

## **CHAPTER V**

### **WOMEN'S ROLES IN HOUSEHOLD FOOD PRODUCTION, CONSUMPTION, SOURCE OF FOOD, AND FOREST MANAGEMENT**

In this chapter, details of women's roles in household food production, consumption, sources of food, and forest management were described. The contents include access to food among Hmong household, sources of food, women's roles in housework and fieldwork, and time allocation in that activities/work.

Most households in the upland area would get their food from many sources especially from their fields and nearby forests. Hmong is the one group of people in the upland area who planted crops for household consumption. Rice is a staple food crop that is grown in both upland and irrigated fields. Hmong consume rice in every meal, they grown upland rice and paddy rice in their rice fields depend on the availability of land and water sources.

The study village does not have fresh a food market but there are small shops selling consumer products. The villagers can buy things from merchants who come to sell goods in their village and shops in other villages especially in the nearby Mae Hae village. The livelihood of the villagers depends on agriculture especially rice and vegetables. Hmong usually do not hire labor in farm activities. Some villagers temporarily migrate to work in cities as Chiang Mai, Bangkok, and Phuket. In their fields, they grow various crops supported by the Royal Project Foundation. The Royal Project Foundation was established in 1979 at Mae Hae village. Crops and fruit trees supported by Royal Project Foundation are lettuce, cabbage, apricot, plum, and persimmon.

## **5.1. Hmong women's role in household food production and consumption**

Rice is the staple food. Some Hmong households also grew other plants in their fields and home gardens for family use. Popular plants in home garden were beans, local pumpkin, and corn. Some households would grow both upland rice and paddy rice. In addition, they also grew other plants with upland rice in upland rice field such as local pumpkin and Chinese pumpkin, corn, and bean. They would grow local vegetables varieties in other fields around crop fields or upland rice field. At Huay Hoi village, villagers also grew other crops that are promoted by the Royal Project Foundation, such as cabbage, carrot, and lettuce. Some households would grow fruit orchards like apricot, peach, plum, and persimmon.

### **5.1.1. Women roles in household food production**

Women did the same activities in rice production as men. They did land preparation, planting, weeding, fertilizing, harvesting, and grading. In rice fields, there did not spray insecticide substances but they put fertilizers in rice fields. Most activities that women did rarely were strenuous work such as clearing land/field and carrying crops back home. In rice fields on the average farm size 2.5 rais, women spent 90, 16, 60, 12, and 32 hours per year for land preparation, planting, weeding, fertilizing, and harvesting respectively. Men work together with women, they spent time to do these activities similarly as women, but they spent include 80 hours per year of land clearing more than women. They spent more time for land/field clearing and carrying crops back home than women. Total average time spending in rice field done by men more than women. Men spent 298 hours per year while women spent 258 hours per year in fieldwork (Table 10).

**Table 10** Time spending in rice fields work in Huay Hoi village.

Type of activities/ work	Time allocation						Total	
	Women			Men			Women	Men
	Time /year	Days/ time	Hours/ day	Time /year	Days/ time	Hours/ day	Hours/ year	Hours/ year
Land clearing	1	5	8	1	10	8	40	80
Land preparation	1	10	9	1	10	9	90	90
Planting	1	2	8	1	2	8	16	16
Weeding	2	5	6	2	5	6	60	60
Fertilizing	1	2	6	1	2	6	12	12
Harvesting	1	4	8	1	4	8	32	32
Transfer rice to home	1	1	8	1	1	8	8	8
<b>Total</b>							<b>258</b>	<b>298</b>

Source: Survey, 2002

For vegetable cultivation, most villagers planted 3 – 4 crops of vegetables per year. They planted two groups of vegetables divided by crop duration include 60 days and 90 days. The vegetables, which there are 60 days of crop duration is lettuce and other vegetables are 90 days of crop duration such as cabbage, red cabbage, chinese cabbage, and carrot.

