

# Wetland users as researchers: Learning to document and manage bio-cultural diversity

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*In river-based communities of North East Thailand, Tai Baan or villager-centered participatory research has proved to be an effective way for local people to draw on their own indigenous knowledge of local natural resources to document bio-cultural diversity and challenge the conventional wisdom of state-led water management schemes. Tai Baan is helping fishers, farmers and other wetland resource users in the region identify ways of improving the economic use and ecological management of the fragile wetlands on which their livelihoods and culture depend.*

The controversial state-led and World Bank financed Pak Mun Dam<sup>1</sup> project on the Mun River of Northeast Thailand, after many years of struggle by local people to get their voices heard, became the first site at which *Tai Baan* Research was applied in 2001-02. Even before the dam was built, local villagers and NGOs predicted it would have far reaching negative environmental and economic impacts, but their concerns were brushed aside by state officials and experts hired by consultancy companies to conduct environmental studies. Finally, it took the accumulated evidence of seven years of social and environmental degradation, plus prolonged protests both locally and in the capital, before the Thai government eventually agreed to allow the river to run freely for a year by opening the water gates, while it hired a regional university to conduct an official impact assessment and future options study.

## First experiences

Wary of externally generated, official studies villagers in the area enlisted the support of the *Southeast Asian Rivers Network (SEARIN)*, a regional NGO to help them prepare their own parallel study. Using the *Tai Baan*<sup>2</sup> approach they demonstrated that once the river was able to flow again and crucial fish habitats and upstream migration routes were restored, the riverine ecosystem was resilient enough to partially recover. This experience contributed to validating *Tai Baan* as a research instrument. It also played an important role in encouraging the fishing communities of the Lower Songkhram River Basin to accept it a few years later as a beneficial research approach for local ownership of the process.

Although the Lower Songkhram River has yet to have a major dam built across the mainstream in its lower reaches, various government agencies continue to make plans to build dams, water gates and various water management schemes across the Songkhram Basin. Such schemes would risk altering the flow and flood regimes of the wetlands and seriously affecting their productivity, while putting at risk the livelihoods of many thousands of households who depend on the rich, natural fisheries and aquatic biodiversity of the lower river floodplain. Villager researchers could generate the data and information needed to better understand the local environment and hence, propose alternative management options to old paradigm approaches.

In 2002, the complex mosaic of seasonal and permanent wetland habitats in the Lower Songkhram River Basin were identified as wetlands of international significance by Thailand's *Office of Natural Resources and Environment Policy and Planning*. In the same year, the area was also selected as the Thailand Demonstration Site for the *Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme (MWBP)*<sup>3</sup>. Within the context of this programme local communities were empowered to

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<sup>1</sup> The 19 m high Pak Mun Dam was built as a hydropower project from 1990-94, near the confluence of the Mun River and Mekong, across the largest tributary of the Mekong in Thailand and destroying what had been one of the most important river fishery sites in the region, through blocking fish migrations and drowning out rapids, amongst other impacts.

<sup>2</sup> *Tai Baan* in Lao literally means "villagers", and is a term that is heard by Lao-speaking local people to describe themselves in communities stretching from southern Yunnan province in China south through Thailand and Laos to Stung Treng in northern Cambodia

<sup>3</sup> MWBP is a joint programme of the four riparian governments of the Lower Mekong Basin – Cambodia, Lao PDR, Thailand and Viet Nam – managed by the United Nations Development Programme (UNDP), The World Conservation Union (IUCN) and the Mekong River Commission (MRC), in collaboration with and other key stakeholders. With core funding from the Global Environment Facility (GEF), the programme aims to address the most critical issues for the conservation and sustainable use of natural resources in the Mekong wetlands.

participate meaningfully in the assessment and monitoring of wetland resources, to eventually allow improved management practices. One of the principal aims of the *MWBP* Demonstration Site in the Lower Songkhram Basin was to obtain living aquatic resources biodiversity knowledge data and local understanding of wetlands-based livelihoods. It was also concerned with supporting decentralization processes and ensuring more community participation in river basin management. The earlier *SEARIN* experience with *Tai Baan* Research in communities on the Mun River at Rasi Salai and downstream Pak Mun put it in a position to support the work of *MWBP* research assistants in facilitating the research process.

