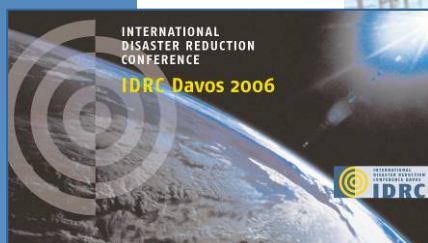


Integrating traditional knowledge systems and concern for cultural and natural heritage into risk management strategies

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Integrating traditional knowledge systems and concern for cultural and natural
heritage into risk management strategies

International Disaster Reduction Conference (IDRC)

L'intégration des systèmes de connaissances traditionnels et l'intégration du
patrimoine culturel et naturel dans les stratégies de gestion des risques

Conférence internationale sur la réduction des catastrophes (IDRC)

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Table of contents

Part 1: Background

Introduction	Page 2
Working Paper for Special Session on: 'Integrating traditional knowledge systems and concern for cultural and natural heritage into risk management strategies'	Page 3
Document de travail pour une session spéciale sur « L'intégration des systèmes de connaissances traditionnels et l'intégration du patrimoine culturel et naturel dans les stratégies de gestion des risques »	Page 11
A Strategy for Reducing Risks from Disasters at World Heritage Properties <i>Giovanni Boccardi</i>	Page 20

Part 2: Integrating Traditional Knowledge Systems and Concern for Cultural and Natural Heritage into Risk Management Strategies

Traditional knowledge as a cultural heritage that can contribute to future risk management strategies - some remarks from the Moken community of the Surin Islands, Phang-nga Province, Thailand <i>Narumon Arunotai</i>	Page 29
Using Traditional Knowledge Systems for Post-disaster Reconstruction: Issues and Challenges following Gujarat and Kashmir Earthquakes <i>Rohit Jigyasu</i>	Page 40
Preventing Pancake Collapses: Lessons from Earthquake-Resistant Traditional Construction for Modern Buildings of Reinforced Concrete <i>Randolph Langenbach</i>	Page 51
Traditional Risk Management amongst African communities <i>Herman Kiriama</i>	Page 88
The Protection of Cultural Property (PCP) in Switzerland <i>Hans Schüpbach</i>	Page 96

Part 3: Participant Presentations

Appendix: The Davos Declaration

Traditional knowledge as a cultural heritage that can
contribute to future risk management strategies - some
remarks from the Moken community of the Surin Islands,
Phang-nga Province, Thailand

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Abstract

Chao Lay or the former “sea nomads” of the Andaman Sea have been an “invisible” or “unrecognized” component of Thailand for a long time. While the December 26th tsunami brought a woeful destruction to many areas in the six southern provinces of Thailand, it has proven that several Chao Lay groups have survived the tsunami due to their traditional knowledge about settlement selection, the legend of the “seven waves”, their boat maneuvering skill, etc.

During the post- tsunami period, local mass media have followed up on the plight of these marginalized groups and several non-governmental organizations have facilitated their recovery and rehabilitation. Several committees have been set up by the government to resolve various problems, ranging from land rights issue and marine resource conservation to nationality. However, relatively little has been done on the preservation of their dying cultural heritage which can contribute not only to strengthen their cultural identity and pride, but also to the development of future risk management strategies for their own communities as well as for the larger society.

The purpose of this paper is to present some remarks about the Moken, a group of sea nomads who are known to be the tsunami survivors, their traditional knowledge which contributed to their survival and how it can contribute to future risk management strategies.

Many coastal communities in the six southern provinces of Thailand received devastated effects from the tsunami of 2004. These communities included the sea nomad or sea gypsy, whose name reflect close physical, social, and spiritual ties with the sea. Over 30 communities of sea gypsies – the Moken, the Moklen, and the Urak Lawoi are found in southwestern Thailand, bordering the Andaman Sea coast, and about half of the communities were either totally wiped out or badly damaged by the

wave impact. However, the number of casualties was quite low in relations to other coastal communities.

I will focus my paper mainly on the Moken, the group which have retained much of the traits and characters of the sea gypsy or sea nomads compared to their counterparts --the Moklen and the Urak Lawoi. The two latter groups have adopted a more sedentary life and have gradually integrated into

the mainstream society, hence the name “*Thai Mai*” or new Thais.