In vegetable fields, on the average farm size 4.75 rais, it was found that women did field work less than men. Men spent 1,062 hours while women spent 918 hours per year. They also work together with men in all activities. Women did more weeding than men. They spent 54, 120, 81, 180, 108, 225, and 150 hours per year for land clearing, land preparing, planting, weeding, fertilizing, pesticide spraying, and harvesting. Men spent more than women include 135, 162, and 360 hours per year for land preparing, fertilizing, and pesticide spraying. Table 11 show that time spending in vegetable field by women and men.

**Table 11** Time spending in vegetable fields in Huay Hoi village.

Type of activities/ work	Time allocation						Total	
	Women			Men			Women	Men
	Time /year	Days/ time	Hours/ day	Time /year	Days/ time	Hours/ day	Hours/ year	Hours/ year
Land/Field clearing	2	3	9	2	3	9	54	54
Land preparation	3	5	8	3	5	9	120	135
Planting	3	3	3	3	3	3	81	81
Weeding	15	3	4	10	3	4	180	120
Fertilizing	4	3	9	6	3	9	108	162
Pesticide spraying	15	3	5	20	3	6	225	360
Harvesting	10	3	5	10	3	5	150	150
<b>Total</b>							<b>918</b>	<b>1,062</b>

Source: Survey, 2002

### **5.1.2. Women role in household food consumption**

Hmong women duties in their households were similar in each household in each day especially on food preparation. They wake up at 4 – 5 a.m. but not later than 6 a.m. and they boiled water for rice while waiting for water to boil, they prepare some ingredients to cook for family members. Cooking was the main task of the women, both daughters and daughters in law. The sources of food come from cultivated plants from household field and home garden, village shop and outside merchants. They had breakfast about 7 a.m. and went to their field after. For lunch, they cooked a simple meal which need a short time to prepare or prepare lunch meal from home together with breakfast. Popular meals were vegetable soup, instant noodles, and canned fish or some food that was prepared in the morning such as vegetables soup with salts, fried meat (pork or chicken) with vegetables. Women would prepare food for dinner about 6 p.m. after they finished field works and go back home. They had dinner about 7 – 8 p.m. In the Hmong community, men always ate before women in every meal (Table 12).

**Table 12** Schedule of women task in each day

Time	Activities
4 – 5 a.m.	Wake up
5.30 – 6 a.m.	Cooking after that they wash their cloths
7 a.m.	Have breakfast
8 a.m.	Go to field
12.00 o'clock	Prepare food and cooking
1 – 5 p.m.	Work on field works
6 – 7 p.m.	Cooking for dinner and feeding their pigs or chickens
7- 8 p.m.	Have dinner
9 – 10 p.m.	Go to sleep

Source: Survey, 2002

The taste of Hmong food was not spicy and their food had as main ingredient salt and vegetables. Some food and ingredients were bought at least four times per month. In every meal, there were often vegetables. Examples of food which villagers consume each day, were shown in table 13. Most Hmong people consumed upland rice and paddy rice similar to the lowland people because they got enough money from their vegetable and fruit selling and they would buy enough rice for household consumption. Fresh vegetables were collected from their vegetable fields and home garden. Some food collected from the forest near their village. Hmong women would collect or gather wild food on the weekend or at free times after fieldwork. They spent about 6 hours for wild food collecting and gathering each time depend on distance between source of wild food and their fields and home.



**Table 13** Example type of food in 5 days that consumed by villagers

Meals	Type of food
<i>Day 1</i>	
Breakfast	Cabbage with pork soup and fried bamboo shoot
Lunch	Fried instant noodle with mixed vegetables
Dinner	Fried cabbage and shallot, fish and vegetable soup
<i>Day 2</i>	
Breakfast	Fried vegetables with pork and eggs, and grilled fish
Lunch	Chili paste (not too much spicy) with fresh vegetables, grilled fish, and fried egg and noodle
Dinner	Fried eggs, long bean soup, and fried vegetables with pork
<i>Day 3</i>	
Breakfast	Fried cabbage and cucumber, fried fish
Lunch	Boiled eggs and mixed vegetable soup
Dinner	Chili paste, boiled bamboo, fried long bean with meat
<i>Day 4</i>	
Breakfast	Fried eggs and pork with cucumber, boiled mixed vegetables with chili paste
Lunch	Mixed vegetables and bamboo shoots soup, grilled fish
Dinner	Fried pork, taro soup with chili paste, and fried long bean with eggs
<i>Day 5</i>	
Breakfast	Fried pork with cabbage and instant noodle, cucumber soup
Lunch	Canned fish, mixed vegetables and mushroom soup
Dinner	Grill fish, fried cabbage, and taro soup with chili paste

