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PARTICIPATION OF LOCAL PEOPLE IN WATER MANAGEMENT: EVIDENCE FROM THE MAE SA WATERSHED, NORTHERN THAILAND

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ABSTRACT

In the early 1990s, Thailand launched an ambitious program of decentralized governance, conferring greater responsibilities upon sub-district administrations and providing fiscal opportunities for local development planning. This process was reinforced by Thailand's new Constitution of 1997, which explicitly assures individuals, communities and local authorities the right to participate in the management of natural resources.

Drawing on a study of water management in the Mae Sa watershed, northern Thailand, this study analyzes to what extent the constitutional right for participation has been put into practice. To this end, a stakeholder analysis was conducted in the watershed, with a focus on the local people's interests and strategies in water management and the transformation of participatory policies through government agencies at the local level. Government line departments were categorized into development- and conservation-oriented agencies.

While government officers stressed the importance of stakeholder inclusion and cooperation with the local people, there is a sharp contrast between the official rhetoric and the reality on the ground. The analysis reveals that government officers, particularly in the conservation-oriented agencies, are not disposed to devolve power to lower levels due to the fear of losing their traditional mandate and persistent stereotypes about local communities' incompetence to manage water resources in a sustainable way. On their part, villagers do not perceive a tangible change in the implementation of water policies and retain a widely negative image of government officers.

In conclusion, the participation of local people in development activities and in the conservation and management of natural resources seems to be currently at the stage of passive or, at best, consultative participation. In order to deal with the severely increasing water problems in northern Thailand, decision-makers have to recognize the value of participation and promote a change of government officers' attitude towards local people through training programs and incentives. Communities and individuals need to be made aware of their constitutional rights and potentials for cooperating with government agencies and participating in their projects.

Keywords: participation, water management, water policy, stakeholders, Thailand

CONTENTS

PARTICIPATION OF LOCAL PEOPLE IN WATER MANAGEMENT: EVIDENCE FROM THE MAE SA WATERSHED, NORTHERN THAILAND[1]

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1. INTRODUCTION

The attention given to water management has increased lately due to the growing problem of water scarcity worldwide and rising conflicts between water users. Participation of local people in water management is now seen as a crucial prerequisite for the conservation and sustainable use of scarce water resources. Since the late 1990s, participatory and integrated water management has been high on the agenda of national governments and international donors in the Southeast Asian region.

After decades of top-down development and state-control of natural resources, the Thai government has taken up the issue of participation. The right of local communities and authorities to participate in the management of natural resources has been included in the 1997 Constitution. This move had its roots in a modest decentralization process that took place during the early 1990s when sub-district (*tambon*) administration organizations (TAOs) were established, conferring a greater degree of autonomy and fiscal opportunities to local administrations for development planning. The sub-district administration – together with the line departments of the major ministries involved in resource governance – are now responsible for putting new approaches to participatory resource management into practice.

[1] The study has been conducted within the Uplands Program - Research for Sustainable Land Use and Rural Development in Mountainous Regions of Southeast Asia. The authors gratefully acknowledge the financial support of the Deutsche Forschungsgemeinschaft and the Eiselen Foundation and thank Claudia Ringler, Ruth Meinzen-Dick, Mark Rosegrant and Regina Birner for comments on earlier drafts of this paper.

The livelihoods of the majority of the people in the upland areas of northern Thailand depend directly upon water for both household uses and irrigation. As a result of the opium substitution programs of the past thirty years, upland farmers' incomes are increasingly derived from the production of cash crops with high water demand, such as fruits, vegetables, and cut flowers for the urban markets. Growing water demands due to production shifts from rainfed poppy to irrigated crops have led to shortages causing yield losses and bottlenecks in household water supply. Village communities and water user groups that previously established water management systems in their villages to allocate water to their members face increasing difficulties in solving the problems of water shortages and rising conflicts. The integration of all stakeholders from a watershed perspective and the joint search for problem solution appears to be a viable option to deal with the increasing problems of water shortages during the dry season and floods in the rainy season.

The objective of this study is to analyze the state of participatory water management in northern Thailand drawing on the case of the Mae Sa watershed in Chiang Mai province. The following research questions are discussed:

1. Who are the people and organizations that have an interest in water management in the Mae Sa watershed? What are the interests of the local people in water issues and what strategies do they pursue to achieve their aims?
2. To what extent is the right of local communities and individuals to participate in natural resource management, as included in the current Thai constitution, put into practice for water management in the Mae Sa watershed?

2. CONCEPTUAL BACKGROUND

WATER AND WATERSHED MANAGEMENT

A watershed is defined as a "land area that drains into a stream" (United Nations Environment Glossary 2004). Watershed management refers to "the use, management, and investment in a number of inter-dependent resources within (…) 'watersheds'" (Swallow et al. 2001: 449). It implies not only to the management of water, but that of all natural resources in a watershed such as forests and other land uses. Watersheds are unique areas that are often characterized by their heterogeneity of biological and socio-economic attributes. Further, the interests of stakeholders, which may differ between upstream and downstream users and between sectors of the economy, are very complex. "Watersheds are generally large, and diverse individuals and groups have an interest in how they are managed. Movements of water, soil, nutrients, and pollutants between different parts of a watershed create physical connections between people who are distant from each other. In economic terms, watersheds are filled with production and consumption externalities." (ibid.: 450).

It has been recognized that water resources cannot be seen separated from the surrounding ecosystem and the people. The greater attention given to watershed management is also tangible in the large amount of funds invested in watershed projects over the last years. Even though this paper focuses on a watershed area, the importance of other natural resources in the watershed is considered insofar as these are directly related to water issues. The emphasis here is put on the management of water and the institutions that determine its control and use.

PARTICIPATION

Participation is a broad term used in different disciplines and applied to many fields, with many variations in meaning and interpretations. The generic term 'participation' is defined as "the action or state of taking part in something" (Merriam-Webster Dictionary 1996). Participation in the political sense is a principle for citizens to take part in the political process e.g. through elections or referendums. In the context of development plans and programs, participation can be defined as "the process through which stakeholders influence and take part in decision making in the planning, implementation, monitoring and evaluation of programs and projects" (Kaosa-ard et al. 1998).

Different forms of participation exist: Participation can take place in the political process, within a development project and in research. Here, the emphasis is placed on policy and development, because (1) the issue of participation is discussed from both a national and local point of view, (2) it is crucial to what extent the political agencies involve local people in water policies and (3) the question is relevant as to which possibilities and political channels exist for the people to participate in the development of water policies.

Participation is difficult to evaluate as there are no commonly accepted quantitative indicators. It is thus important to distinguish between different levels of participation. In their study about participation in the Mekong River Basin, Kaosa-ard et al. (1998) describe four stages of participation: information gathering, information dissemination, consultation, and participation. Other scholars like Pretty (1995) make a more detailed differentiation: passive participation, participation in information giving, participation by consultation, participation for material benefits, functional participation,

interactive participation, and self-mobilization (Pretty 1995). Taking Pretty's classification as a base, the following levels of participation are being distinguished for the purpose of this study in table 1.[2]

Table 1--Forms of participation

Passive participation	People are being told what is happening. It is a unilateral announcement by an administration or project management without any listening to people's responses.
Participation in information giving	The information being shared belongs only to external professionals. People participate by answering questions posed by researchers using questionnaires or surveys. People do not have the opportunity to influence procedures or outcomes, as the findings are neither shared nor checked for accuracy.
Participation by consultation	People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions and may modify these in the light of people's responses.
Participation for material benefits	People participate by providing resources such as labor, in return for food, cash or other material incentives. It is very common to call this 'participation' yet people often have no stake in deciding about the processes and in extending activities when incentives end.
Functional participation	People participate by forming groups to meet predetermined objectives related to the project. These institutions tend to be dependent on external initiators and facilitators but may become self-dependent.
Interactive participation	People participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple objectives and make use of systematic and structured learning processes. These groups take control/ownership over local decisions, and so people have a stake in maintaining structures or practices.
Institutionalized participation	Participation in theory and practice are included in the political and legal national framework and the population has actual decisionmaking power. Consultation and joint decisionmaking is a must for project implementations.

