

LORE

Capturing
Traditional
Environmental
Knowledge



Edited by
Martha
Johnson

LORE

Capturing Traditional Environmental Knowledge



Our culture is something that surrounds us, something that is part of us, and is inextricably linked with the land upon which we have lived for thousands of years. Our culture has a past, and it is that past especially as we find it embodied in our elders that we are pledged to preserve. It also has a present a present that threatens our culture, which we are pledged to protect. Our culture lives, and must have a future. We are pledged to promote our culture, especially among our young people, to ensure that they will identify themselves as Dene, in the full meaning of the term. The mission of the Dene Cultural Institute is to work with the people of the Dene Nation, and with other institutions and organizations, to preserve, protect, and promote the Dene culture, languages, spirituality, heritage, traditions, and customs.



The International Development Research Centre is a public corporation created by the Parliament of Canada in 1970 to support technical and policy research designed to adapt science and technology to the needs of developing countries. The Centre's five program sectors are Environment and Natural Resources, Social Sciences, Health Sciences, Information Sciences and Systems, and Corporate Affairs and Initiatives. The Centre's funds are provided by the Parliament of Canada; IDRC's policies, however, are set by an international Board of Governors. The Centre's headquarters are in Ottawa, Canada. Regional offices are located in Africa, Asia, Latin America, and the Middle East.

LORE

Capturing Traditional Environmental Knowledge

Edited by
Martha Johnson

DENE CULTURAL INSTITUTE



INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

Copyright © 1992 by the Dene Cultural Institute and the International Development Research Centre

Johnson, M.

Dene Cultural Institute, Hay River, NWT, CA

Lore: capturing traditional environmental knowledge. Ottawa, Ont., IDRC, 1992. x + 190 p.: ill.

/Ecology/, /environmental management/, /resources management/, /environmental education/, /indigenous population/, /traditional culture/, /folklore/, /social research/, /documentation/, /data collecting/, /information exchange / /case studies/, /Canada/, /Oceania/, /Sahel/, /Thailand/, /conference reports/, bibliographies.

UDC: 574:303.2(=1-81) ISBN 0-88936-644-6

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior permission of the International Development Research Centre. The views expressed herein are those of the authors and do not necessarily reflect the views of the International Development Research Centre or the Dene Cultural Institute.

Foreword

In recent years, the value of the traditional knowledge of indigenous peoples, and particularly their traditional environmental knowledge, has been recognized. This has unleashed a flood of research. Some of the research has been undertaken by scientists working alone, but the most innovative responses to this trend have been developed by indigenous researchers working in collaboration with Western scientists. They recognized early on that the main objective was not simply to collect reels of audio or video tape as a form of folklore, but to catalogue this information so that it could be compared from one region and one culture to other regions and other cultures, and, even more, so that it could be brought to bear on policies for sustainable development in remote and typically fragile ecosystems.

This book presents the results of a workshop on the documentation and application of traditional environmental knowledge through community-based research. Organized and hosted by the Dene Cultural Institute (DCI) based in Fort Hay, Northwest Territories, Canada, and supported by Canada's International Development Research Centre (IDRC), the workshop brought together a small number of teams, each composed of indigenous and nonindigenous researchers from Northern Canada, Europe, Africa, Southeast Asia, the South Pacific, and South America. Their primary goal was to discuss effective methods for documenting the unique

environmental knowledge and understanding that characterizes the heritage of all indigenous peoples around the world.

In many ways, the workshop was unique. It represented an important initiative on the part of a Canadian aboriginal organization (DCI) and a Canadian development agency (IDRC) working together toward a common goal. The workshop was held in a traditional Dene camp along the shores of the Deh Cho (Mackenzie River) in the Canadian North. Participants flew to Canada from around the globe. Upon arrival in Canada, they faced another extended flight to Yellowknife in the Northwest Territories. From there, they were taken by bush plane and boat to the Dene camp. Daily life and workshop sessions took place in tents, which both represented typical living conditions during actual collection of indigenous knowledge and, unhappily but typically for the North, provided protection from the cold and rainy summer weather.