Source : Survey, 2002

Table 13 shows the type of food that interviewed households consume in five days. Type of food that they consume in each day made up of vegetables, meat, and salt. Popular food, which they consumed all households such as, fried pork or chicken with vegetables like cabbage, chinese cabbage, and cucumber and chicken soup made from chicken boiled with some vegetables and medicinal herbs. Chicken curries was one type of food that they consumed, most chicken curries would cook with oil, a little bit chilli, and some medicinal herbs or vegetables like shoot bamboo and long bean. Sometime they consumed chilli paste with rice. Normally, chili paste made from chilli, salt, and fermented soybean but the taste of chilli paste was not too spicy. Corn grilling was a dessert, which was cooked in households. Special dessert was cooked in special celebrations such as New Year and wedding day made from sticky rice, and sugar.

Fuel wood collecting for household use was a major task of women and their children. They would collect small dry wood sticks from the forests around their village while men collected bigger wood sticks as fuel wood as women and children could not contain them in their basket. Men would collect fuelwood in the forest as far from their village as 15 kilometers. In this study they would collect fuel wood in the forest near Mae Sa Nga village. On the other hand, they would buy fuelwood from other villagers at a price of 150 – 200 baht per pick up truck.



## 5.2. Hmong women's roles in household

In general, women in rural societies have similar roles, which we could see from their daily life. Most women still hold on to a traditional way of life, which women must take care of their husband and family.

The labour division also varied according to the season. In this Hmong community, due to the lack of the cultivated areas and the lack of water for cultivation in the dry season, most households could grow one crop of rice and upland rice per year or grow vegetables 1 – 2 crops in the rainy season. Then in the dry season they either grew vegetables in the fields where there was a nearby stream. Some households did not have land for cultivation in dry season. They would rent land for grow vegetables from their friends or neighbors and other villagers who had many field plots. Because the villagers grew many vegetable crops in a year, they would be busy with their cultivation. Household members both women and men would join with their family especially in the harvesting period when they would very busy. On the other hand, they also would take their role in housework. The role of women and men in housework were show in table 14.

In Hmong society, both women and men had roles in housework, but women had more roles more than men. In the survey, the author interviewed 30 persons from 30 households and found that most women had important roles in housework and taking care of their children. They had their roles in the fields, but had fewer roles than men especially in strenuous work as land clearing, land preparing, pesticide spraying, and so on.

**Table 14** Labour division in household works in Huay Hoi village

Activities	Labour division	
	Women	Men
<b>Vegetables and rice cultivation</b>		
Seed selecting	X	XX
Land clearing	X	XX
Land preparing	X	XX
Planting	XX	
Weeding	XX	
Fertilizing	X	XX
Pesticide spraying	X	XX
Harvesting	X	XX
<b>Home gardening</b>		
Propagation	XX	
Land preparing	XX	X
Planting	XX	
Weeding	XX	
Harvesting	XX	
Collecting for household use	XX	
<b>Cattle feeding</b>		
Pigs	XX	X
Chickens	XX	X
<b>Wild plant collecting</b>		
Food plants	XX	X
Medicinal plants	XX	X
Fuelwood	X	XX
Fodder	XX	X

Source: Survey, 2002

Table 14 (continue)

Activities	Labour division	
	Women	Men
<b>Housework</b>		
Cooking	XX	X
Dish washing	XX	
Cloth washing	XX	
House cleaning	XX	
Going to buy food	XX	X
Taking care children	XX	X
Fuelwood collecting	X	XX
Taking care members' health	XX	
Clothing	XX	
House repairing		XX

Source: Survey, 2002

Note: XX means main labor

X means supporting labor

### 5.2.1. Women role in housework

According to Hmong, households were extended households, which included many small families in each household. Thus, there were many Hmong women each household includes daughter, daughter in law, wife, mother, and grandmother.