Source: Adapted from Pretty 1995

The issue of participation and its forms, potentials, and problems raise the question of the optimal level of involvement of local people. If participation were

[2]It has to be mentioned that the forms of participation here are put in a hierarchical order, i.e. that passive participation is the one having the lowest degree of involvement or decisionmaking power whereas institutionalized participation provides people with the best possibilities to take part in joint decisionmaking. It is controversial though, if participation for material benefits is a more empowering form of involvement than participation by consultation. It depends certainly on the individual case.

maximized, local people would have complete control over the natural resources. Exclusive management by local communities, however, does not necessarily mean that they maintain the resources in the most sustainable way; individual farmers will always try to increase their share of the benefit stream of a certain resource and local communities in upstream areas might exploit water resources at the expense of downstream residents. Thus, the aim of participation may not necessarily be to transfer the decisionmaking power completely to local communities but rather to initiate a process of negotiation between the stakeholders affected by integrating individual, communal, and national interests in a balanced way in the decisionmaking process. This optimum can be described with the idea of 'institutionalized participation', in which participation is integrated into the political process and joint decisionmaking is a *sine qua non* condition for the planning and implementation of development projects.

Participation is desirable for water management due to the characteristics of watersheds. "Because of lateral flows and the cross boundary nature of watershed resources, the effect of an application of a technology on one plot is not necessarily confined to that plot or the user of that plot. For example, lateral flows of pesticides can harm water quality downstream. In the case of non-point source pollution, it is difficult to determine the source. Externalities are even more pervasive for resources shared in common" (Knox and Gupta 2000). Watersheds comprise a multitude of different actors with diverse interests, but the resource flows in the watershed links all the users even though they might be widely scattered across the landscape. Participation of stakeholders in the watershed in water management may offer solutions for a more efficient and sustainable management of water resources. Several studies suggest that "participatory

watershed development projects are more successful than externally managed, top-down, 'one-size-fits-all' projects" (Ibid.). A literature review on the potentials and pitfalls of up-scaling participatory watershed management projects in India underlines this statement. "It is now widely accepted that if the productivity of natural resources is to be enhanced in a sustainable fashion, then those engaged in and affected by management of the resource—the communities—must participate in plans for its rehabilitation and management. Their participation will generate a stake in the process and enhance the prospects of both institutional and ecological sustainability." (Turton et al. 1998). A study from northern Thailand with villages participating in the management of their watersheds and villages with no participation showed that the villages participating had higher incomes after completion of the project. Although they had higher opportunity costs due to the time spent for meetings and seminars the villagers taking care of their own resources benefited from improved water, soil and forest quality and quantity and could make use of it through higher yields and thus through a higher income. The success of the projects, however, was not only the result of enhanced participation of the people, but also due to other aspects such as resource tenure and existent and well-functioning institutions which contributed to the increased incomes of the farmers (Empandhu et al. 1996).

Another participatory watershed project has been initiated in the Mae Ta Chang watershed, Chiang Mai Province. The watershed is located closed to the study area of the Mae Sa watershed and has similar conditions. Due to severe water problems and conflicts, a watershed commission was set up by local people and NGO activists in 1998 bringing together representatives of all stakeholders involved in water issues from the

watershed. The project was supported by the Thailand Research Fund and by academics from Chiang Mai University. The commission gave the local people in an unprecedented manner the opportunity to express their concerns and opinions and released some tension among them through establishing a dialogue and organizing joint field visits. Further, an agreement was found for water use between upstream and downstream communities. Although some problems remain unresolved and conflicts are still prevalent, the Mae Ta Chang Watershed Commission serves as an example for successful participatory watershed projects in northern Thailand.

3. STUDY SITE AND METHODOLOGY

SELECTION OF STUDY SITE

The Mae Sa watershed was chosen as the study area because it is a representative site for small-scale commercial agriculture and a high degree of stakeholder complexity and actors, which includes upstream and downstream communities, tourist resorts, drinking water companies, and several government line agencies. Some of the subunits of the government agencies are even located in the watershed area such as the Upstream Management Units while the line departments of the district and province administration are in Chiang Mai. Further, the watershed had been selected to serve as a pilot project for river rehabilitation launched by the Prime Minister in December 2003. The Mae Sa stream flows into Mae Ping, which is one of the main tributaries of the Chao Phraya river, whose delta constitutes Thailand's 'rice bowl'. The Mae Sa watershed includes the area from the source of Mae Sa stream until the outlet into the Ping River including all the streams and creeks flowing into Mae Sa, which is an area of 142.2 square kilometers.

The watershed extends from 20 to 45 kilometers northwest of Chiang Mai, in Chiang Mai province, Mae Rim district (Amphoe). Major parts of the watershed are included in the Doi Suthep Pui National Park. It covers the three sub-districts (Tambon) Mae Sa, Pong Yang and Mae Ram. The main stream, the Mae Sa, has a length of 24 kilometers, with about 20 creeks as tributaries. The watershed is an upland area with mountainous terrain and altitudes ranging from 300 to 1400 meters above see level. Precipitation differs in the watershed among locations and years; the average rainfall is at 1,160 mm, with about 85 percent concentrated in the rainy season.

METHODOLOGY

The results of the study are based on a review of literature, semi-structured interviews, and group discussions that have been conducted from March to May 2004 in the Mae Sa watershed and in the city of Chiang Mai, northern Thailand. Altogether, 39 semi-structured interviews and group discussions were carried out, mostly with representatives of government agencies and local people. The results presented in section 4 and the further procedure of selecting respondents for the study on participation (section 5) are based on a stakeholder analysis carried out for the Mae Sa watershed. A stakeholder analysis is “the identification of a project’s key stakeholders, an assessment of their interests, and the ways in which those interests affect project riskiness and viability” (ODA 1995). The methodology of research followed a qualitative approach, based on semi-structured interviews. It also included on-field observations, open and informal talks and tools from the Participatory Rural Appraisal (PRA) portfolio, such as rankings, to analyze the perspective of the villagers in regard to the importance and benefits of the government organizations. But since the state of participation and the

policies of the government agencies are hardly quantifiable, they were assessed through the transformation of official policies by staff of government agencies at different operational levels, their attitude towards local people and the people's perception of changes in water management.

4. STAKEHOLDERS' INTERESTS, POWER RELATIONS, AND COMMUNITY-BASED WATER MANAGEMENT

STAKEHOLDER GROUPS

The people and organizations that have an interest in water issues in the Mae Sa watershed can be divided into five stakeholder groups as shown in Table 2:

1. local people upstream, living in seven communities,

2. local people downstream (17 villages),

3. enterprises (20, mostly tourist resorts),

4. research organizations (Watershed Research Institute, The Uplands Program, Chiang Mai University, Mae Jo University), and

5. government line agencies (under the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Cooperatives).

Table 2--Stakeholder table for the Mae Sa watershed

Stakeholder group	Interests	Key Stakeholders
Local People (Hmong, Thai), Upstream	Water availability at any time for irrigation and household uses	Village headmen, village committee, TAO representatives
Local People (Thai), Downstream	Water availability and quality for irrigation and household uses	Village headmen, village committee, TAO representatives, *Kamnan, Kae Muang, Kae Fai*
Enterprises	Water quality, no trash in the water, conservation of landscape	Mae Sa Elephant Camp, Mae Sa Valley, Aura Water Company
Research Organizations	Rehabilitation of the rivers, research on sustainable land and resource use	Watershed Research Institute, Uplands Program
Government Agencies	Conservation of forests, rivers and national parks, water quality and quantity, provision of irrigation water	RID, RFD, National Park Department, Department of Water Resources

In this paper, we emphasize the interests and strategies of local people and the attitudes and practices of government agencies towards stakeholder participation in water management.