This book examines the process of collecting traditional environmental knowledge while using a participatory action or community-based approach. It looks at the problems associated with documenting traditional knowledge problems that are shared by researchers around the world and it explores some of the means by which traditional knowledge can be integrated with Western science to improve methods of natural resource management.

We hope that this book will assist others to develop effective, culturally appropriate research methods at a time when alternative understandings and approaches to sustainable development are increasingly critical to the survival of our planet.

Joanne Barnaby
Executive Director
Dene Cultural Institute

David B. Brooks
Director
Environment and Technology Program
International Development Research Centre

Acknowledgments

The Fort Good Hope workshop was a unique event and many people and agencies contributed to its success. The community of Fort Good Hope put on a show of hospitality that left our international guests with a true taste of traditional and modern Dene culture. The Chief and Council of Fort Good Hope provided generous logistical support for the camp. Star Tech Ltd lent tents and other camping gear and Northern Stores Ltd donated groceries. Special thanks go to Alfred Masazumi, Michael Lafferty, and Joe Cotchilly. They ensured that the camp ran smoothly despite inclement weather and a last minute change of site. Bella T seleie and Judy Lafferty assisted in setting up the camp, and Mary Barnaby and Margaret Kelly prepared some memorable meals of traditional Dene cuisine. Wilma Schreder of the Dene Cultural Institute made all of the travel arrangements.

Dr Evelyn Pinkerton served as the rapporteur for the workshop. Her work on the discussion summaries and her thoughtful insight on earlier drafts of the introductory papers were much appreciated.

Our special gratitude goes to Robert Ruttan, project biologist for the Dene Traditional Environmental Knowledge Pilot Project. His calm and sense of humour in overseeing the entire organization of the camp made the workshop the success that it was.

Thanks are also owed to the Canadian Broadcasting Corporation (CBC) and the Yellowknife *Press Independent*. Their generous publicity created better public awareness of the value of traditional environmental knowledge and the research that is being conducted to preserve and apply it today.

Finally, thanks go to all of the elders, community researchers, and scientists who travelled from the nearby community of Fort Good Hope and from the far corners of the globe to participate in this unique event. Their willingness to overlook the bad weather and the mosquitoes, and to share their knowledge and culture in the traditional setting that was the Fort Good Hope camp represented the true spirit of international and cross-cultural cooperation.

Martha Johnson

Research Director

Dene Cultural Institute

Contents

Introduction	<u>1</u>
Research on Traditional Environmental Knowledge: Its Development and Its Role	<u>3</u>
The Workshop: Purpose and Results	<u>21</u>
Canada's North	<u>29</u>
Traditional Environmental Knowledge of the Dene: A Pilot Project	<u>31</u>
Reindeer Management in Canada's Belcher Islands: Documenting and Using Traditional Environmental Knowledge	<u>63</u>
The South Pacific	<u>81</u>
Traditional Environmental Knowledge from the Marovo Area of the Solomon Islands	<u>83</u>
The African Sahel	<u>103</u>
Documenting Oral History in the African Sahel	<u>105</u>
An Experience in Oral History: One Researcher's Account	<u>126</u>

Northern Thailand	<u>131</u>
Regional Development in Northern Thailand: Its Impact on Highlanders	<u>133</u>
Documenting and Applying Traditional Environmental Knowledge in Northern Thailand	<u>152</u>
Appendix	<u>161</u>
A Summary of Workshop Discussions	<u>163</u>

Regional Development in Northern Thailand: Its Impact on Highlanders

By Leo Alting von Geusau, Sanit Wongprasert, and Prasert Trakansupakon, Mountain Peoples Culture and Development Programme, Chiang Mai, Thailand.

For centuries, the northern region of Thailand has served as a refuge for minority peoples of neighbouring countries. Only 1% of Thailand's population consists of mountain minority tribal peoples. Some, such as the Karen and Lawa, have lived there for centuries. Others, such as the Akha, Hmong, Htin, Khamu, Lahu, Lisu, and Yao/Mien, have migrated to the region because of various political, economic, and other social pressures in their native lands. Such migrations began in the middle of the 19th century and continue today.

