

**The Dynamics of Land Tenure and Natural Resource
Management
under the Influence of Social Organisations
of a Hmong Village in Northern Thailand**

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5 Conclusion and summary

5.1 Conclusion

The Hmong farmers and their activities concerning land tenure and resource management were the focus of interest in this study. The social structures within the village were described. The legal framework was briefly introduced and influences through governmental agencies were assessed.

The demographic characteristics such as the size of households, the educational status of the household head and the age structure do not show any peculiarities. No bigger changes other than those expected through the improvement of the living standard (e.g. the educational status improved with the easier access to schools) occurred compared to the investigations of Cooper (1984) made in the early 70s. The Hmong social categories still play a major role in the village community, though some important functions have changed from the clan and lineage relationships to a more Thai oriented administrative system. However, this system remains independent from Thai governmental administration in most subjects. The socio-economy of the households in the village has changed especially in the composition of household income which is closely related to agricultural production system and farm economy. Paid labour, trading and permanent employment are of increasing importance in many of the investigated households.

The coexistence of two tenure systems, the official and the local one, is repeatedly causing conflicts between farmers and governmental agencies. Negotiations between the two parties are difficult and the Queen Sirikit Botanical Garden, for example, preferred to solve the conflict, arising when the botanical garden was established, through compensation payments to the farmers who lost land. After the QSBG had to face these problems they wanted to exclude the village and the remaining subcatchment area from the project planned in cooperation with DANCED (Environmental Assistance to Developing Countries, Denmark) and will be implemented through IMPECT (Inter Mountain Peoples Education and Culture in Thailand Association). The project aims to train and educate academics and non-academics about biodiversity and environmental issues. IMPECT voted for the involvement of the villagers living in the Mae Sa Noi subcatchment area in the project aims as they perceived that the QSBG is the "Community Forest" of Mae Sa Mai. According to IMPECT, the village should be involved in small scale community projects which add the "cultural dimension" to the QSBG. The villagers can benefit from the project as they may use the facilities and be employed by the QSBG. Although the project recognises the existence of the village, no efforts are taken to solve the land tenure problems between the Royal Forest Department and the villagers in the long run.

The importance of agriculture for the subsistence livelihood of a household is decreasing whereas cash generation through agriculture is becoming more important. This is evident through the increasing area of lychee plantations. Besides lychee, vegetables are produced on a large scale. Most of the vegetables require only a short vegetation period, the cropping system is highly variable and can be adapted to household needs and weather conditions. The villagers nowadays settle permanently in this area which resulted in the change to permanent agriculture and the growing of perennial fruit tree. Other factors such as the market economy and projects promoting cash crops influence the cropping systems in the subcatchment area as well. The promotion of erosion control measures and irrigation through projects and extension workers reaches villagers holding a function first as they are often those to be addressed first. Other social categories hardly influence the agricultural production system in the subcatchment.

Local organisations play an important role in the management of irrigation water and conservation activities. After the area of irrigated lychee increased steadily during the past decades and water scarcity became apparent the villagers tried to solve the water conflicts through the establishment of a water management group. First irrigation schedules were set up for conflicting parties. Later, as more farmers got involved, this management system did not work out well and a resolution was made that every plot gets the same amount of water. Following the resolution every farmer is allowed to install a one inch pipe per plot. Villagers individually reacted to the water scarcity through the installation of barrels and ponds to collect water during night-time and irrigate during day-time. No communal irrigation constructions have been built yet, cooperation does not extend clan level.

The conservation and reforestation of the forest on the upper slopes of the subcatchment area is the aim of the conservation group formed by the villagers. They cooperate with the Forest Restoration Research Unit and at some occasions with the Royal Forest Department. Most of the members belong to the Sae Shong clan, have a basic formal education and some are holding a function within the village administration as well. The conservation of forest is the pronounced main aim of the group. Though the members of this group are rather interested in securing the village position in the subcatchment against governmental agencies and the conservation activities are one part of bargaining with governmental agencies. The activities of the conservation group in collaboration with FORRU have been acknowledged in public already through newspaper articles in the Bangkok Post and The Nation in 1998. Some villagers are well aware of the fact that the subcatchment area cannot provide enough resources for sufficient agricultural production of an increasing village population. Therefore they seek alternative non-agricultural activities to generate income. One idea of them is a village based eco-tourism project. The idea was raised by some of the conservation group members and the village headman.