Most of Hmong women would take their role in housework. Housework includes cooking, rice pounding, animal feeding, house cleaning, taking care of household members and clothes washing. That was all of women's responsibility. Sometimes, men would help women to take care of their children and to help in cooking but usually not so often. Taking care their children was the main task for

women and their older children, and sometimes, old people in each household could help them take care children when they go to crop fields or do other works.

From 52 interviewed households, it was found that women spent 3,482.5 hours per year in housework, home gardening, and wild plant collecting while men spent 866.4 hours per year on those activities. Women spent 10 – 15 minutes to take care of 2 – 6 pigs per household. They spent for 1-2 hours each time to boil dried maize or corn for their pigs. Sometimes, they boiled corn / maize with other vegetables and mixed with remnants of a meal. They fed their pigs two times a day as about 6 a.m. and 6-7 p.m. Pigs were sold for cash and kept for home consumption. Men hardly ever did pig and chicken feeding. Women spent 1-2 hour for washing clothes in each time. They spent about 10 – 30 minutes for house cleaning per time. Women spent times at least 1.5 hours for taking care their children in each time. Men would help them for take care their children while his wife or daughter cooked each meal.

For home gardening and wild food gathering, women spent times about 260 and 432 hours per year respectively while men spent time include 62.4 and 168 hours per year of home gardening and wild food gathering respectively. Women spent time after their fields for wild food collecting or wild fodder for their pigs. Sometime, they spent average time about 6 hours for collecting wild food plants from the forest around their fields. In addition, women still had duty in preparing clothes for all household members for Hmong's New Year celebration in every January. They must spent time about 1 – 2 hours for preparing clothes each day while men did not spent time for this duty (Table15).

**Table 15** Gender role in housework of Hmong in Huay Hoi village

Type of activities/ work	Time allocation				Total	
	Women		Men		Women	Men
	Time /year	Hours/ time	Time /year	Hours/ time	Hours/ year	Hours/ year
Cooking	730	1.5	360	1	1095	360
Animal feeding	365	0.5	0	0	182.5	0
Clothes washing	260	1	0	0	260	0
House cleaning	52	0.5	0	0	26	0
Clothes preparing	60	1	0	0	60	0
Taking care children	730	1.5	180	1	1095	180
Fuelwood collection	12	6	12	8	72	96
Home gardening	260	1	104	0.6	260	62.4
Wild food gathering	72	6	28	6	432	168
<b>Total</b>					<b>3,482.5</b>	<b>866.4</b>

Source: Survey, 2002

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
 Copyright© by Chiang Mai University  
 All rights reserved

### 5.2.2. Women role in home garden

Home gardening was a traditional kind of cultivation around the house, which usually includes fruit trees, vegetables, root crops, poultry and small livestock and sometimes a fishpond. In Thailand, home gardens were multiple cropping systems found in family compounds surrounding the house. At the same in Northern Thailand, home gardens were mostly located in communities around the foot of the hills and multiple non-cash plants were grown in home garden around the house (FAO, 1995).

In the study area, Hmong households planted food crops in home garden around their house. Food crops were planted in home gardens, including taro, corn, cucumber, cowpea, and sweet potato. On the other hand, they planted some plants for medicine and food such as sweet basil, ginger, lemon grass, and chilli. Because there were not had fresh markets in this village, home garden became the main place to provide these fresh foods for daily meals. Most households used empty land around their house and used family labors to take care home garden, which was done mostly by women in each household. Hmong people have home gardens to supplement their food sources.

Medicinal herbs were popularly in this area. Normally, Huay Hoi village used to have traditional doctors who used these medicinal herbs to treat common diseases such as stanching, fever, flu, cold, and stomachaches. Some households in this village still planted medicinal herbs for household uses. There is common health station in nearby village, although villagers still treated common diseases by themselves with herb from home garden, wild herbs, and sometime they would buy medicine from public health stations, drug stores in town, or shops nearby their village.