There are now between 530 and 600 thousand tribal minority peoples living in some 2 200 villages and other locations dispersed throughout the remote highland areas of northern Thailand. These highland communities pose political, administrative, economic, and social problems for the Thai government. However, they also make an important contribution to the region's economy.

Highland languages are quite distinct from Thai, as are their customs and laws. Highlanders have become known for their sophisticated cultures, key to which is their intricate adaptation to, and knowledge of, the ecological environment.

Economic Issues

The Thai government and some scholars have argued that the excessive production of annual crops on steep slopes through swidden (shifting) cultivation has damaging effects on the forests and watersheds. However, some authorities suggest that swiddening is ecologically, economically, and socially appropriate given the requirements of small communities in tropical or subtropical environments. Monocrop systems are viewed by some as the only viable alternative to swidden agriculture. However, some recent studies have shown damaging effects of these systems on the mountain ecology of northern Thailand.

In 1967, it appeared that more than 2.24 million hectares of forest had been seriously affected by shifting agriculture in northern Thailand, and that this figure was increasing by 40 thousand hectares every year. Some scholars, however, have disputed these findings and criticized the conclusions drawn from remote sensing techniques. Whatever the case, the state of northern Thailand's forests is serious, and may ultimately lead to economic and social disturbances in the country. Agricultural, reforestation, and social forestry programs have been initiated to cope with this situation (in, for example, the Sixth National Program of Thailand: 1986-1991).

Social Issues

The Opium Act of 1959 banned the sale and smoking of opium in Thailand. As a result, both opium growers and smokers faced a drastic change in lifestyle, something that the Thai government had to deal with.

The opium poppy grows best in a cool climate and at altitudes above 1000 metres. As such, it has been an ideal cash crop for the impoverished mountain populations of Thailand. Also, it should be noted that opium addiction is not a cause of impoverishment; rather, it is a consequence of health problems and impoverishment.

In 1965, the United Nations Survey Team on Economic and Social Needs of the Opium-Producing Areas in Thailand set out to determine the extent of opium production. The Team used two

methods in its survey: interviewing and aerial survey with ground inspection. By the 1980s, the Thai government was able to reduce opium production through effective law enforcement, crop replacement, and education. An especially large drop in opium production was observed between 1984 and 1986.

At the same time, however, several government agencies and functionaries have also questioned the regional development impact of these programs on both opium-growing and non-opium-growing highland communities; the latter accounting for about 80% of the highland population.

Political Issues

Before 1983, many political problems arose from the infiltration of highland tribal communities by insurgent elements. These problems no longer exist (*Bangkok Post*, October 1986); however, the highland people are still seen as a minority group whose language, economics, sociocultural customs, and religion differ from those of Thai lowlanders. Highlanders are therefore often seen as having no sense of national belonging or national consciousness. They are seen as separate, cohesive groups.

Illiteracy, poor health conditions, low life expectancy, and insecure socioeconomic conditions are common problems in the highlands. These problems are being aggravated by a slow influx of highlanders from neighbouring countries, the result of political oppression in Myanmar and the changes occurring in Laos after the Vietnam War. As well, the poor lowland peasantry of Thailand and ethnic Chinese from Yunnan Province, People's Republic of China, have been migrating to the Thai highlands.

As a result, incorporation policies formulated in 1967, such as the formal granting of Thai citizenship, are behind in their implementation. In some provincial districts, the proportion of the population with Thai citizenship is as low as 10% (National Statistical Office 1986). The land rights of highlanders is another problem that remains unresolved.

To tackle these issues, the Thai government, with the help of various international agencies, has implemented the highlanders' development program. The objectives of the program are to

- Stabilize the residence and secure the livelihood of highland peoples;
- Discourage and eventually replace opium production;
- Discourage and stop deforestation; and
- Encourage highlanders to participate as citizens in the national life of Thailand.

