing sector tends to attract a high proportion of the young workforce, especially those aged 15-20 years ([Table 1](#)). Entry into the labor market tends to be at an earlier age for females than for males in both manufacturing and other types of employment. This confirms the finding by Singhanate-Renard that girls leave school earlier than boys. This is particularly evident when job opportunities are more suitable for girls than for boys.

The difference between manufacturing and village-based employment is that the former refers to jobs in factories, where at least some mechanical or electrical process is involved, while the latter means working at home. In the Lower North, the manufacturing industries that villagers are involved in are noodle factories, brick production, furniture, bags and shoes. In the Upper North, the main industries are ceramics, furniture, food canning, garment-making and assembly of electronic components in the industrial estate at

Lamphun. Factories in this industrial estate actually follow the minimum wage law and most have a social security system. Workers are required to have at least nine years education, three years beyond the six years compulsory education. They were paid about 2,200 baht a month at the time of this survey, in 1991, or about 85 baht a day.

Factories outside the industrial estate offer wages below the minimum wage and some also use the piece rate system. In ceramic bowls production, for example, the painting of bowls is paid only for every 100 bowls completed. Factories aiming at high-quality products prefer to hire labor on a daily basis.

Men and women are given different tasks in ceramic factories and their wages are, therefore, different. Men are employed where hard labor or mechanical or firing skills are required. Women are used for lighter jobs, such as jiggering, finishing and painting. Men may, however, sometimes perform the same tasks as women, such as painting, but they normally work on large objects and must be highly skilled.

Interviews with young workers in factories outside the industrial estate areas revealed that most are run by the owner and lack formal supervision. Most do not have foremen and workers' productivity varies substantially. Work-force turnover is high, but factories try to overcome this by employing more workers than needed. Many girls, especially those who work in garment factories, work very long hours, i.e., 12 hours a day starting from 8 a.m. in the morning and finishing at 5 p.m. for the first shift, with half an hour break at noon, and the second shift working from 5.30 p.m. to 9.00 p.m.

In Lamphun, where almost a hundred factories surround the city center, the labor market is very competitive. At the time of our interviews, the labor market was a sellers' market. Workers could easily move from one factory to another, obtaining the same pay or better. Even under this intense labor competition, however, wages paid to unskilled workers were lower than the legal minimum wage—no more than 35-45 baht per day.

More than 80 percent of this industry's work force is female, most workers starting directly after completion of compulsory education. There is no training except on-the-job. Women take maternal leave to look after their babies, but many return to work if they can leave their children with relatives.

In Lamphun, young women earn about 40 baht a day for ceramic production, only half the prevailing agricultural wage. When asked why they preferred to work in factories, rather than in the fields where wages are higher, the girls replied that factory jobs were light and year round; income was low but steady and guaranteed. Working in the fields is far too tiring and hot.

Employment in Commerce

Compared to other occupations, employment for women in the commerce sector tends to start much later in life ([Table 1](#)). Only about 16 percent of the women in this sector are 25-years-old or younger. Many women go into commerce only after they are married. Trading is generally not a full-time occupation and is supplementary to work in agriculture or in the public services.

Men are engaged in trading that involves more external and distant contacts, e.g., peddling home-made products in other villages. In the dry season, many men go to ceramic factories to buy flawed goods at wholesale prices to re-sell at a profit in remote villages. In the Upper North, men are more often found in speculative sales, e.g., making advance contracts to buy fruit prior to harvesting, etc. This type of transaction involves fairly distant travels from one village to another. Women generally prefer a fixed trading spot, e.g., in their own village or in the sub district market. Selling food, fresh or cooked, in a market is a common commercial occupation for women. In many areas of the Upper North, where women have to work in the fields with men, cooked food is usually bought from these markets and only rice is prepared at home. A relatively new trend for women in commerce is for younger girls to take jobs as sales clerks in the urban areas.

Service Employment

Unlike other employment, service employment is mostly performed outside the village and is more prevalent in villages close to town centers. The most common service employment is in the construction industry for men and as domestic help for women. Public service employment has long been the most sought after occupation for many families, but few have been able to penetrate this "lucrative" job sector. The most publicized and probably the most lucrative service occupation for village girls is in prostitution, or the so-called "entertainment industry."

Most employment in the services sector shares a common characteristic: job opportunities depend on access to an established network. This access generally arises from the migration of a village member. This, quite often, determines the pattern of employment for the whole village.

In the construction industry, the employment pattern varies from village to village. In Salachai in Lampang, construction workers commute to work daily as their major labor market is in the provincial center. In Ban Son, Phayao, the villagers work as a team and may travel to other provinces to work. These workers usually return home every two weeks, or when the family needs agricultural labor. In Don Rabiang, many young villagers have gone to Bangkok to join a construction company. Access to this particular company was established when one villager joined the company construction site in a nearby province. Some have since decided to work with the company permanently. Others still return home during the rainy season.

Working as domestic help is a stepping stone for entering into urban employment for many young girls from the rural areas. In Ban Huad, Lampang and Ban Kor, Lamphun, young girls work first as housemaids in their district center and then gradually move to the city center. As the girls start to feel their way around and have wider connections with the outside world, some manage to move to Bangkok and finally work in factories or as sales clerks.