The village location is not isolated and villagers seek opportunities in the region. Some of them use additional land outside the subcatchment area for agricultural production whereas others use the regional infrastructures to trade goods. Labour and permanent employment gain increasing importance for villager. The people living and working outside the village support their households in Mae Sa Mai financially and with labour force and keep regular contact.

Asking the villagers for the biggest problem in the Mae Sa Noi subcatchment two points were always mentioned: the land insecurity against the RFD and drug addiction. This supports the findings above that no real solution about land conflicts was found yet. And that the role of opium and especially heroin in the village cannot be omitted. Although there are no opium fields to be found in the subcatchment area, people might still grow opium in more remote areas and some are definitely involved in drug trafficking.

Many governmental agencies preserve their prejudices against the ethnic groups in the north. Though examples like the planned IMPECT project show that some NGO's and projects promoted by the government see the necessity to involve the local population. No solution to solve the land conflicts between local farmers and the Royal Forest Department in this subcatchment have been carried through yet. The decentralisation of resource management aimed by the government did not show any obvious results yet. However, the Hmong farmers are able to manage water resources themselves. The groups that are involved in water management and forest conservation show the ability of villagers to manage their resources. The existing structures could be supported by governmental and non-governmental organisations to improve the existing system.

The increase of irrigated agriculture is the main factor for water scarcity. This is exacerbated by the farmers who focussed on lychee as the only perennial fruit tree. All lychee farmers therefore need irrigation water at the same time of the year. And second, the drop of the market value of lychee as well as the danger of failing harvests through occurring pests is a high risk for the households that focus on lychee production only. Diversification of the perennial and irrigated cash crops is one measure to prevent this problems.

5.2 Summary

Conflicts about natural resource use are one of the main problems in northern Thailand. Most of the 790,000 members of ethnic minorities in Thailand live in the northern part of the country. They occupy mainly mountainous forest areas and are stereotyped as encroachers of the forest as they used to practise swidden cultivation. Nowadays the government enforces a strong conservation policy through designating new protected areas and National Parks. This causes conflicts between the ethnic minorities and government agencies as well as NGO's working in conservation field. The Hmong are the second largest ethnic group with

approximately 118,000 members throughout the North. They are well-known as successful opium-growers and -traders.

The aim of this study is to analyse the organisational framework of resource management in a Hmong village and the surrounding subcatchment located in Doi Suthep–Pui National Park. It takes into account social relations and structure of the Hmong society. The development of the local land tenure system and its influence on agricultural production systems was investigated. As irrigation is getting increasingly important, the water management in the subcatchment was included in the study as well as forest conservation activities. Participatory methods were used to gain knowledge about some fundamental issues. The survey was undertaken using a standardised questionnaire. About one third of all households living in Mae Sa Mai and less than one third of the subcatchment area under agricultural production are included in the investigations.

In Mae Sa Mai the Hmong villagers have developed an administration system which is mostly independent from Hmong social categories and oriented to the Thai administrative system with the village headman the representative of the village. Though the influences of Thai administrating agencies in the village are very limited.

The local tenure systems is coexisting with the official system, as within the Nation Park official land ownership is hardly possible. As the parks are administered by the Royal Forest Department the villagers have to face land losses through and conflicts with the agency. The development of the local tenure system is following the change in agricultural practices from shifting towards permanent cultivation systems. The local tenure provides the villagers with relative secure ownership and use rights within the village community. The local land tenure system distinguishes between ownership and borrowing of land. Inheritance has become the most important way of claiming land, buying land is an alternative which is especially important for land outside the subcatchment area. Borrowing land is common on a mutual base. No payments have to be made to land lenders from the same village. Outside the subcatchment hardly any land is borrowed as the villagers have to pay for it either in cash or rice.