Since 1969, at least 22 government agencies and many international donors have been operating in the highlands of Thailand. Today, the international agencies supporting projects of education, health, and crop replacement include the Australian Development Assistance Bureau (ADAB), the Food and Agricultural Organization of the United Nations (FAO), Canada's International Development Research Centre (IDRC), the United Nations Development Programme (UNDP), the United States Agency for International Development (USAID), the United States Department of Agriculture (USDA), and the World Bank (Tapp 1985).

These and other agencies, the projects they have supported, and the six national development programs introduced after 1961 (the last one being 1986-1991) have increasingly emphasized regional development. Within the region, they have focused on social issues, local involvement, infrastructural arrangements, and action research.

Beginning in the 1960s and continuing today, many programs were implemented to develop the Thai highlands. However, only since the 1980s have studies looked at the impact and implications of development programs on highland communities, including Lee (1981), Cooper (1984), and Tapp (1985, 1986). Although valuable, these and similar works have several common flaws:

- All deal with only one tribe, specifically the Hmong and some minor sections of the Akha;

- Several deal in a limited scope with one or a few villages and thus are micro-oriented;
- None are comprehensive, focusing on only one or two issues, such as opium or cash crops;
- None deal with the regional perspective as intended in the regional programs;
- Most do not deal specifically with the impact and implications of regional development;
- None address policy-making; and
- Several are doctoral theses, intended more for academics than for policymakers.

Environmental Knowledge

Since early 1987 and the discussions on swidden agriculture, deforestation, reforestation (with eucalyptus and pine trees), and land use in general have escalated in the northern highlands of Thailand. Debate has focused on the question of blame. Who is at fault for the escalating deforestation, depletion of land resources, erosion, and illegal logging: the mountain peoples themselves or, rather, government or commercial agencies? In the last few years, this debate has culminated in discussions on land rights, land use, and the resettlement of hill tribes in the Thai lowlands.

At the same time, some development agencies, government organizations, and nongovernment organizations (*NGOs*) have begun to focus on the social or cultural dimensions of development. In some cases, issues of indigenous knowledge, indigenous management, and traditional medicine have been included in projects descriptions. However, little has been done to determine which social and cultural elements and which indigenous environmental knowledge could become integral elements of development.

Thus, in analyzing the impact of regional development upon highlanders in northern Thailand, the following questions must be answered:

- What has been the impact of massive resource depletion and environmental degradation on the traditional environmental knowledge of the hill tribe population?
- To what extent has modernization and consumerism, through increased road access or new educational systems, eroded the traditional environmental knowledge of the highlanders?
- How well have mountain populations adapted to environmental degradation, resource depletion, loss of land, etc., through adjusting and employing their traditional environmental knowledge?
- To what extent have development projects seriously accounted for indigenous knowledge, traditional technology, indigenous management, and traditional environmental knowledge? This would include traditional herbal medicine and medical treatments, the use of ethnobotany in agriculture (knowledge of soils, water, fauna, flora, and natural pesticides and fertilizers), knowledge about nutrition, handicrafts (materials and colouring), indigenous education (oral texts and songs), and laws and value systems related to the environment.

The participation of tribal peoples and the use of their resources is key to successful regional development. Recently, however, it has been recognized that many existing development programs suffer some serious deficiencies (see Chayan Vaddhanaputhi 1986), including

- A lack of information on the highlanders, their communities, and their responses to regional development efforts;
- A lack of foundation on policies that were based on past research in the social or natural sciences;
- A lack of involvement by tribal people in both development and research;

- A lack of trained personnel to carry out the work; and
- A lack of commitment by Thai officials for long-term research.

A recent document from the Thai Ministry of Education (1987) goes so far as to say

The government should analyze and research all dimensions of activities directed at hill-tribes and employ these results in the revision of government policies and operational programmes of all Ministries and Departments concerned [and] provide an information-base on peoples and conditioning in the hills [as a means for this revision] If the current trends in the northern mountains and government action . . . are not soon corrected, a definite negative impact on the lives and cultures of these people, the environment, and national security will ensue.

The Project

In December 1989, the Mountain People's Culture and Development Educational Programme (MPCDE) began a 2-year comprehensive, comparative, and interdisciplinary study to look at the implications and impact of regional development programs on the highland communities in the Chiang Rai region. The project is sponsored by IORC and is part of the Southeast Asian research network involving tribal people in Malaysia, the Philippines, and Thailand, centred in Kuala Lumpur, Malaysia.