Their home gardens did not have any fixed patterns. They cultivated any plants that they like and often to use anywhere near their home. They started planning in the early rains season and after planting, these plants were grown with no pesticide,



fertilizer, and insecticide. They did not spend much time on their home gardens. They did not propagate wild plants in their home garden belong to their believes. In home gardens, they grew some medicinal plants for use in household. Most women charged on planting, sowing, weeding, and collecting for food. Women collected vegetables from their home gardens for family consumption.

Hmong people use their knowledge to propagate many plants species in both women and men. Women are more concerned with plant propagation than men because women have responsibility to work in home gardens. The author found that women in Huay Hoi village spent time on home garden everyday and each time about 1-2 hours.

Hmong women take charge in home gardens. They planted these food crops and collected them to cook. This study reported that, there are 19 species were food crops (Table 16), 7 species of which were medicinal herbs (Table 17).

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved

Table 16 List of food crops species in home garden

No.	Scientific name	Family name	Local name	Parts of use	Pattern of use	Quantities of use (Kg./year)
1	<i>Carica papaya</i> Linn.	Caricaceae	Malakor	Fruits	-Eat fresh fruits	11
2	<i>Oroxylum indicum</i> (Linn.) Vent.	Bignoniaceae	Malidmai / Pega	Pods	-Grilled fresh pods	3.5
3	<i>Musa sapientum</i>	Musaceae	Kuay tai / Kuay namwa	Fruits	-Eat fresh as fruits	75
4	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Kraprao	Stem Leafs	-Boiled stem with pork -Fried with meat as pork and chicken	6.5
5	<i>Zea mays</i> L.	Gramineae	Kaopod	Seed	-Boiled or grilled	90
6	<i>Cymbopogon citrates</i> (DC.) Stapf	Gramineae	Takrai	Roots	-Boiled with chicken and other herbal plants	3
7	<i>Coccinia grandis</i> Voigt	Cucurbitaceae	Tunlueng / Pak cab	Leafs	-Boiled -Boiled with pork and mixed vegetables	15
8	<i>Cucumis Sativas</i> L.	Cucurbitaceae	Tang kwa	Fruits	-Eat fresh fruits -Fried with egg and pork	45
9	<i>Vigna sinensis</i> Savi ex Hassk.	Fabaceae	Tua fak yao	Pods	-Boiled with pork -Eat fresh pods -Boiled with meat	43.5
10	<i>Benincasa hispida</i> (Thumb) cogn.	Cucurbitaceae	Fak keaw	Fruits	-Boiled with meat and fish	42

Table 16 List of food crops species in home garden (Continue)

No.	Scientific name	Family name	Local name	Parts of use	Pattern of use	Quantities of use (Kg./year)
11	<i>Cucurbita moschata</i> (Dence) Poir.	Cucurbitaceae	Fak tong	Fruits	-Steam and boiled	48
12	<i>Solanum melongena</i> L.	Solanaceae	Makueyao	Fruits	-Boiled and grilled	29
13	<i>Ipomoea batatas</i> Lamk.	Convolvulaceae	Munted	Roots	-Boiled, steam, grilled	52
14	<i>Colocasia esculenta</i> (L.) schott	Araceae	Pueak	Roots	-Boiled, steam, grilled	76
15	<i>Sechium edule</i> Sw.	Cucurbitaceae	Tangdoi	Fruits	-Eat fresh fruits	52
16	<i>Passiflora foetida</i> Linn.	Passifloraceae	Katokrok /Suetamalai	Fruits	-Boiled with pork or fish and chilli paste	12
17	<i>Morus nigra</i>	Moraceae	Mon / Hua yah	Fruits	-Eat fresh fruits	2.5
18	<i>Lagonaria leucantha</i> Rusby	Cucurbitaceae	-	Baby fruits	-boiled baby leaves with chicken as medicine	5
19	<i>Colocasia gigantea</i> Hook f.	Araceae	Toon	Herbaceous stem	-Boiled with pork -Eat fresh -boiled with chilli paste or meat adg mixed vegetables	9