Prostitution is not a widespread occupation in poverty-stricken areas but seems to occur only in villages where a "network" has been established. Among our sample villages, the Koh Thung village is one of the poorest villages but none of the girls has gone into prostitution. In Pa Eung,² which is equally poor, most of the young girls have been recruited into prostitution. In Eung Nua Village,² although the income is relatively high, many girls have also joined the entertainment profession.

Prostitution is generally not practiced in the home village, partly because the local market is small. Girls from the villages surveyed are generally sent to brothels far away from home, but the returning "veteran" prostitutes sometimes ply their trade during market days. Some take daily employment at a brothel in a nearby district center. No social sanction has been observed as many of these girls appeared to be "filial daughters," or daughters who provide income to their families.

[Table 2](#) indicates, by age group, the number of jobs held by villagers. About 8.5 percent (104 out of 1,247) of the men held more than two jobs at a time and about 6 percent (73 out of 1,183) of the women had two or more jobs. The proportion of women with two jobs increases markedly after the age of 30, i.e., after the normal child-bearing age. This implies not only that women return to work after their children start school but also that they have become more active in searching for work.

INCOME AND REMITTANCES

Income

Women's family pay contribution has been calculated by excluding agricultural income because allocating agricultural income by gender requires detailed time allocation analysis. It is apparent that women's contribution to household cash is on average almost half (46 percent) of total household income ([Table 3](#)). This was much higher than the ratios for both the Northern region and nationwide in 1988, which were 31 and 33 percent respectively. Female contributions made up more than half the total household income in villages involved in the manufacturing and service industries.

The correlation between the level of household income and the contribution of women shows a small but

negative sign and is estimated at $-.036$ (1-tailed significance: $-.001$) for the 774 sampled households that had income-earning women. The correlation is slightly stronger ($-.054$) when per capita income is considered. This confirms the hypothesis that women in lower income families tend to bear greater economic burdens than women from higher income families.

Remittances

According to our sample, 217 households receive remittances from both daughters and sons. Remittances per household from daughters average 1.7 times (169 percent) higher than that from sons ([Table 4](#)). Remittances from daughters account for about 28 percent of total household income and are particularly high in villages where women work in the entertainment industries. On the whole, almost one-third of the total cash income of northern rural villages comes from the remittances from female family members.

When classified by village type, it appears that, except in rain-fed agricultural villages, daughters' remittances are generally larger than sons' ([Table 5](#)). In villages with women working in the entertainment industries, the average remittance per daughter is particularly high.

Stories of "filial" children are common in rural villages but more generous support is evident when a daughter marries a foreigner. In Koh Thung, Lampang, one girl married a Swiss man and now supports the whole family of five. A woman in Ban Huad, also in Lampang, built a large house for her parents. Both women have given generous financial gifts to their local temples.

Enrollment Beyond Compulsory Education

An enrollment ratio is defined as the number of children attending school divided by the number of all children of the same age group. Thailand's enrollment ratio beyond compulsory education is among the lowest in the ASEAN group. In 1988, it was 43.4 percent for secondary school, well below the target of 60 percent stipulated in the Sixth National Economic and Social Development Plan. There was an acute disparity between Bangkok (95 percent) and the provinces. In 54 provinces outside Bangkok, the ratios were below 50 percent. Official data, however, do not distinguish between the ratios for girls and that for boys.

The evidence in our sample suggests that, on average, the enrollment ratio for lower secondary education for girls aged 13-15 was slightly higher than that for boys ([Table 6](#)). The opposite is true for the upper secondary level ([Table 7](#)). Classified by type of village, enrollments tend to be lower in rain-fed agricultural villages—the ratio drops significantly from around 53 percent for children aged 13-15 to around 19 percent for those aged 16-18. In villages where home-based employment and formal education are compatible, the enrollment ratio for girls actually exceeded that for boys at both lower and upper secondary level.

Our findings tend to support the hypothesis that enrollment ratios vary inversely with job opportunities. In villages where manufacturing employment is available, the enrollment ratio of girls for upper secondary education is 27.8 percent, while that for boys is 42.9 percent. A similar phenomenon is observed in the service-related villages. By contrast, in advanced agricultural villages where family labor requirements remain high, the enrollment ratio for boys (40 percent) is noticeably lower than that for girls (48 percent). In handicrafts villages, where much of the employment is home-based and labor is not tied to machines, handicrafts employment apparently does not affect enrollment ratios. It is, therefore, possible to conclude that there is no discrimination by gender. The opportunity cost of a child's labor seems to be the decisive factor. This finding is also consistent with the existing social belief that investments in boys do not bring economic gain to the family as boys normally marry out. Our empirical findings, indicated earlier, also confirm that remittances from girls are usually higher.

CONCLUSIONS

The evidence from our large-scale survey indicates the increasing participation of rural women in Thailand's money economy. Young women (15-25 years old) tend to participate more in manufacturing activities,

while older women (25-plus) tend to be self-employed as traders or engaged in home-based activities. In our sample, more women were engaged in paid agricultural work than men.

On average, women in the North now contribute almost half the total household cash income. Women's contribution by income category is particularly high in the trade sector and government service.

The study also found that northern rural economies depend to a significant extent on remittances. Comparing female to male members, female remittances were on the average 1.7 times greater than contributions from male members. In villages where household members worked in the services industry, women remitted more to their families than men did.

As well as women's increasing economic role, data from a macro overview and our surveys suggest that access to education for girls has improved. Over the whole sample, including 35 villages in the North, the enrollment ratios for both lower and upper secondary schools tend to be affected more by employment opportunities than by gender.

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