The project was conceived to improve our understanding of the various highland communities and their responses to regional development programs. Specifically, the objectives of the proposed study are as follows:

- To collect and document basic demographic, socioeconomic, and ecological information on regional development programs and government policies in the highlands of northern Thailand;
- To examine and analyze the social, political, economic, and ecological implications of these regional development programs and their relationship to migration, settlement schemes, land rights, citizenship, reforestation, and forest-protection schemes;

- To evaluate how quickly ecological changes affect the traditional environmental knowledge of the mountain peoples;
- To examine the extent to which highlanders adapt to ecological change through the use of traditional environmental knowledge;
- To determine the roles of the various agencies that are responsible for policy, planning, and implementation of regional development programs in the highlands of northern Thailand;
- To study the impact of regional development on highland communities and to document, at the grass-roots level, the responses and reactions of highlanders to such programs;
- To examine the extent to which development programs have accounted for social and cultural values such as indigenous management, indigenous laws and norms, traditional educational values, traditional knowledge of flora and fauna, and indigenous skills related to the ecology;
- To systematically evaluate regional development programs and government policies while recognizing the views of the highlander peoples;
- To define the problems and needs of highland communities in relation to regional development programs and to publicize this information to policymakers and planners;
- To examine the problems related to reproduction and conservation of flora, fauna, and related knowledge and skills, and to determine to what extent the highland peoples see them as economic assets for their future; and
- To provide feedback and recommendations to improve current and future regional development programs in the highlands of northern Thailand.

Project Area

The northern highland region of Thailand (Fig. 1) encompasses 40% of the country's territory, covers 2 of the country's 17 provinces, and is home to almost 6 million of Thailand's 60 million people. Mountainous areas make up 65% of the highland region and 35% of the country. In the past, the highlands have been characterized as wasteland; more recently, they have been seen as a resource area. Chiang Rai Province is located in the northernmost part of Thailand. With an area of 11 678 square kilometres, Chiang Rai shares its border with Laos in the east, Phayao in the south, Chiang Mai in the southwest, and Myanmar in the north and west. The southern border of Yunnan Province, People's Republic of China, is about 200 kilometres from the northern border of Chiang Rai. The prominent geographical features of Chiang Rai are mountains and, until recently, forests. However, over the last 20 years, the forests of Chiang Rai have been rapidly disappearing.

In 1988, Chiang Rai was divided into 11 districts (Amphoe), 103 subdistricts, 1 093 villages, and 539 hill tribe villages. The main ethnic groups are the Lahu, Akha, Hmong, Lisu, Karen, Khame, Yao, and Lawa. There are also large numbers of Yunnan Chinese, Shan, Lua, and Wa. The largest population of highland ethnic minorities is in Mas Chan District (41080 persons), followed by Mae Suai District (20 611 persons) (National Statistics Office 1986). The study will concentrate on these districts and their hill tribe villages.

Administrative Structure

The project employs three professional staff: a project administrator (Director, MPCDE), a research trainer and coordinator (Assistant Director, MPCDE), and a field coordinator/researcher (Senior Staff, MPCDE). The main functions of the professional staff are

- To initiate and implement the research project;
- To train field staff in research methods, including the design of questionnaires;
- To train interviewers and assist in field trips;



Fig. 1. Northern Thailand: home of the highland peoples. The twelve villages visited were in Chiang Rai and Chiang Mai provinces: 1, Doi Lan (Lisu); 2, Doi Chang (Lisu); 3, Doi Chang (Akha); 4, Thung Phrao (Karen); 5, Thung Phrao (Lahu); 6, Mae Ta Maew (Akha); 7, Ayo Mai (Akha); 8, Pha Dua (Yao); 9, Huay Mae Liam (Yao); 10, Mae Poon Lang (Lahu); 11, Khun Tae (Karen); 12, Mae Chorn (Meo).