Source : Survey, 2002

Table 17 List of medicinal herbs species in home garden

No.	Scientific name	Family name	Local name	Parts of use	Pattern of use	Quantities of use (Kg./year)
1	<i>Chlorophytum intermedium</i> Craib	Liliaceae	To Din	Baby leafs	Boiled baby leafs with chicken	5
2	<i>Agastache rugosa</i> (Fisch. c. Mey.) O.K.	Labiatae	.	Leafs	Boiled leafs and drink	3
3	<i>Acorus gramineus</i> Sol ex W. Ait	Araceae	Per Kah	Leafs	Boiled leafs and drink	1.2
4	<i>Zebrina pbnidula</i> Schmizl.	Commelinaceae	Lao Cher	Baby leafs	Boiled Baby leafs with chicken	2.9
5	<i>Dichroa ferbrifuga</i> Lour.	Saxifragaceae	Fan Wang	Baby leafs	Boiled Baby leafs with chicken	1.5
6	<i>Oenanthe javanica</i> (Bl) DC.	Umbelliferae	Tung Ki	Leafs	Boiled leafs with chicken	4.5
7	<i>Conyza sumatrensis</i> (Retz.) walk.	Compositae	Gua Kai	Baby leafs	Boiled Baby leafs with chicken	4

Source : Survey, 2002

### 5.3. Access to food of Hmong household

Hmong women had various duties in their household crops and rice fields. In housework, they took important roles in food preparation, childcare, animal feed, and so on. In their fields, they did less strenuous tasks such as land clearing and carry their crops or vegetables on the back. The following diagram would explain access to food of Hmong households.