### **Generating interest**

Local people are often unaccustomed to talking in an objective way about their everyday livelihood activities. Fishermen and their families know the local Lao names of fish, other aquatic organisms and plants but rarely think that this knowledge could be useful to outsiders. The *Tai Baan* Research experience provided the four local communities that took part in the programme in the Lower Songkhram River Basin with an opportunity to detail and aggregate community knowledge and see how it could be used for effective and sustainable resource management.

To succeed *Tai Baan* Research requires time, patience and flexibility on the part of both village researchers and facilitators. A first important step is generating interest in the approach and the way it can be used to manage and sustain natural and cultural diversity. Because it involves participatory processes of co-learning, those taking part must feel confident that they are the owners of the information they collect. During the initial village meetings and exchange visits these aspects of *Tai Baan* are made clear and steps are taken to train the Research Assistants to support villager research activities. Their job was to work together with villagers to identify local needs and interests and formulate them into specific research objectives. Once this had been done work plans were drawn up for the villagers and inter-village networks established, before research could begin.

### **Commitment and orientation**

For many villagers the *Tai Baan* Research approach was at first difficult to accept. They were accustomed to a culture of top-down planning and so the idea of participating in studies whose outcomes could be used, for example, to influence government policy was a significant challenge. In addition, taking part in the research offered no immediate material advantage. In fact, it would cost them time and required fishers to share specialized knowledge about fishing gears with outsiders, something they were initially cautious about, as some are considered illegal by the state. Despite these obstacles some 240 villagers decided to join what came to be known as the *Lower Songkhram River Basin Tai Baan Research Network* and took part in the programme as participating researchers and co-learners.

Once commitments had been made, the *Tai Baan* Researchers started to collect and exchange necessary background information. In the Lower Songkhram River Basin the data was assembled on the seasonal variations in the communities' wetlands resource-based economy and its complex ecological setting. From June 2003 onwards *MWBP* facilitators organized informal village meetings, arranged exchange visits between communities and consulted key stakeholders in the locality. During these visits, villagers were able to study examples of different approaches to conservation including fish conservation pools and community-managed forests. There was also time to network and discuss the way these initiatives had been planned and developed.

By committing themselves to the process, becoming closely involved in village activities and building up relationships of trust, friendship and a sense of common purpose, the outside facilitators and researchers not only played an important role in helping initiate the *Tai Baan* process, they also helped sustain it. They were frequently in the villages, ate and drank with the families, helped with household tasks and participated in religious, cultural and social events. *Tai Baan* involves much detailed work, discussion, reporting and validation, therefore ensuring continuity and villagers' commitment over time is essential.

### **Identification and study**

The next step was to define research objectives more closely. Villagers from the four communities met in a workshop and agreed that there were six issues that needed to be addressed: fish; fishing gear; flooded forest vegetation; agricultural systems including riverbank agriculture; raising large livestock and local ecosystems. The villagers split into sub-groups, according to their individual research

interests and further refined the specific research topics within each issue e.g. resource classification; livelihood importance; past trends versus current use and availability; marketing mechanisms; and cultural and social importance of the resource.

Villagers would meet regularly in their own villages to study and discuss the different topics and from time to time results would be exchanged with other villages during meetings arranged for this purpose. The amount of data collected grew quickly and was consolidated, summarized and presented during the First Progress Report Workshop. The Workshop was important because it enabled participants to track research progress. It also kept all those involved - including community researchers, local and provincial government officials, NGO stakeholders, *MWBP* staff as well as civil society representatives from all over Thailand - informed and provided an opportunity to discuss, clarify and draw conclusions about the work being done. Presenting their results to outsiders and dealing with questions and comments increased the confidence, capacity and determination of the villager researchers and ensured that they were profiled as the owners of the *Tai Baan* Research results. In addition it provided them with an opportunity to learn from the experience of other villagers and made it possible for them to evaluate and incorporate criticisms and suggestions in their research plans.

### **Feedback and comments**

The actual research phase of the programme lasted about 18 months. During that time villager researchers patiently went on gathering data relating to the priorities they themselves had set and communicated in their own native dialect. At the same time they were encouraged to take part in other environment-related events. Villagers took part, for example, in various activities organized by the *MWBP Demonstration Site* including the annual *World Wetland's Day* event and the *Sri Songkhram Fish Festival*, a two-day celebration of all things connected with fish and fisheries. The *Tai Baan* researchers took advantage of these events to present their results to the general public. Using posters, displays and stage presentations they dramatized the links between local ecosystems, in particular the seasonally flooded riverine forest - the *paa bung paa thaam* - and village livelihoods. Their involvement in these types of activities brought villagers into contact with new ideas and practices including ways of adding value to wetlands products by improved processing and cooperative marketing.