- To coordinate and manage research projects with other MPCDE programs, mostly consisting of students and collaborators from different mountain areas and highland villages; and
- To tabulate, analyze, and report project results with the help of other technical MPCDE staff.

There are two groups of field researchers: the MPCDE-related research team and the village-based helpers or coresearchers.

The MPCDE team consists of about 14 researchers-in-training. All are part of the Chiang Rai/IMPECT All Mountain Peoples Program, either as staff or as students (that is, they are all affiliated to an MPCDE program). Almost all team members belong to a highland tribal group; there are four Akha, two Yao/Mien, three Lisu, two Hmong, one Karen, and two non-tribal members that speak Akha. Education levels range from sixth grade high school to college or university.

The village-based group consists of 24 helpers or coresearchers. As 12 villages were to be covered in the study, this represents two people per village. Group members might be village heads, teachers, or other literate persons of the village. Education levels vary from sixth grade high school to teachers college.

Selecting Researchers

The most important attributes for community researchers are curiosity, analytical capacity, and an understanding of their own culture and how to conduct research among their own people. Motivation is also key. Most of the village-based researchers as well as the MPCDE team receive only minimal remuneration for their work.

Community researchers must also have the confidence and respect of the villagers. They must have a thorough knowledge of the languages and cultures of the region, as well as a good understanding of the effects of development on villagers. They must be fluent in their own tribal language and be able to immediately transcribe from their own language into Thai

(mountain languages have no script). They must have the ability to get inside information.

Community researchers must possess a good traditional, tribal education and awareness of their own culture. Also, an education level of at least sixth grade high school in the Thai educational system, which is high for the mountain peoples, is required. They must also be able to work as part of a team and cannot be closely associated with any big development project.

As interviews always involved people of the same gender, it was essential that the village-based team have a strong representation of both men and women.

Training Researchers

Training for this vast research project was mostly conducted in the field. It began in an informal setting with the MPCDE research team obtaining an overview of the main development problems as perceived by the villagers. Having gained the confidence of the villagers, the research team introduced more sophisticated survey methods to obtain more in-depth information. Through the surveys, the community researchers discovered that many of the problems of their own villages were common among other tribal groups.

As the research progressed, other methods were introduced, including interviewing and participant observation. Issues and problems were reviewed from the bottom up. Discussions looked at problems through the eyes of the villagers, and followed a brainstorming approach.

Next, the basic socioeconomic, demographic, ecological, political, and structural data and problems were covered. A base-line approach was used in an informal a setting as possible. This enabled the project team to grasp the setting of the problems in the 12 villages. This was followed by household surveys: individual interviewers (researchers) providing a detailed overview of the villages.

Selecting Informants

Village informants were usually elders with a thorough knowledge of the history of the village and a detailed understanding of traditional knowledge. The same persons would also be subjects for the household interviews. Other informants included village heads and school teachers, both having a good understanding of the village from the inside. Informants were selected by the MPCDE research team and some field research staff.

Interview Methods

Interviews were conducted in 12 villages throughout Chiang Rai Province and part of Chiang Mai Province, northern Thailand (see Fig. 1). Several interview methods were used: from brainstorming sessions to more structured team interviews with senior villagers (base line) to household-based interviews.

Household interviews were conducted by local interviewers with the help of an MPCDE team member. They proved to be the most difficult stage of the project, resulting in the resignation of a few local researchers. Less formal, more group-oriented interviews worked best. In such a setting, villagers did not feel as if they were being interrogated, as was the case in individual interviews.

The highlanders of northern Thailand have a strong sense of freedom and autonomy within a Thai context. Because of this and the flood of researchers, anthropologists, developers, and missionaries who have come to question or develop them over the last 30 years, the highlanders tend to be skeptical and shy in front of interviewers. Like any other people, they dislike answering questions about their personal or economic affairs unless they believe that, by doing so, their life will genuinely improve or they will be recognized for who they are and what they have to offer.

Consequently, interviews were held inside the villages, where the tribal researcher met and spoke with friends, relatives, and acquaintances in an informal setting where people would feel comfortable sharing their knowledge with the outside world. Also, the words interview, interviewer, and questionnaire were

avoided. These are words of the social scientist, equating people with objects of academic research.