Agriculture in the Mae Sa Noi valley is based on cash crop production. More than three quarter of the total agricultural area is covered by perennial fruit trees, mainly lychee. Annual cash crops such as cabbage, salad and carrots were introduced through the Royal Project and cover more than 10 percent of the area. Most of those crops need irrigation to have a sufficient yield. The remaining agricultural area carries staple crops such as paddy, corn and upland rice. Whether perennial or annual crops are grown on a plot depends upon the tenure status of the plot. On borrowed plots only annual crops are grown. More than half of the households focus on cash crop production to cover the livelihood.

Water in Thailand is an open access resource. Villagers set up a management group that ensures equal water distribution to all farmers. However, they cannot provide measures for a more effective irrigation system for more sustainable agricultural practises. Upstream-downstream conflicts only occur on a local base, large scale effects of irrigation in the subcatchment were not observed in this study.

From the late 80s onwards the Thai government enforced Conservation Policies in National Parks. This includes relocating villagers as one measure for the government to regain control over land. Those attempts have not been successful yet. The villagers have to face land loss for governmental reforestation activities. However, there has been involvement in a reforestation research project in the Mae Sa Mai area and villagers established a conservation group to promote conservation among themselves. Opting for conservation activities seems to be a strategy to bargain with the government in exchange for their security of settlement in the designated national forest reserve. On the other hand, villagers seek alternatives to agricultural production to cover their livelihood such as eco-tourism.

The Hmong farmers are to a certain degree able to manage water resources and forest independently. Agriculture is strongly influenced by the market and sustainability is questionable.

6 Zusammenfassung

Ressourcenkonflikte sind eines der Hauptprobleme in Nordthailand. Der größte Teil der etwa 790.000 Mitglieder ethnischer Minderheiten in Thailand lebt im Norden des Landes, vor allem in den Bergregionen. Die Hmong bilden hierbei die zweitgrößte ethnische Gruppe und umfaßt etwa 118.000 Mitglieder. Sie sind vor allem als Opiumbauern und –Händler bekannt. Da sie traditionell Wanderfeldbau betrieben haben, werden sie häufig als Schädiger des Waldes angesehen. Die Regierung versucht durch das Ausweisen von neuen Schutzgebieten und Nationalparks die strengen Naturschutzbestimmungen durchzusetzen, es fehlen ihr jedoch die Kapazitäten zum Management der Gebiete. Da diese Gebiete zum großen Teil besiedelt sind, entstehen Konflikte zwischen den Mitgliedern der ethnischen Minderheiten und den Regierungs- und Nicht-Regierungsorganisationen, die ein Interesse am Schutz Wald haben

Das Wassereinzugsgebiet Mae Sa Noi befindet sich im Doi Suthep–Pui Nationalpark. Hier befindet sich das untersuchte Dorf Mae Sa Mai. In dieser Arbeit werden die Organisationsstrukturen des Managements natürlicher Ressourcen in diesem Gebiet beschrieben. Die sozialen Beziehungen der Hmong wurden in die Untersuchung mit einbezogen. Es werden die Entwicklung des lokalen Landbesitzsystems und sein Einfluß auf die landwirtschaftlichen Produktionssysteme beschrieben. Die Bedeutung von Bewässerungsfeldbau hat stark zugenommen und deswegen wurden Wassermanagement und Forstschutzmaßnahmen in der Studie ebenfalls berücksichtigt. Um eine Übersicht über die grundlegende Situation im Dorf zu erlangen wurden partizipative Methoden genutzt.

Der Haushalt ist die ökonomische Einheit in der Gemeinschaft der Hmong. Etwa ein Drittel aller Haushalte in Mae Sa Mai und etwas weniger als ein Drittel der bewirtschafteten Fläche sind in dieser Studie berücksichtigt.

Die Bewohner von Mae Sa Mai haben ein eigenständiges Verwaltungssystem ins Leben gerufen. Dies bezieht sich in seinen Funktionen primär nicht auf die sozialen Strukturen der Hmong sondern ist am System der thailändischen Verwaltung orientiert. Der Einfluß thailändischer Verwaltungsorganisationen im Dorf ist jedoch sehr gering.