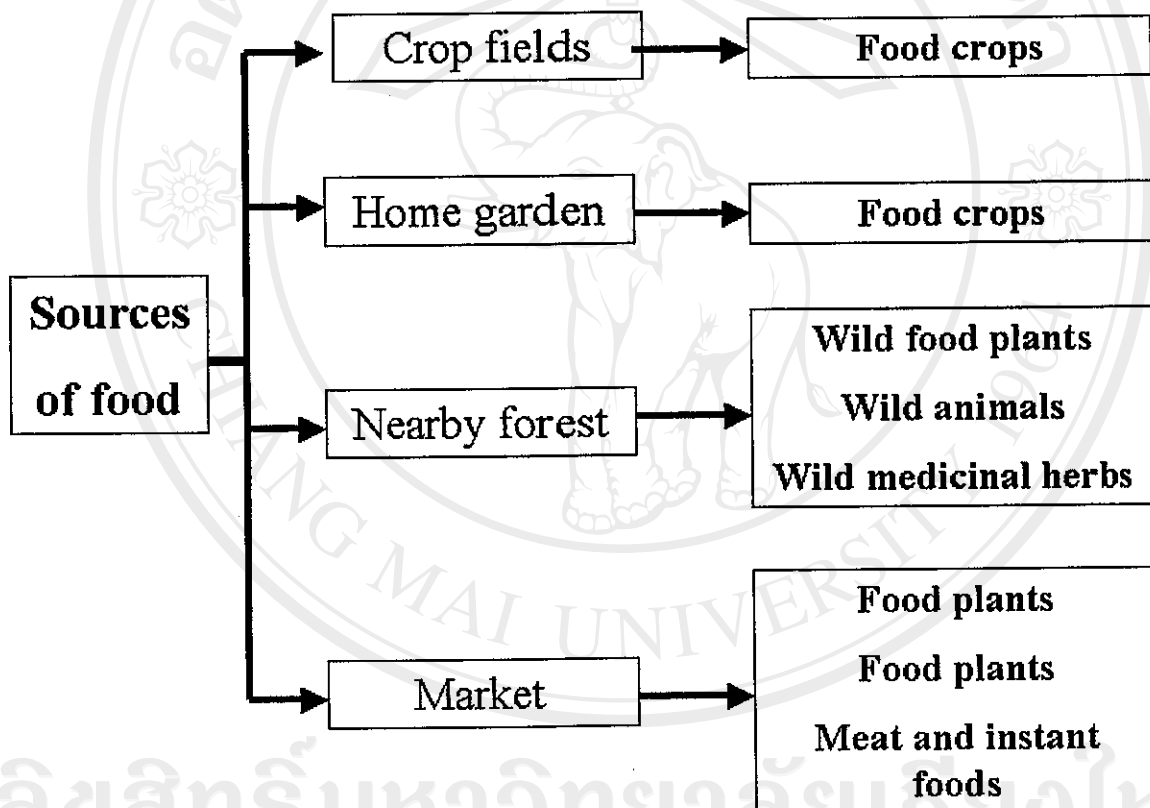


Figure 5 Sources of food of Huay Hoi villagers

Most of Hmong household in Huay Hoi village got some food from their fields and home garden especially vegetables, village shop, and in nearby forest. In this study, access to food of villagers, was explained as follows.

Figure 5 show that sources of food that villagers gathered / collected food for their household consumption. In this study, it was found that there were four groups of food sources includes crop fields, home garden, nearby forest, and market. The market means village shops and markets in other places such as Ban Kad market, San Pa Tong market, Muang Mai market, and so on. Crop fields were popular food sources for their households. Villagers grew food crops as rice and vegetables. In their fields, they planted cash crops as cabbage, chinese cabbage, red cabbage, carrot, and lettuce and they collected these crops for cook in their household. Some households planted pumpkin and corn in their vegetables fields or upland rice fields. In their home gardens, they planted taro, cucumber, pumpkin, squash, corn, bean, cowpea, and bamboo. Most of households will cook every meal for household consumption. They cook for breakfast and dinner at home while have lunch in their fields. On the other hand, they got some food from forest products gathering such as bamboo shoots, banana, mushroom, fern, honey, and get some plants for their pigs such as wild banana tuber and bamboo shoots. They buy some food from village shop such as fish canned, instant noodle, and eggs while some fresh food as pork, fish, and chicken were bought from food shops at Mae Hae village.

### **5.3.1. Food for household consumption**

The type of food that villagers cooked for household members would depend on season each year. Vegetables were the main ingredients for each meal, which is planted in home garden and cash crop fields and gathered from forest nearby their village. Thus, vegetables, which are cooked for household consumption, were different in each season. Meat such as pork, chicken and fish were not often served. Especially for pork, which were cooked in special ceremonies such as New Year ceremony. Fish was not often to serve because water sources were too far from Huay Hoi village and villagers must spend too much time for gathering fish from stream



and / or gully. The type of food that villagers cooked in their household were fried vegetable with eggs, chicken or pork, vegetable soup with chicken, sauce of fish or chicken paste with a little chili and vegetables, and chicken curries with vegetables.

Villagers bought some food from market in Mae Hae village, market in Mae Wang district, and market in Chiang Mai. Because of they had cars and motorbikes and they sold their vegetables by themselves. After they sold their vegetable, they would buy some food and some things that they want. They bought some food much as noodles with pork and/or meatball, fish canned, and food that already to cooked from Mae Hae food shops for lunch meal. On the other hand, most of the households have gathered food from forests but this depend on their free times.

### **5.3.2. Source of food**

In the past 10 years, villager's livelihood depended on natural resources such as forest more than now. They grew upland rice, paddy rice, and vegetables for household consumption and gathered some food from forests nearby village. Forest products that gathered for food such as herbaceous stalk and spathe of wild banana, bamboo, taro, mushroom, wild passion fruit, honey, wild boar, jungle fowl, squirrel, and wild birds. Besides, villagers feed chicken and pigs in their household.

From the household interviewed, it was found that most villagers would buy rice from the market for consumption more than in the last ten year. They hardly grew paddy rice or upland rice for household consumption. They said that because of they could sell vegetables and fruit trees and got money more than grew paddy or upland rice. In addition, they got enough money to sell rice for household consumption all year and other goods that they want. They bought some food from market and food shops. They consumed more instant food products because they could save time for cooking each meal. Forest product gathering by villagers was less in the last ten years because they spent much time for grow cash crops as vegetables

and fruit trees. But most of the households gathered forest products for food in only nearby forest. Because some type of wild plants that they gathered for food could not be planted in home garden and some wild plants were not allow to be planted in the forest area due to their beliefs.