INTERESTS OF THE LOCAL PEOPLE IN WATER ISSUES

The watershed is inhabited by 15,426 people with 52 percent belonging to the ethnic minority group of the Hmong and 48 percent being northern Thais (Pong Yang Sub District Administration Organization 2003). In the past people grew predominantly rice, corn, and poppy for opium production. Since the prohibition of opium production in the late 1950s the Thai government – with support of international donors – has put an enormous effort in replacing poppy by other crops under a range of opium substitution programs. Today, farmers in the area cultivate a variety of cash crops, such as vegetables

like sweet pepper and cabbage, cut flowers and fruits (mainly litchi). Most of the crops have a high demand of water, particularly during the hot dry season which extends from March to May. In order to sustain the yields the farmers irrigate their crops during that time wherever feasible. The irrigation systems consist of simple water storing devices such as small tanks, ponds and small pipes connected to the storage devices or the water courses (either natural streams or irrigation channels). The upland villages are not connected to a public water supply system but get their domestic and irrigation water from rainwater, water harvesting and storing, natural water courses and irrigation channels and, in some cases, from groundwater.

According to interviews with several village headmen, water has become the most crucial and contested production factor in agriculture in recent years. The basic interest of local people in water management is similar--everybody wants to have reliable access to water in sufficient quantity and quality. But when taking a closer look at the interests of the water users differences emerge by gender and location. With respect to gender, the interests in domestic water and thus in water of good chemical and biological quality is often stronger among women. Men usually have a higher interest in the supply of irrigation water. However, the management of both domestic and irrigation uses is a male-dominated activity.

The second difference in interests is between upstream and downstream water users. The people living in the four Hmong and three Thai upstream communities do not have to worry as much about water quantity and quality as the people downstream. Both the quality and the quantity of the water released to downstream areas depend on the externalities of water use and agricultural production practices of the upstream users.

From the differences in water interests several conflicts have arisen. Those conflicts occur in Mae Sa watershed within the villages (between users of the same creek, reservoir, pond or pipe), between villages (mainly upstream and downstream villages) and between unequal partners (like investors with a large estate and local people) or between different economic sectors (farmers versus tourist resorts). The conflicts over water occur mostly in the hot and dry season when water gets short because of low supply (lack of rainfall and high evaporation rates) and high demand (seasonality of fruit production and water requirements of cut flowers and vegetables).

From the local people, some key stakeholders can be identified which also play an important role in the solution of the conflicts. The elected village headmen or the village committee (which villagers can choose freely) are certainly key stakeholders; they are the legitimate representatives of the village and therefore responsible for ensuring an adequate supply and management of water. In some villages water committees have been established to deal with problems of water allocation. In downstream Thai villages traditional irrigation systems (*muang fai* systems[3]) existed or still exist in an adapted form. The *gae muang* and *gae fai*, who are in charge of the irrigation channels and weirs, respectively, and are responsible for the timely and equitable water distribution to all members of the systems can also be considered as key stakeholders. The elected head of the sub-district (*kamnan*) and the members of the sub-district (*tambon)* administration (TAO) also have a stake in water management.

Being farmers themselves, the basic interest of key local stakeholders is similar to that of all local people. Their interest as an institution (e.g. as village headman or TAO

[3] The *muang-fai* system (*muang* = small canal; *fai* = weir) is a communal form of irrigation system which dates back more than 1400 years.

representative) is more complex, however. The key stakeholders are concerned about the distribution of the water in their area, regulations for water use if necessary, about water pricing and about the provision of water storage or irrigation development. The key stakeholders all want to avoid conflicts over water even though not all of them favor equal distribution. Cases are reported about village headmen, the *kamnan* and other local elites allowing unequal allocation of water to take a lion's share in the resources or to favor their close friends and relatives.

PROPERTY RELATIONS, ALLOCATION MECHANISMS, AND MANAGEMENT STRATEGIES FOR WATER

The concept of legal and institutional pluralism describes best the situation of water management in the villages of the Mae Sa watershed and thus determines the strategies for water management. It refers to the coexistence and interaction of different legal orders in the same socio-political space. (Griffiths 1986). According to Meinzen-Dick and Bruns (2000) and Ganjanapan (2001), this concept can be applied in particular to water rights and watersheds where different socio-cultural systems interfere with each other and a large heterogeneity of stakeholders exists. Even though the Mae Sa watershed is relatively small, the situation of legal and institutional pluralisms holds. As Neef et al. (2004) describe in their study, the often perceived concept of water rights being under an unregulated common-property system or a *de facto* open-access regime does not capture the reality of water rights and institutions for northern Thailand. The use rights and the practice of water utilization are rather bound into a complex governance system that reflects the socio-cultural background and local power structures (ibid.). Although water is described by the Thai Civil and Commercial Code as a good with a "common benefit for the people," the social structures in the communities determine the management of the

water and the allocation patterns. Hence, the property relations of water in the villages are not as simple as they appear; instead they are influenced by dynamic social, economic, and institutional factors. Even though water is a common pool resource, it is not under a uniform common property regime, but under the different property regimes of the communities.

Over the years, the villagers have developed water conveyance systems for irrigation and domestic water to deal with increasing water demands. Every village has developed its own systems of water management depending on geographical, technical, social, cultural, and economic factors. Both upstream and downstream farmers mainly use gravity irrigation with simple irrigation devices, like pipes transferring water from streams, or irrigation channels, ponds, or tanks. These structures make farmers strongly dependent on surface water sources and hence on the climatic and geographical conditions. Pumps and wells that would decrease this dependency are exceptions and are limited to few outside investors and better-off farmers.

Irrigation water is managed either in a group or on an individual basis. In individual water management schemes, a villager gets his or her own water from a stream through pipes or other devices and has no agreements with others about the amount of water usage and when he or she can withdraw. This arrangement is mainly observed for irrigation water, whereas different types of management patterns (individual, group, communal, and a combination of them) can usually be found in the villages. Individualized water management is more often observed in Thai villages as an example from the Thai village Pong Krai illustrates. The village headman issued a regulation not to share pipes with others to prevent arguments and conflicts. Most farmers observe the

rule but some have to share pipes for economic reasons. In Hmong communities, water management is organized more on a group basis with local elites (usually the descendants of the founding families of the village) playing an important role. Conflicts are either regulated at the user group or the village level. In the Hmong village of Mae Sa Mai, the village water committee decided to reduce the diameter of all pipes to one inch to increase the equality of water use. Influential persons, however, continue to use pipes with a larger diameter. Problems of water management that cannot be solved by the heads of water user groups or by water committees would be brought to the village headman and the village committee in both Thai and Hmong communities. In the regular village meetings the people have the opportunity to voice their concerns about any issue including water. The headman and his committee take the decisions and implement resolutions for solving conflicts. Apart from the formal channels, other institutions play important roles in the determination of water allocation and in conflict mediation. In Hmong communities, for instance, the council of elders and the leaders of the different clans play an important role in village-internal affairs. In Mae Sa Mai, the shaman and leader of the founding clan of the village coordinates the water use, mediates in disputes, and performs the religious ceremony *sya-hao-dhale*, held annually at the beginning of the irrigation season to honor the water spirit and to ensure permanent water flow.

While the allocation of irrigation water tends to favor the long-established families, the politically powerful villagers and the better-off farmers, access to domestic water is relatively equitable. Domestic water supply in the villages of Mae Sa watershed is mostly organized on a communal basis. Often the villages have at least one principal tanks to which all households are connected. Only in some villages are water fees

collected either on a monthly or per connection basis (e.g. in the Thai village Pong Yang Nai) or per unit of water measured with water meters like in the Hmong village Buak Chuan. The case of Buak Toey, another Hmong community, shows that water fees are based on the costs of making the water available (installation, electricity), but not the real value of water; only those households which draw water from a system with electric pumps have to pay a fee, whereas households connected to a gravity supply system can get their water free of charge.