Im Einzugsgebiet Mae Sa Noi gibt es zwei parallel existierende Landrechtssysteme. Der Nationalpark ist Staatseigentum und deshalb gibt es kaum die Möglichkeit des Privateigentums an Land. Das königliche Forstministerium verwaltet die Nationalparks in Thailand und fordert illegal besiedeltes Land zur Wiederaufforstung zurück. Dies führt zu Konflikten zwischen dem Forstministerium und den Dorfbewohnern, die häufig dadurch das von ihnen genutzte Land verloren haben. Die Einführung permanenter Landnutzung führte zur Entwicklung eines lokalen Nutzungsrechtssystems, das privates Eigentum anerkennt und das Verleihen von Land ermöglicht. Innerhalb der Dorfgemeinschaft besteht eine hohe

Zuverlässigkeit der lokalen Nutzungsrechte. Die Vererbung von Land hat mittlerweile die wichtigste Bedeutung in der Landverteilung. Landkauf ist eine alternative Möglichkeit neue Landflächen hinzuzuerwerben, besonders außerhalb des Mae Sa Noi Einzugsgebietes. Das Leihen und Verleihen von Land ist eine gängige Praxis innerhalb der Dorfgemeinschaft, das auf Gegenseitigkeit beruht. An die Verleiher muß keine Pacht gezahlt werden, Gegenleistungen werden jedoch erwartet. Landpacht außerhalb des Einzugsgebietes spielt keine große Rolle, da hierfür offizielle Pachtregelungen gelten.

Im Einzugsgebiet spielt der Anbau von Marktfrüchten die wichtigste Rolle. Über 75 Prozent der landwirtschaftlichen Nutzfläche wird hauptsächlich durch Lychee und andere mehrjährige Obstbäumen genutzt. Weitere 10 Prozent werden durch Kohl, Salat, Möhren und andere annuelle Marktfrüchte genutzt. In den relevanten Wachstumsperioden werden diese Flächen bewässert. Die übrige Fläche wird zur Produktion von Grundnahrungsmitteln wie zum Beispiel Wasserreis, Bergreis und Mais genutzt. Ob annuelle oder Dauerkulturen angebaut werden, hängt vom Eigentumsstatus ab. Auf geliehenen Flächen werden keine Dauerkulturen angebaut. Mehr als die Hälfte aller Haushalte hat sich auf die Produktion von Marktfrüchten spezialisiert.

Wasser gilt in Thailand als eine Ressource mit offenem Zugang. Im Dorf haben die Bewohner eine Wassermanagementgruppe gebildet, die für die gerechte Verteilung des Bewässerungswassers zuständig ist. Diese Gruppe kann sich jedoch nicht um Maßnahmen zur Effizienzverbesserung kümmern. Konflikte zwischen Wassernutzern in den oberen und den unteren Lagen des Einzugsgebietes kommen nur auf lokaler Ebene vor und werden durch diese Gruppe gelöst.

Die Maßnahmen zum Schutz des Waldes sind von der thailändischen Regierung seit den 80er Jahren stark propagiert worden. Um die Kontrolle über die Forstgebiete zu verstärken, wurden auch Dörfer aus den Waldgebieten umgesiedelt, was aber aufgrund der großen Zahl an dort lebenden Menschen nicht praktikabel war. Obwohl die Dorfbewohner Landverluste durch das Forstministerium erlitten haben, nehmen sie an Wiederaufforstungsprojekten teil. Sie haben selbst eine Naturschutzgruppe gebildet, um solche Ideen im Dorf weiterzuverbreiten. Das Annehmen von Naturschutzideen ist jedoch eher als eine Strategie zu sehen. Durch die aktive Teilnahme am Schutz des Waldes wollen die Dorfbewohner ihre Position im Einzugsgebiet gegenüber der Regierung stärken. Auf der anderen Seite suchen sie auch nach Alternativen zur Landwirtschaft, wie zum Beispiel Ökotourismus.

Die Hmong sind in der Lage ihre Wasser und Forst Ressourcen selbständig zu handhaben. Die Landwirtschaftliche Produktion ist stark durch den Markt beeinflusst und die Nachhaltigkeit des Produktionssystems ist fragwürdig.