The first team and group interviews were informal and spontaneous. Household surveys tried to be equally spontaneous, but, by necessity, ended up being somewhat more organized and formal. They took place either in peoples houses or in village fields.

The length of the interview depended on the interviewer and the informant. A compassionate and interested interviewer might stay overnight with an informant to gain as much information as possible. Team interviews lasted anywhere from 2 or 3 hours to an entire day. Interviews of a single persons by one or two interviewers and household overviews averaged 1 or 2 hours. In many cases, interviews were conducted a little at a time. Except for team interviews, researchers always interviewed persons of the same gender.

Translation and Recording

There are as many as 12 mutually incomprehensible languages among the mountain peoples of northern Thailand. As such, inside information is best obtained through one s own language; outside information is obtained through a common language, which is now increasingly Thai, but sometimes Lahu or Chinese.

Interviews are done in the village s own language and by native speakers. However, questionnaires are in Thai, which all team and staff members can read. The MPCDE research team is responsible for designing and translating the questionnaires. This is done during periods of rain or when villagers are busy in the fields (planting, weeding, or harvesting).

Most interviews were recorded in writing, translated, and transcribed. If an informant was uncomfortable with such a procedure, researchers memorized the information. The information is then compiled in tables designed by the MPCDE research team, analyzed, and interpreted. Occasionally, cameras, video recorders, and tape recorders were used.

Managing and Interpreting Data

Team base-line, household base, and other related information is compiled in village dossiers. The information is then tabulated by the MPCDE research staff. They also perform the first review, analysis, and interpretation of results. When the first phase of the village overviews is finished, the analysis and conclusions are discussed with MPCDE-related research team and reviewed with the field staff.

Preliminary Results

Preliminary results clearly indicate some common problems in the villages of northern Thailand.

Land rights

Villagers have no legal rights regarding ownership or even usufruct of land. In fact, one village had been told by the Thai Ministry of the Interior, which deals with problems of national security, that it would have to vacate its site; a site that the village has occupied for more than 30 years. At the same time, the Ministry failed to indicate where the villagers might resettle.

In the Mae Chaim, Mae Suai, and Mae Chan areas, it appears that large lowland companies are able to rent or purchase land near or even within village fields. Company activities include coffee production, agrobusiness, and forestry. As land in the mountains cannot be legally bought or sold, villagers find this situation very puzzling, and the results can be quite disturbing.

For example, land used to plant rice or cash crops is lost, resulting in increased malnutrition and disease. Also, companies employ villagers at very low wages; some companies pay their workers only once every 3 or 4 months. As a result, employees borrow money from the companies to buy food, money that is repaid through wage deduction, leaving some people without income.

Some companies also run gambling operations, in which villagers lose their money.

Suicide

The project team has also noticed the appearance and dramatic rise of a phenomenon hitherto unknown among the highlanders: suicide. Usually accomplished by drinking of strong insecticide, about half of the suicides occurred among younger, unmarried people, mostly girls. The main reason for this trend appears to be the growing disparities in wealth. A small number of families are becoming richer and a majority of families are becoming poorer. This is creating marriage problems in the villages. Among the Lisu, for example, the poorer boy may no longer be able to pay the bride-price for the girl he wishes to marry. In despair, the girl takes her own life. In the case of the Karen, several young couples have committed suicide because their parents would not permit their marriage. Other suicides are the result of young villagers being unable to seek a new future in the cities and feeling trapped in the mountains.

Drug abuse

A similar phenomenon is the dramatic increase in drug abuse. Alcohol, opium, ganja, and heroin addiction is on the rise in most highland villages. Over the last 2 years, the number of addicts has doubled or even tripled in some villages. Villagers attribute this trend to deteriorating health conditions and an increased sense of futurelessness. Another cause is the deterioration of family relations, particularly between men and women. The role of the highland man has corroded more quickly than that of the woman. This leaves a heavy burden on the woman, resulting in marital friction and sometimes divorce. Younger girls often make their way to the city in search of a husband or a brighter future; however, this often leads to prostitution and drug abuse (see Chivit Bondoi 1990).