In sum, water management in a village is a complex issue involving formal and informal institutions and different levels of management, from the individual and family to the group and village level. While collective action arrangements are effective and commonly accepted mechanisms for water allocation, local power structures, or unfavorable (geographical) conditions can also lead to unequal and non-sustainable water management. Participatory policies of the responsible government agencies could help to even out unfavorable conditions or unequal distribution between the stakeholders. The increasing water shortages and the arising problems and conflicts for the people lately show that external support by the government agencies and local administration is needed for providing facilities such as reservoirs, canals or weirs, knowledge and expertise, and money. Basic water infrastructure like reservoirs or weirs can help the people to overcome water shortages but they cannot be provided by the village community and rarely by the local administration due to lacking financial resources. These projects, in the case of water infrastructure under the responsibility of the Royal Irrigation Department and the local sub-district administration, should be planned and implemented in a participatory way. The construction of water infrastructure can always affect other

people negatively. Thus, the involvement of all stakeholders would initiate a negotiation process between them to find solutions acceptable to all interest groups.

5. STAKEHOLDER PARTICIPATION IN WATER MANAGEMENT

THE EMERGENCE OF PARTICIPATORY APPROACHES IN RESOURCE MANAGEMENT

For many centuries, communities in today's northern part of Thailand were under the sway of nobles. In the thirteenth century, King Mangrai established dominance over the small neighboring principalities and finally founded Chiang Mai as the capital of the Kingdom of Lan Na (a million rice fields). He acknowledged the importance of local irrigation systems for wet-rice production, expanded irrigation projects by construction of canals and established an irrigation law determining regulations for water management (Attwater 1997; Surarerks 1998; Elstner and Neef 2004). In the nineteenth and early twentieth century, the Kingdom of Siam extended its control to the North, putting in place bureaucratic institutions to displace the political power of local nobles. The administrative structure remained centralized throughout the twentieth century. By 1932, the year when Chiang Mai became a province of Siam, a parliamentary democracy was established but many subsequent governments were strongly influenced by the military and often removed by coups. Only until the beginning of the 1970's, the series of military regimes could be put to an end and free elections took place. An emerging civil society called for democratization and decentralization in the 1980s. Different non-governmental organizations started to become active in the movement. One of the results was the transformation of sub district councils into *Tambon* administrative organizations in 1994. Another outcome was the current Constitution promulgated in 1997. The so-called

"People's Constitution" was the product of an innovative process of consultations with the public and sought to institutionalize a system of checks and balances through the decentralization of key functions of power from the central government to independent institutions (Laird 2000). Within the opening of politics in the 1980s and 1990s the importance of participatory policies has been recognized and included in the People's Constitution. Article 46 and 56 explicitly gives local communities and individuals the right to participate in the management of the natural resources. Article 46 states

> "Local communities which have traditionally been formed by individuals shall have the rights to conserve or rehabilitate customs, indigenous knowledge, local as well as national arts and culture, and to participate in the management, maintenance and balanced and sustainable use of natural resources and the environment. The exercise of these rights shall be in accordance with law."

It was the first time that communal rights to participation in natural resource management were mentioned in a Thai constitution which "marks a departure from the traditional 'command and control' approach whereby the State possesses the sole power in resource management to the exclusion of its people, including those whose livelihood depends on the use of those resources" (Kaosa-ard et al. 1998).

Participatory principles and decentralized decisionmaking in natural resource management have also been emphasized by the current Thai Government as part of their populist policies. Out of the nine ministries with over thirty line departments involved in water issues only two ministries are of relevance for the Mae Sa watershed: the Ministry of Natural Resources and Environment (MoNRE) and the Ministry of Agriculture and Cooperatives (MoAC) with their corresponding line departments. MoNRE was newly established in 2002 as part of a large bureaucratic restructuring process. This involved the creation of the Water Resources Department which recruited 1,600 officials from the

Irrigation, Public Works, and Health departments and the Prime Minister's Office. At least one representative of MoNRE's and MoAC's departments at the provincial or district level was interviewed; if the agencies were considered as particularly relevant for water management, several officers were interrogated. All interviewed government officers unanimously emphasized the importance of the cooperation with the local people and their demands. There is a stark contrast, however, between the rhetoric of the government officers, in particular the ones in the upper hierarchies, and applications in practice. There are few activities with a concrete involvement of local people through consultation or the transfer of decisionmaking powers. It was found however, that a distinction has to be made between the organizations that promote the conservation of natural resources by state authority, such as the Royal Forest Department, and agencies which support the development of local communities, like the Royal Project (Neef 2004).

In the following sections we analyze how participatory principles and policies are transformed by government agencies at the local level.

STAKEHOLDER PARTICIPATION IN DEVELOPMENT-ORIENTED GOVERNMENT AGENCIES

The organizations that promote the social and economic development of the people are the Royal Irrigation Department under the Ministry of Agriculture and Cooperatives and the Royal Project, which has officially the status of a non-governmental organization but is supported by government agencies and thus here considered in the same section.

The Royal Project

The Royal Project has always worked closely together with the local people since its stations have been established next to villages of ethnic minorities. The planning of

the projects is done mostly in the Royal Project Foundation and its supporting agencies; but the officers stated that they also ask the farmers about their opinions and try to plan together for the field of research and the topics of trainings and field days for the farmers. However, most research ideas are not requested by farmers, but are developed by government agencies.

Trainings, on the other hand, are typically initiated by farmers. For example, the Mae Sa Mai station organized a training about the cultivation of several fruit trees like persimmon, passion fruit, and star fruit, based on a request by farmers. When the stations organize such trainings, field days or demonstrations, the attendance and interest of farmers is large as one of the officials said "There is very good participation. Farmers are interested as we deal with issues that affect farmers' everyday life."[4]

In addition to their relatively close cooperation with the local people the interviewed officers in the station next to the Hmong village Mae Sa Mai also had a positive attitude towards ethnic minorities. Station officers believe that the local people have the capacity to manage their resources and try not to interfere too much in their activities. Often the Royal Project Stations act as a mediator between the conservation-oriented organizations and the local people.

Royal Irrigation Department (RID)

According to the statements of the officers interviewed, the Royal Irrigation Department has adopted participatory policies and recognizes the importance of the voices of the people. However, not all officers have the same understanding of participation. According to the director of the provincial department in Chiang Mai,

[4] Interview with Royal Project Officer, April 27, 2004

enhanced participation can be seen through the increase in the demands of local people for irrigation facilities. Officers feel that the number of proposals written by the people to the RID is due to more participatory policies and not due to any other reasons like more pressing water problems or increased population.[5] The higher the rank of the interviewee, the stronger he or she emphasized the application of participatory methods. In the directory board of the provincial Royal Irrigation Department the officers stressed the importance of participation but their confidence in the capacities of local people was very low. They stated that local people would need to be educated before they could be more involved in resource management.[6] Here, participation appears to be only a label to get the projects accepted as one of the head officers mentioned: "If the approach is top down, the people do not allow that something is build on their land, so cooperation with the people makes it easier to allow to build on their land."[7] In the lower hierarchy of the RID an officer even expressed criticism about the type of 'participatory' practice of the RID.

> Interviewer: With the new Peoples Constitution the people are supposed to be involved in resource management. How would you describe the situation in the RID?
>
> RID Officer: After the new constitution the RID is trying to involve the people more and it is trying to receive more from the people. The RID has a mobile section. But I feel that the RID does not go deep into participation.
>
> […]
>
> Interviewer: What do you mean by saying "participation does not go so deep"?
>
> RID Officer: (he lowers his voice as there are other people in the office): My personal opinion is that government officials should lower themselves to get to the same level as the farmers in the village so that they can listen better to the people. [8]

[5] Interview with Royal Irrigation Department Officers May, 13, 2004
[6] ibid
[7] ibid
[8] Interview with Royal Irrigation Department Officer. April 02, 2004

The mobile section of the RID, doing extension work in the field of irrigation, is the division that works closest with the local people. In this section, the staff in contact with the people also has a positive attitude towards participation as well as towards the local people. They have confidence in their work and their capacities. "The villagers have the capacity to manage them [the resources] by themselves; they know a lot, the RID only supports them."[9]

STAKEHOLDER PARTICIPATION IN THE CONSERVATION-ORIENTED GOVERNMENT AGENCIES

The conservation-oriented organizations are the line departments under the Ministry of Natural Resources and Environment such as the National Park, Plant and Wildlife Conservation Department or the Royal Forest Department. Even though the officers in these departments also underlined the importance of participation there are very few examples of water or watershed projects with actual involvement of local people. The structures in the departments are centralized and hierarchical and the major decisions are being made in the ministries in Bangkok or at the provincial level. Local people are hardly ever asked for their opinion and priorities and, even if consulted, they would still not contribute to the final decision of a project. In the following, we discuss the findings from our interviews in the most relevant agencies in detail.