#### **5.4. Women and forest management**

The Hmong had belief about forests as being “the best friend” for them because the forests were as habitat, source of food, source of water, and so on, and were necessary in their livelihood. The Hmong would select planted areas near water sources and select areas to build their houses on tophills. The Hmong had management of forests that was near their village and fields. They divided the forests depending on the utilization and conservation purpose. They had community forests for the utilization of timbers and other food products, land for cow feeding, and medicinal plant source. At the same time, they had forests as conservation areas to keep water source. Villagers were not allowed to do any activities in this area. On the other hand, there was a forest conservation group of fourteen villages around the Mae Hae Highland Development Center that supported by Mae Sa Nga watershed management unit, the Royal Forestry Department, and Royal Project Foundation. This group would discuss about forest conservation and utilization of all village members especially when they were users of the Mae Hae forests and when some villagers cleared land for cultivation in forest areas. The forest conservation group would discuss about problems and how to punish the villagers. The forest conservation group had a conference every month on Day 6 or 7.

The Hmong believed that god and spirits would protect the forest. The following details were examples of the belief about forests of Hmong community.

**Roob Xab Cum** was an area which was located between three mountains. The Hmong would not plant any crop or agricultural activities in this land because they believed that there was a god who protected this area and had strong power. If villagers go there, they would be sick.

**Dawn** was called “Kiw” in Thai name. Dawn was a plain area on the mountain that was located between two mountains. The Hmong would not do any agricultural activities in this area because Hmong believed that this area was water source and was habitat of god. Thus, human was not allowed to do anything.

**Area that had water sources** and water appeared on land that villagers would use this water source for consumption and in agricultural activities. Villager would not go there because they feared gods and spirits.

**Cemetery forest** was an area that was used for bury dead man that was not land for cultivation. Thus, villagers would not plant crop or do animal feeding in this land.

On the other hand, there were beliefs when villagers went to the forests to hunting and wild plant collection. While they were hunting some wildlife and that wildlife cry, they would encounter unluckiness. Thus, the villagers would not kill them. For fuelwood collection, they would collect dried branches and stems of trees and carry on the back or in trucks back. Sometimes they would haul logs as fuelwood, they chose only dried wood. If they did the collection both by in baskets carrying on the back and also by hauling them as logs in a truck at the same time, they would have unluckiness.

Villagers in Huay Hoi set rules for forest conservation and asked all households chose a family member to participate in these rules. Tree planting and fire bridge were activities for forest conservation. According to an announcement of the Royal Forestry Department about National Park areas and they was not allowed to extend cultivation areas. It was one reason to brought them to concern about forest

conservation more than the last 10-30 years ago when they moved to new land for cultivation and were not concerned about decreasing of forests and land for cultivation.

At present, they concerned about the importance of forests because they knew that the forest gave water and good soil for them. Thus, they would plant tree in their community forests every year and made fire bridge to protect fire every year, it was one way to protect their field crops and villages from fire. Planting trees and making fire bridges were activities which all of households in village must participate. Men from each household would do fire bridges and sometimes women participated in this job. Planting tree was done by both men and women.

This survey shows that women participated in two activities, women participated in tree planting more than fire bridges. They participated 100 percent in tree planting and 25 percent in fire contours (Table 18).

**Table 18.** Women's participation in forest conservation in Huay Hoi village

Activities	No. of participation	No. of interviewees	Percent of participation (%)
Tree planting	20	20	100
Fire bridge	5	20	25

Source: Survey, 2002.

Besides, women in this village formed housewives group for preservation of fruit trees, medicinal plant conservation, and for any help in any activities in village. There was a medicinal herb plot for use in Huay Hoi village. The housewives' group would plant medicinal plants that were used in the household. These species were brought from nearby forests.