The Moken, along with their counterparts, was previously regarded to be a backward and poor tribe, with virtually nothing to offer to the larger society. For decades, these people have faced discrimination and marginalization. Yet the tsunami incident has proved that their indigenous marine knowledge and their almost forgotten “legend of the seven waves” have saved them and others (especially tourists and park staff) from the disaster.

The Moken did well in getting back to their normal lives. The recovery has been quick. It could be said that they have a resilient social system, because loss and death have been very common in their daily lives. Moreover,

for the Moken of the Surin Islands, the tsunami brought only one death in the community (a sick man left on the Island while the entire community went to seek refuge on the shore).

Moken communities in Thailand

Large Moken communities can be found in the three provinces of Ranong, Phang-nga, and Phuket. Individual Mokens are also found in several Urak Lawoi communities like those of Sireh Village (Phuket Province), Phi Phi Island and Lanta Island (Krabi Province), and Lipe Island (Satun Province). The approximate number of the Moken in Thailand is over 800, and there is about 2,000-3,000 more in Myanmar.

TABLE 1: MOKEN COMMUNITIES AND APPROXIMATE POPULATION IN THAILAND

Province	Island/Town	Land ownership status	Approximate Population
Ranong	Lao Island and Sinhai Island	Private and public land	339*
	Payam Island	Private land**	80
	Ranong town and pier	Stayed with employers or in rental place	30
Phang-nga	Surin Islands	State land (national park)	323*
	Ra Island and Phra Thong Island	State (national park), private, and public land	
	Khuraburi Town (Chai Pattana Village)	Private land (the Thai Red Cross and Chai Pattana Foundation)	
Phuket	Rawai Village	Private land	50
Others	Several Urak Lawoi communities	Various status	20
Total			842

Source : The Andaman Pilot Project Census Counting 2006

*The result of census counting and collecting individual data by the Andaman Pilot Project in collaboration with Mirror Art Foundation

**The land was bought by a Christian church and allocated for the Moken. New huts were also constructed with the funding from the church.

In earlier days, the Moken had dual lifestyles. The term “amphibious” was very suitable for the Moken livelihood. In the dry season, the Moken resided in their boat in order to travel and

pursue maritime subsistent activities such as fish spearing and diving for shells and sea cucumbers. They also traded with middlemen for rice and other necessities. The Moken are

skillful divers and navigators who possess intimate knowledge about the sea and insular forest.

The Moken's "Warning sign" in the form of an old legend

The morning of December 26, 2004 seemed to be like any other ordinary morning for the Moken. However, some Moken elders were reminded about the legend of the seven waves and expected the coming of a disaster after they saw the waves and currents behaving abnormally, with the final and "obvious" sign of water receded.

On the Surin Islands, the Moken who stayed in the village shouted to others and quickly climbed to a higher ground. Those who worked as hired labor at the Park kitchen and campground helped the visitors who were not familiar with the terrain to find a way to a higher place. And those who worked as boatmen maneuvered the long-tailed boats to a deeper water when the waves hit the shore, and then steered the boats back to the Park ground after things began to calm down.

It could be said that the tsunami has brought "the Moken" on the social map, and they became practically a celebrity overnight. This was because a Thai pop star and a pop singer happened to be in the village on December 26, 2004. It was the Moken who signaled to them that some danger was coming their way and they climbed up a steep slope to seek shelter from that danger. The fans were worried about the stars, and when they returned safely to Bangkok, newspapers, radios, televisions made interviews. As a result, most people in Thailand as well as abroad got to know the Moken, the almost forgotten indigenous peoples of southwestern Thailand.

The Moken survived because of indigenous knowledge, which has been "imprinted" in many Moken about the "legend of the seven waves". When the seawater started to recede, the Moken knew that "*/a-boor*" or tsunami was coming, so they ran up to a high ground. It becomes almost instinctive, even to children. A small boy who was rowing his boat noticed that the current got stronger and unusual, so he quickly row to the shore and ran up the hill. Tsunami warning sign is actually imprinted in their cognitive system, so they are all able to survived even though most have not even seen the tsunami before.