Water Resources Department

According to interviews with officials in several line departments in Chiang Mai, the Ministry of Natural Resources and Environment in Bangkok has given an order to apply participatory policies in the departments. Participation could be important for the

[9] Interview with staff from the mobile section of the Royal Irrigation Department, April 30, 2004

basin and sub-basin committees that the Ministry has assigned the Water Resources Department to coordinate. An official from the Water Resources Department stated that they are trying to involve the people in their work and that he considered participation as necessary. He reported that many changes have occurred within the government giving an illustrating example: "Previously people were looked at like little birds and the government as mother bird only gave the food to the little birds. With more participation people know what they can get, but also see that they have to sacrifice."[10] According to the officer, the Department tries to apply participatory ideas in the coordination work for the committees and working groups where they propose representatives from the villages for the different committees. The selection is then done at the village level and they are invited by the district. Hence, the department has, to a certain extent, adopted participatory approaches but the officers do not have much contact or no contact at all with water users. The officer responsible for the coordination work with the committees even stated "I am employed in the wrong place, because I am not used to work with people, my specialization is in civil construction and I have never done this before."[11] This shows that working with local people and involving them as partners rather than clients requires qualifications that go beyond technical skills and mechanistic application of participatory methods. Nevertheless, it seems that the staff in the Water Resources Department has understood the principles of participation and that they have a positive attitude towards local people and their involvement. Asked about the capacities of the local people to take care of their own resources, the officer stated "Yes, people have

[10] Interview with Water Resources Department Officer, May 05, 2004
[11] ibid

knowledge and I think it (their participation) will work well."[12] But the same officer also sees problems in participation and, in particular, in the committee work; according to his statement the people have to learn to acknowledge the decisions of their representatives in the committees, "in the sub-committee the villagers will have to accept what their representative has voted for and this might cause conflicts."[13]

Concluding for the Water Resources Department, it can be stated that due to the new creation of the department in 2002 they do not have many activities in general, and even less with local people. They are only in contact with other government agencies and the TAO. However, the officers seem to have understood the importance of participation, even noting that the local people will have to learn to accept decisions taken by their representatives, and are willing to apply it in practice, albeit they acknowledge that their own capabilities are challenged as some lack the skills to apply participatory methods. The structure of the Department appears to be another obstacle for participatory policies: The Department has a very centralized and hierarchical structure, where decisions are taken in the central agencies in Bangkok and the budget is distributed in equal shares to all provinces, irrespective of their demographic, economic, and geographic conditions and of ongoing projects. One of the officers voiced his criticism about the distribution of the budget, illustrated in the extract of the interview:

> WRD Officer: I don't understand why every province gets the same budget even though they are all different in size. And I even tell the Department about this.
>
> Interviewer: And are they open to criticism? How do they react to that?
>
> WRD Officer: I cannot tell directly, you can imagine in the Thai culture that we cannot say something like this directly to our boss. But the Ministry has a website where you can write comments and there I express my critique.

[12] ibid
[13] ibid

Interviewer: And you do this anonymously?

WRD Officer: Yes. [14]

Upstream Management Units

The Upstream Management Units under the National Park, Plant and Wildlife Conservation Department are in close contact with the local people due to the location of the stations in the upland areas. One of the principle officers stated that they also have adopted participatory policies. "Participation is our main goal. In the past, it was all top-down, now we have integration of top-down and bottom-up."[15] Nevertheless, the officer does not see any achievements from the introduction of participatory policies as he says that the process has just started with the Thaksin Government. As the following interview extract shows, however, he does not seem to believe that the local people, in particular ethnic minorities, are capable of managing the natural resources on their own.

Interviewer: How do you see the situation with water in the Mae Sa Watershed?

UMU Officer: There is a big problem with water. Too many people live in the watershed and do farming. The people should change their habits of how to earn their living, they should become traders or something else. And also more measures for protection are needed, more discipline is needed from the people.

Interviewer: Where do you see the reasons / causes for water problems?

UMU Officer: In the destruction of the forest and land. And less rainfall: 70 years ago they had 1700 mm of rainfall per year and now they have only 1100 mm per year.

Interviewer: What measures do you suggest to improve the situation?

UMU Officer: A compromise of the people is needed. People should not cut the trees and burn the forest, not clear the land. The people don't follow the training, and every unit of

[14] ibid
[15] Interview with Officer from the Upstream Management Unit, Chiang Mai, May 04, 2004

> the upstream units[16] does what they want to do. And even if people participate in the trainings, they do not cooperate, people only want more land. [17]

Even though the same officer told about participation being their main goal, he seems not very enthusiastic about working together with the people and involving them in their work. In contrast, the temporary staff working at one of the stations in Mae Sa watershed has more contact to the people and describes the work in the villages where they construct mostly weirs as positive.

> Interviewer: Do you work with the villagers? How often do you go to the villages?
>
> UMU Worker: Yes, we work together with the villagers. I go to the village every day, not only for work but also for example to play football to have a good relation to the villagers. [18]

Although the interviewed workers did not originate from this area, they are fond of their jobs and of working with the local people in the villages. Unlike their superior, they do not perceive such a gap between themselves and the people they work with. It gives the impression that the people being closest to the villagers do not need to follow orders of participation from above, but that they are the ones actually putting participation into practice by themselves without external force. The central and hierarchical structure of the Units, however, are an obstacle for participation; the decisions for projects, e.g. for the construction of weirs, comes from the National Park Department and sometimes the villagers do not agree with these ideas. Such decisions make the work of the upstream workers particularly difficult as they still have to convince the local people about the advantage of a project.

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[16] Several Upstream Management Units are placed in upland areas; two of them are located in the Mae Sa watershed.
[17] Interview with Officer from the Upstream Management Unit, Chiang Mai, May 04, 2004
[18] Interview with workers of the Upstream Management Unit, April 01, 2004

National Park Offices

The interviewee in the National Park Office mentioned that changes are occurring towards better communication between the officers and the people and that the demands of the people should be considered more in the future. The officer cautioned, however, as demonstrated in the interview extract below, that this process is still in the beginning, that the attitude of the people has to change, and that the local people have to be punished if they act against the law.

> Interviewer: What do you mean that the communities are more involved now?
>
> NP Officer: I think, we are at a starting point, in the future we can ask the communities more about their demands, but first the awareness of the people has to be created.
>
> Interviewer: How are you planning to create awareness?
>
> NP Officer: In the past, there was only law, which created conflict. Now the officers have realized that they have to talk to the people. In the past they did not.
>
> Interviewer: So are you saying that the relationship between officers and the people is not ready for asking the people about their demands?
>
> NP Officer: In the past, there was no communication between the officers and the community, now they have to talk more, in the past the officers only arrested [the local people].
>
> Interviewer: Where does this change come from?
>
> NP Officer: It is the new philosophy of the Ministry [of Natural Resources and Environment] of integrated development to make it sustainable.
>
> Interviewer: Does this correspond also to your point of view?
>
> NP Officer: I think it is good that the law is going according to the demand of the people, but if there are wrongdoers the law is still needed.[19]

[19] Interview with Officer of Doi Suthep Pui National Park Office, May 10, 2004

Conservation Unit

The practices of the Conservation Unit, which also deals mostly with forest fires, in terms of participation are expressed in the extract from an interview with the responsible officer.