During the second and third phases of the *Tai Baan* Research further information was collected and gaps filled. Each phase ended with its own workshop and reports, while outside agencies continued to be invited to share findings. Once the third phase of research had been completed and data carefully cross checked and verified, a final progress report was prepared. In this report, researchers presented their detailed findings on all the issues covered by the research to a diverse audience of local and non-local stakeholders.

Their experience with the *MWBP* project made villagers more certain about the way in which *Tai Baan* can help them to understand and improve the management of their local natural resource base. The information that went into the final report became the basis for discussing and planning local natural resource management and conservation, both within the village and at higher levels. Already some villages have begun to strengthen the rules and regulations relating to conservation areas within their communities. In Ban Tha Bor village for example, villagers are planning to expand their community forest area and have entered into negotiations with a local agribusiness company for the return of a disputed area of common land.

While the *Lower Songkhram Basin Tai Baan Research Network* concentrates on expanding research activities to four new villages, the original village research groups contemplate their next focal points. Fishers would like to learn more about local freshwater mollusc diversity, for example, and they want to show how irrigation weirs have affected the flow and ecology of the Nam Yam River (a major Nam Songkhram tributary) to the detriment of the size and diversity of their catch. They are also keen to build up evidence to support their case for adopting locally-appropriate water management methods with minimal ecological impacts

### **Dissemination and replication**

In November 2004, a group of *Tai Baan* researchers presented their findings to an international audience at the *World Conservation Congress* organised by IUCN – *The World Conservation Union* in Bangkok and, in April 2005 a book - *The Ecology and History of the paa bung paa thaam in the Lower Songkhram River Basin* was published in Thai with an executive summary in English. It presented a

summary of villagers' research findings within each issue area and delved into the special significance of the seasonally-inundated forest for local livelihoods. All the villagers who had taken part in the programme were credited and received a copy of the book. To increase awareness of the effectiveness of the *Tai Baan* approach the book was also distributed to local schools and educational institutes as well as stakeholders in both government and the private sector. A second book has recently been published on the fish biodiversity of the Lower Songkhram Basin based on the indigenous knowledge collected by *Tai Baan* researchers, with detailed photos by the Research Assistants.

The State and other institutions at the sub-district, district and provincial levels have also become interested in *Tai Baan* Research and in finding ways to adapt it to their needs. The *Nakhon Phanom Provincial Natural Resources and Environment Office* which has been involved in the *MWBP Thailand Demonstration Site* as a partner organization from its earliest days is considering promoting the approach in other parts of the province and is currently using the results of ongoing village research to support its own work. Officials at the District Administration office in Sri Songkhram have also shown their readiness to promote the *Tai Baan* approach at local events which is a significant indication that it has not only become accepted but that it is also considered replicable.

Areas where *Tai Baan* Research is currently being introduced include some of the most critically threatened natural riverine sites in Northern Thailand, including the Upper Mekong in Chiang Rai Province, the Salween River in Mae Hong Son Province opposite Burma, and the Yom River in Phrae Province. As Thailand's process of decentralization proceeds it is hoped that sub-district administrations will begin to include a *Tai Baan* component in their local development projects.

### **Thailand and beyond**

Despite differences in social and political organization, the four riparian governments of the Lower Mekong Basin – Cambodia, Lao PDR, Thailand and Vietnam - face similar problems as far as the conservation of fragile wetland ecosystems are concerned. Some of the researchers and research assistants involved in the programme have gone on to help spread the approach to communities along the mainstream of the Mekong River in Stung Treng Province, Northeast Cambodia. This is also a *MWBP Demonstration Site*. Four representative villages have already been selected and progress is being made in studying local fish and plant species in the river, its flood zone and banks. Efforts are also being made in Attapeu, Southern Lao PDR and the Plain of Reeds in the Northern Mekong Delta region of Vietnam to use the *Tai Baan* approach to document the use of indigenous knowledge to stimulate endogenous development.

The *Tai Baan* Research approach shows that local communities in the Lower Mekong Basin can contribute significantly to identifying and managing wetlands conservation and that their active involvement at all stages of the process provides a concrete way of ensuring that adequate attention is given to livelihood concerns and the traditions and practices that define local culture and society. As new sites of *Tai Baan* Research are established, so knowledge networks amongst local wetland resource users are strengthened and widened, providing alternative voices for society and policy makers to heed.