Citizenship

In 10 of the 12 villages studied, villagers complained about their inability to obtain household registration or identification cards giving them Thai citizenship. Despite years of effort by village leaders to obtain citizenship for their people, it appears that such documents have recently become even more difficult to obtain.

Water supply

Most villages do not have an adequate water supply. There seems to be two reasons for this: increased deforestation for commercial purposes and, according to the villagers, increased temperatures over the last few years leaving streams dry during periods of no rain.

Road access

During the rainy season, roads in and out of highland villages are impassable. These roads were originally built for reasons of national security or to allow easy access to forests by the Royal Forestry Department. As the threat of communism has subsided and much of the forest has been denuded, there no longer seems to be an interest in maintaining the mountain roads. Only a few of the larger, Chinese market towns near the border have good road access and electricity. Tribal villagers believe that their economic interests are being neglected in favour of the city-based national economy.

Preliminary Conclusions

From these and other preliminary observations, the following conclusions can be drawn:

- There is a tendency in village families to shift from subsistence farming to wage labour.
- Increasingly, children are being sent to lowland schools far from their native village.
- Among younger villagers, there is massive urban migration; however, migrants invariably lack the proper skills for urban life and end up working for very low wages.
- National or private family-planning projects, to some extent forced upon villagers, can create social and psychological problems, sometimes resulting in suicide.
- Increased contact with the outside and lowland world has resulted in an increase in new diseases.

- The generation and culture gap between the young and the old is increasing; the youth are not interested in the ritual ceremonies or traditional knowledge of the elders.
- Consumerism, entering by road, radio, and television, is creating unrealistic expectations about an artificial world of luxury.
- In many villages, tourism is encouraging and promoting opium smoking; inducing young children to beg; and, in several cases, devastating village fields and trees with elephant rides for tourists.
- Traditional medicines are still used, but mainly by the old and the rich, who have time to collect the medicinal herbs.
- As a reaction to massive deforestation and with the hope of gaining land rights, highlanders are beginning to plant fruit trees in the fields and to increase forest management around several villages.
- In areas of severe land loss, there is a tendency toward increased handicraft production and husbandry, especially cattle breeding.

Final Products

The final product of the project will be a research report prepared by the research team. It will contain a combination of quantitative and qualitative results and conclusions presented in a comparative and contextual framework with an historical perspective. This type of report is essential for any study looking at development impact. Rather than being purely technical and quantitative, the report will give examples of how particular villages or groups react to negative impacts of regional development based upon traditional knowledge.

The MPCDE research is not intended for outside publication. Its principal purpose is to create an awareness of existing development problems and their possible solutions among participating team members, interviewers, informants, and villagers. In this context, the team will attempt to make the data relevant to forestry, wildlife and agricultural management, land-use planning, medicine, education, and cultural development.

References

- Chayan Vaddhanaputhi. 1986. Thai-German Highland Development Programme: social sector evaluation report. Thai-German Highland Development Programme, Bangkok, Thailand.
- Chivit Bondoi. 1990. Life on the mountain. MPCDE, Chiang Mai, Thailand. MPCDE Newsletter No.3.
- Cooper, R. 1984. Resource scarcity and the Hmong response: patterns of settlement and economy in transition. Singapore University Press, National University of Singapore, Singapore.
- Lee, G.Y. 1981. The effects of development measures on the socio-economy of the White Hmong. University of Sidney, Sidney, Australia. PhD thesis.
- National Statistical Office. 1986. Survey of hill tribe population. National Statistical Office, Office of the Prime Minister, Bangkok, Thailand. Survey No. 2529.
- Tapp, N.C.T. 1985. Categories of change and continuity among the White Hmong of northern Thailand. University of London, London, UK. PhD thesis.
- _____. 1986. The Hmong of Thailand: opium people of the Golden Triangle. Third World Publications, London, UK.
- Thai Ministry of Education. 1987. Conclusions of the Task Force appointed by Ministry of Education Order No. 609/2528. Ministry of Education, Bangkok, Thailand.