> Interviewer: Do you also work together with people?
>
> CU Officer: Our real objective, the heart of the park work, is 1. conservation for existence, to keep whatever we have and not destroy it, 2. study and research, 3. work for recreation purposes.
>
> […]
>
> Interviewer: Do you also work together wit the villagers in the villages?
>
> CU Officer: Yes, sometimes for demarcation purposes for example.
>
> Interviewer: Do you also do trainings?
>
> CU Officer: No, we just go to the villages for suppression to arrest people who cut or burn the forest. We combine arresting people and Public Relations work.[20]

Office of Highland Development

The Office of Highland Development (OHD) employs local people in their work and thus practices participation through mobilization. Recently, the OHD has engaged in a new environmental policy of zoning and demarcating agricultural land and forestland in protected areas. In these demarcation projects the farmers do not have a choice if they want to participate in the project or not. If their land is within the project area they have to take part.

The officer in the following extract describes the cooperation with the ethnic minorities in Mae Sa Mai, one of the pilot areas of land demarcation:

[20] Interview with Officer the Conservation Unit of Doi Suthep Pui National Park, April 30, 2004

> Interviewer: Where do you see the possibilities of farmers to participate in resource management?
>
> OHD Officer: Most farmers in Mae Sa Mai are hilltribes and they are different and so cooperation is different.
>
> Interviewer: Is it difficult to work with them?
>
> OHD Officer: In the short term it is difficult.
>
> Interviewer: Why?
>
> OHD Officer: It is difficult for people to understand, if hilltribe people don't see the consequences then they won't cooperate.
>
> Interviewer: Is this different from Thai people?
>
> OHD Officer: Yes, very different, they have a different culture, different language and geography.
>
> Interviewer: Do Thai people cooperate better?
>
> OHD Officer: Maybe they understand better.
>
> […]
>
> Interviewer: Are they [the hilltribes] accepting this [the policy of demarcation]?
>
> OHD Officer: Not all of them, but in the end they have to. In the future they will have even more problems because they don't have birth control, then land and water will become even scarcer, and they don't have any forest anymore to absorb the water, then they will not have water for irrigation anymore.[21]

In sum, the attitudes of government officers from conservation-oriented agencies toward local people and, in particular, towards ethnic minorities, remains negative, and they do not have confidence in their capacities to manage the resources autonomously.[22] The conservation-oriented organizations have problems in devolving power to lower

[21] Interview with Officer of Highland Development Office, May 06, 2004

[22] The attitudes certainly differ among individuals and organizations with some being more conservation-oriented than others. The interviewed officers in the Water Resources Department are an exception insofar as they had a quite positive opinion about the local people and their participation in water management. However, they focus on the conservation of water resources and are under the Ministry of Natural Resources and Environment and thus are considered as conservation-oriented. The Water Resources Department is a borderline case and their policy in the next few years will show if they orient more towards the support of people's own development priorities.

levels because they are afraid that the local people exploit the resources instead of protecting them. Passing on responsibilities to lower levels would also mean for the conservation-oriented organizations a substantial loss of control over the resources and the perceived risk of not being able to fulfill their given tasks in resource conservation.

THE TAMBON ADMINISTRATIVE ORGANIZATIONS: A MEDIATOR BETWEEN STAKEHOLDERS INTERESTS?

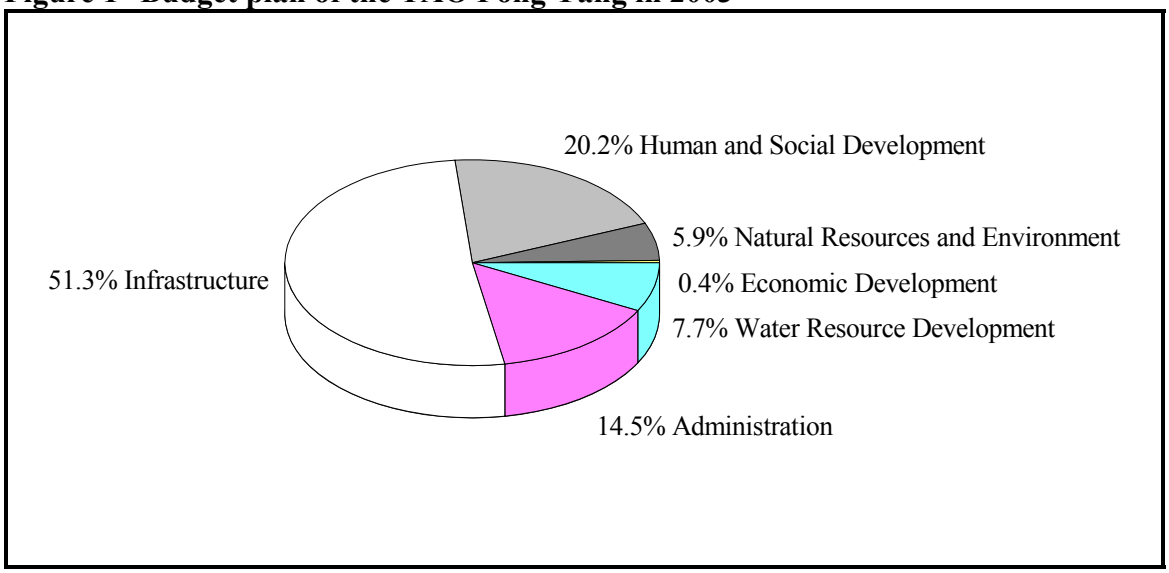
The *Tambon* (sub-district) Administrative Organizations (TAOs), established in the drive for more decentralization in the mid-1990s, have the potential to assume a mediating role between the conservation- and development oriented organizations and between government agencies and local communities.

The TAOs are operated under the supervision of the Ministry of Interior. Their main objective is to empower local communities in decisionmaking, policy formulation, as well as other activities related to community development so as to serve their own needs. A TAO consists of two major sections, a Council and an Executive Committee. The members of the Council include two elected representative of each village[23]. In theory, the Executive Committee has extensive powers and functions covering economic, social, and cultural development of the sub-district, which includes *inter alia,* the provision and maintenance of infrastructure, waste disposal, development of women, children, youth, and senior citizens and the protection and maintenance of natural resources and environment (Kaosa-ard et al. 1998). In practice, the TAOs are lacking the budget to realize their plans and projects for community development. The Decentralization Law of 1999 established to increase local governments' share in public

[23] The sub-district Pong Yang comprised nine villages during the time of the study.

spending to 20 percent in 2001 and 35 percent by 2006, but with 8.4 percent actual share of TAOs expenditures in total public spending in 2002 fell short of the target (Suwanmala, 2002). The budget situation in the sub-district organizations is one major reason why the TAOs cannot get involved in many environmental or natural resource projects; the focus of the work as shown in the Figure 1 is mainly on small infrastructure projects to satisfy the basic needs of the people.

Figure 1--Budget plan of the TAO Pong Yang in 2003



Source: Pong Yang Subdistrict Administration, 2003

The scope for action of the TAOs is further limited as they are not autonomous in their decisionmaking; the *Tambon* budgets and projects must be approved by the District Officer, a Ministry of Interior appointee, and the competences given to the TAOs are restricted by other government departments which still hold the decisionmaking power in certain areas (Badenoch 2002). For example, as regards forest utilization in the national parks, the National Park, Plant and Wildlife Department has to make the decisions about

any projects in these areas. In areas covered by the Royal Project Foundation, most government activities have been coordinated by working groups chaired by Royal Project representatives, following a decree by the Office of the Prime Minister. Thus, in many fields the TAOs lack the power to counterbalance the influence of both the conservation- and development-oriented organizations due to their limited mandate.

EVALUATION OF PARTICIPATORY POLICIES

For the evaluation of the participatory policies of the government agencies Pretty's classification for different levels of participation is used in Table 3.

Table 3--Level of participation as applied by different government agencies

Type of Participation	Departments applying
Passive participation	Conservation Unit (MoNRE)
	National Park Offices (MoNRE)
	Royal Irrigation Department (MoAC)
	Royal Forest Department (MoNRE)
Participation in information giving	Water Resources Department (MoNRE)
	Royal Irrigation Department (MoAC)
	Royal Forest Department (MoNRE)
	Royal Project
Participation by consultation	Royal Irrigation Department (MoAC)
	Royal Project
Participation for material benefits	Office of Highland Development (MoNRE)
Functional participation	-
Interactive participation	-
Institutionalized participation	-

As a synthesis it can be stated that the participatory policies of the government agencies are mostly only at a passive level or at the level of information provision. The development-oriented organizations go beyond this and involve local people also through consultation. Two organizations, both conservation-oriented, involve local people through labor. But as described above and confirmed by the interviewed people, consultation and labor involvement does not necessarily have an influence over the decisions made and the projects implemented. Moreover, participation for material benefits is not automatically a better form of participation. In the case of the Office of Highland Development the participation of the people in the project is compulsory. People have to participate if their cultivated land is in the area of the demarcation project of the office.

PERCEPTION OF THE PEOPLE

The establishment of the *Tambon* Administrative Organizations is certainly the main improvement in terms of enhanced participation for the local people. The TAO council is constituted by two representatives from each village within a sub district, which gives every village the chance to present their problems in an open forum and bring them to a political arena. Decisions are being made by the executive board of the TAO, elected by the council, which has the power to take certain decisions affecting local communities, mainly in the field of infrastructure development. The main impediments for the work and the functioning of the TAOs are budget constraints and their restricted mandate. Many competences are still concentrated in the hands of the government agencies and can block or undermine the actions of the TAOs. Insufficient financial resources are a big constraint insofar as most of the TAOs can only concentrate on some

basic infrastructural necessities of the sub-district, like the construction of roads or small water storage facilities. The TAOs lack the financial resources to take up major projects that would be necessary for a better management of the natural resources. Notwithstanding these constraints, certain improvements towards greater public participation are already perceived by the local people.

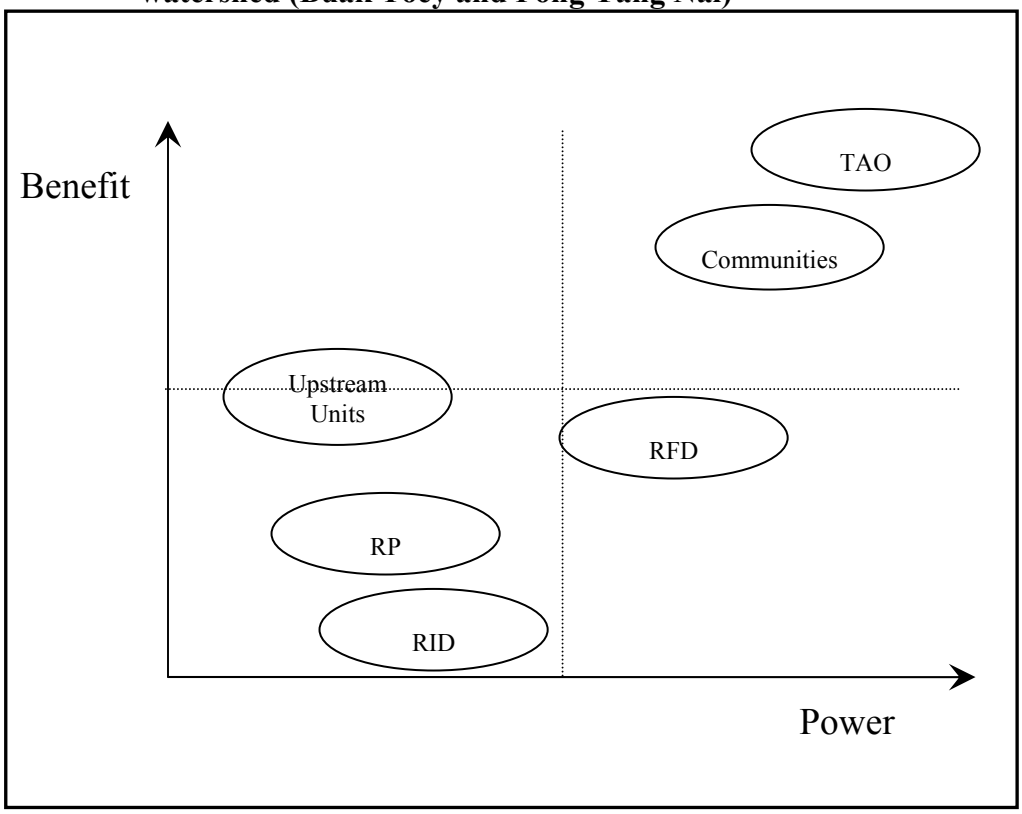
Another noticeable change in terms of participation for the local people is the increasing involvement of local representatives in different committees such as river-basin committees, sub-committees, and working groups, which have been established in the last years by the Thai government with support of the Asian Development Bank in an effort to promote integrated water management. The river basin management approach and the invitation of local people is certainly a step towards more public participation in water management. But the work in the committees has not progressed much even though they have been meeting for several years in some cases. At the local level, the administrative officers who lead the committees do not share the same enthusiasm to work with the people as intended in the plans by the government. The officers are not prepared to treat the local people as equal partners and the opinion of the people, if they are able to express it, does not necessarily have an influence over the decisions in the committees.

Although small changes are noticeable for the local people, the possibilities for participation stand in sharp contrast to the rhetoric of the government officers and the principles of the constitutional framework. The ordinary villager can hardly feel any differences or achievements in terms of participation in managing natural resources. What they perceive regarding water management are increasing water shortages and

floods, an enhanced involvement of the TAO in mediating conflicts, and a village community that strengthens its own capacity in organizing water allocation and dedicates more time and effort to the management of water resources. The contrast between the rhetoric of the government officers and the reality at the community level is striking at first. But the analysis of the participatory policies of the local government agencies above explains why so few of the announced changes arrive at the local level. Even though the officers emphasize the importance of participatory policies and the involvement of the local people, their lacking willingness to really devolve power to a lower level and to pass on responsibilities to the local people in resource management elucidate the few noticeable improvements at local level.

The general attitude of the local people towards the government officers is still characterized by skepticism and mistrust. This is particularly true for the Hmong who do not perceive them as supporters but as intruders to the villages who, at best, ignore their priorities or, in the worst case, arrest them for encroaching into forestland. Figure 2 illustrates the results of group discussions with villagers in one Hmong and one Thai community about the organizations that support them most and are most influential in terms of water management. One might have expected that the people would feel that the village communities and the TAO help them most, and that government organizations such as the RID are seen as most influential. However, the majority of the interviewed villagers consider either the village community or the TAO as most supportive and also as most influential. The local people rely on their community and on the TAO for support and also feel that the community and the TAO have the biggest influence and power over water management.

Figure 2--Benefit and power of different organizations involved in water management as perceived by villagers in two local communities of Mae Sa watershed (Buak Toey and Pong Yang Nai)



Another argument for the few tangible changes for villagers is the lack of opportunities to express their disapproval. They can present a complaint to the TAO representative of their village but beyond that there are not many channels for them to express their opinion. Although, according to the 1997 Constitution, citizens have the right to information, to public hearings, and to legal action against projects affecting them negatively, but ordinary villagers lack the necessary knowledge, capital, and relations to influential persons to file such a suit. On the one hand, the recently introduced rights in the constitution require institutionalized patterns for their realization such as civil rights action; on the other hand, the people need to be aware of their rights to be able to make use of them. If, for example, a villager in the Mae Sa watershed has a problem with

water, such as water shortage in a creek, he or she would first talk to relatives or other users of the creek to find a solution. If this is not successful he or she would bring the issue to the village headman or to a meeting of the water user group. These groups have been established autonomously in most local communities as a self-help mechanism to manage water from commonly used water sources. However, these water user groups are sometimes dominated by local elites and do not always guarantee equal access to water for all villagers (Neef et al. 2004). In the interviews it became apparent that people do not even know that they could use other channels beyond the village community, such as contacting a government agency directly if they have a problem.

Among the politically influential villagers such as TAO members, the head of the sub-district *Kamnan* or village headmen, the perception is different. They are in contact with the government agencies and do feel that the possibilities for participation have increased. They can express their opinions, are invited to committee meetings, and are being consulted. In addition, the TAO has received more money in the past few years. All interviewed persons described these changes as positive, but none of them is satisfied with the *status quo*. They feel that they cannot make their voices heard and that they are powerless against decisions of other government agencies. As one village headman mentioned when he was requested to report about perceptible changes in participation "before they didn't ask us about anything, now they talk to the people and ask about opinions, but this is only verbal. (…) Now they talk more, in theory this is good, but in practice it didn't change anything."[24]

[24] Interview with Village Headman of Ban Buak Chan, June 01, 2004

6. CONCLUSION

In recent years water problems have become a severe problem for the people in the uplands of northern Thailand. Droughts in the dry season threaten the villages' water supply for domestic and irrigation uses. The local people deal with growing water problems in their villages through uniquely established water supply systems. Over the years, every village has developed its own management system. The water in the villages, a common pool resource, is not under an open access regime as misinterpreted by some government agencies. Neither is it necessarily under a common property regime; instead the property regime of the water in the villages is subject to different tenure regimes and determined by a range of local factors such as power structures, kinship relations, geographic conditions, technical choices, and socio-economic settings in the villages. Management systems at group and communal level are often able to deal with water allocation in an efficient way, but they do not necessarily provide the fairest or most sustainable form of water governance.

Thailand, a traditionally centralized country, has made attempts to devolve power to lower levels in the 1990s through the establishment of the *Tambon* Administrative Organizations and the recent People's Constitution. In the 1997 Constitution local administrative units such as the TAOs and individuals are given the right to participate in the management of natural resources.

Moreover, the line departments at the district and provincial levels have been given orders to apply participatory policies in water resource management. Certain participatory projects have been included in the plans of the departments at the local level, and all government officers stated that they have adopted participatory policies. But

the interviews revealed that the officers are not prepared to really involve the people in joint decisionmaking and the departments are not ready to release power to the local people. This applies in particular to the conservation-oriented government organizations such as the National Park, Plant and Wildlife Department, which are afraid of yielding responsibility over resource conservation to the people who, they think, would exploit the resources. In the development-oriented departments, some officers with closer contact to the people try to apply participatory approaches but they lack both the necessary skills and the support from their superiors to really engage in a collaborative process with the local people that would open spaces for negotiation of interests.

Accordingly, at the village level the changes in the government agencies are hardly noticeable, and the local people can barely feel that the possibilities for participation have improved. A negative image remains of government officers, and the people rely on their own regulations for water management instead of contacting the government agencies for help. What is perceptible for the local people is the involvement of the TAO and a larger number of meetings and committees to which only politically influential people like the village headmen or TAO representatives are invited. Among these key stakeholders, the perception of changes is different. They are in closer contact with the government agencies and can see that changes are occurring towards more involvement of the people. Nevertheless, the newly introduced policies are still not enough for them and appear to the local elites rather as a justification for the pre-conceived actions of the agencies. Taking Pretty's classification as a reference, participation occurs, if local people are being involved at all, only as passive participation, in information giving, rarely by consultation, and in the case of the Office

of Highland Development, for material benefits. In communities covered by the Royal Project, people are being consulted, and even the RID sometimes asks the people about their priorities. But the choices are still being made in the government agencies and so the people have neither real decisionmaking power nor institutionalized patterns to participate in the management of their resources. The constitutional right for participation in resource management is not sufficiently put into practice and the optimal level—where participation consists of a negotiation process between all stakeholders to balance their interests and find solutions together—is far from being reached for water issues in Thailand.

7. POLICY IMPLICATIONS

This case study from the Mae Sa watershed demonstrates that it is not enough to put participation on the political agenda and give orders about the implementation. The involvement of local people in the political process and in research and development requires more fundamental changes in the structure of the government agencies and among their staff. Government officers need to change their attitudes towards local people and have to learn that participation is not only a tool to improve project outcomes, but also an objective in itself. The universities and schools - where the government officers get so far only their technical education in e.g. engineering, forestry or agriculture - need to extend their curricula by modules on participatory research and development. Further, seminars and trainings that provide the necessary communication and facilitation skills for working with local people should be offered for the government staff already in office. Reducing the mistrust between government officials and local

people is certainly a long process but could be facilitated through the establishment of pilot sites where the success of cooperation between government officers and local people is demonstrated as exemplified by the case of the Mae Ta Chang watershed. While improving government officers' knowledge and skills in applying participatory approaches is necessary, it is certainly not sufficient; the local people also have to be made aware of their rights and increased possibilities under these new policies. However, participation *per se* is not necessarily only positive for local people. Participatory processes require compromises between the stakeholders and do not only provide benefits to local people but might involve disadvantages to certain groups that have been favored before. Upstream populations, in particular, are likely to loose their previously exclusive control over water resources. The *Tambon* Administrative Organizations could play an important role in their mediator function between local people and government agencies and between upstream and downstream communities. The TAO representatives could raise awareness among the local communities about possible benefits and compromises through participation in e.g. village meetings. Moreover, the TAOs could establish better contacts between the local people and the government officers by, for example, inviting officers to the village meetings or to discussions with local people.

The example from Mae Sa watershed has shown that water management in Thailand has reached a crossroad. The government has yet to demonstrate that its newly declared openness to participatory approaches is more than just another populist strategy to win votes in rural areas. The fate of the draft Water Resource Bill–based on consultations with grassroots groups and local people in Thailand's 25 river basins–will give proof of the sincerity of the government to institutionalize participatory approaches

to water management. The real test will be how much of its people-centered principles will be watered down through the series of public hearings and the contestation of its content by groups with vested interests before it will come into effect.

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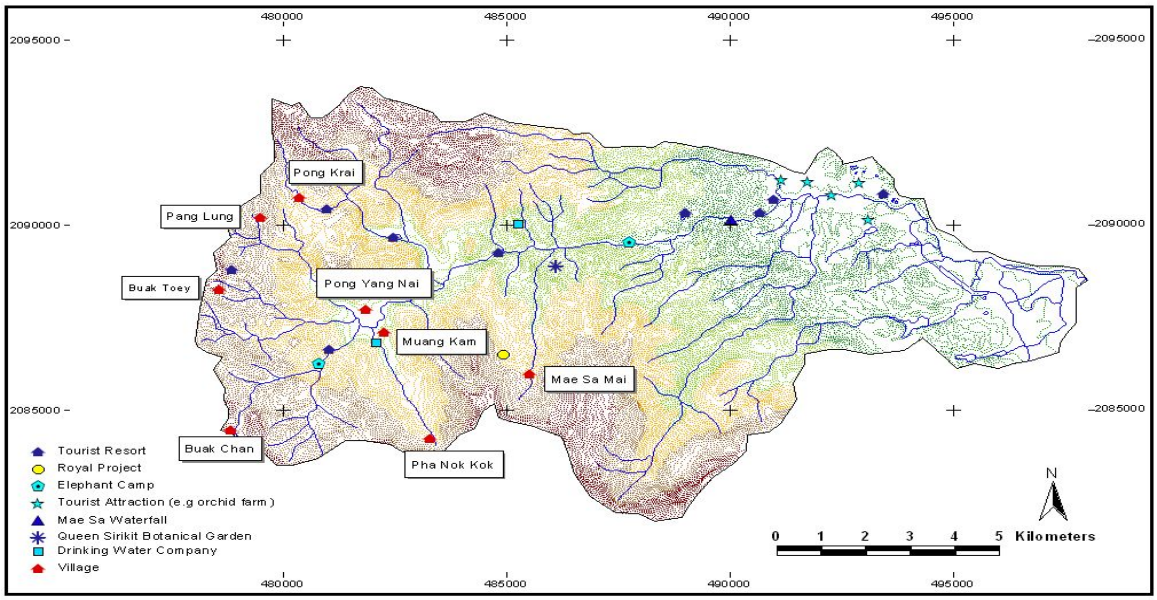
ANNEX 1: THE STUDY AREA – MAE SA WATERSHED



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