The legend of the seven waves is actually an unwritten "historical" record that has become internalized by the elder Moken. It enables the Moken to recognize the coming of the disaster and they could eventually escaped in time.

Traditional knowledge about settlement site selection

Moken traditional huts and village settlement on the Surin Islands National Park, Phang-nga Province, Thailand, could be considered the production of indigenous knowledge, which has been passed down for generations. Together, they represent an adaptation of a human settlement to suit the local marine and forest environment. This short article presents some remarks about Moken settlement, village lay-out, hut forms, hut building, and how these have changed markedly since the Moken have built their new village after the tsunami disaster of December 26, 2004.

The Moken and the Urak Lawoi who reside on different islands within Thailand's Andaman Sea carefully

select appropriate site for their villages, that is, the area on the eastern part of the islands. It is obvious that traditional settlements, be they the Moken village at “Daya Eboom” or Mae Yai Bay on North Surin Island, Urak Lawoi villages at Sireh Island and Rawai Beach on Phuket Island and Hua Laem Klang

(Middle Cape) Village on Lanta Island. These villages are all located on the eastern side of their respective islands. A comparative analysis of these indigenous settlements leads to the conclusion that each of the Moken and Urak Lawoi settlements share at least three common characteristics as indicated in the table below --

Characteristics of the Sites	Rationale
1. Beach area in protected bay, usually on the eastern side of the islands --this is because the islands in the Andaman Sea are influenced by two monsoons, southwest monsoon which brings rain, strong winds, waves, and storms; and northeast monsoon which brings drier weather and milder winds. Having settlements on the eastern side of the island means being well-protected from southwestern wind.	Protection from winds and waves, and easy to observe boats traveling from mainland towards the islands.
2. Area with fresh water source, sometimes this is a small stream from the forest or a small spring.	Convenience to fetch water to drink, cook, wash, bathe, etc.
3. Beach area with suitable degree of slope – if there is too little slope if the beach is rather flat, then it will be difficult to bring boats in and out at low tide. One will have to wait until high tide before taking boats in or out.	Convenience to bring boats in and out, to take care of them, and to transport things into and out of boats.

For the Moken, the villages usually consist of two or three rows of huts slightly staggered one another. This depends on the width of the beach and flat area suitable for settlement. The first row of huts is right on the beach slope. At high tide, sea water floods below the huts, thus these huts must have tall stilts to keep the floor well above water line. The second row is on the beach just beyond the reach of the high tide mark, and the third row is more towards inland. The latter huts do not use tall stilts, but are still tall enough for a person to stoop underneath.

Nowadays, the Moken still move their huts and village much intermittently. It is quite rare in comparison with earlier times when they had a more mobile life, and the community was often moved due to epidemics, deaths, or sickness and the choice of where they could live was not limited by coastal development or the declaration of protected areas.

Huts and village after the tsunami

The problem faced by numerous tsunami-affected communities in Thailand is rebuilding houses and

community. The local government, out of their best intentions, tried to design and build houses quickly to accommodate affected people. However, this was often done without people's participation. As a result, house styles and community layout are not suitable.

As for the Moken of the Surin Islands, after their villages at Sai-En Bay and Small Bon Bay were swept away, they came to shore to take refuge in the local temple. Within two weeks, when they felt confident enough to move back to Surin Islands, the government sent them raw materials to build their huts.

Though the Moken have always designed and build their own huts and village, for the sake of speed and convenience, the government and an aid organization designed the village for the Moken. Local Thai volunteers were recruited and they willfully worked side by side with the Moken on building huts. All the Moken --- 194 persons, 52 huts^{xxxix}, now live in a large village at Large Bon Bay, the place where they previously had a settlement 11 years ago. Below is the table showing comparison of the old style huts and village with the new ones.

Moken traditional settlement, village, and huts, including beliefs and practices about hut construction are all reflection of traditional knowledge which enables the Moken to reside comfortably and safely in the coastal environment. In addition, a small village with long-stilted huts situated on the water has been a significant part of Moken cultural identity. After the Surin Islands villages were destroyed by the big waves, under the local government administration the Moken rebuilt their village in Large Bon Bay in February 2005. This marks the moment when the socio-

spatial structure of their huts and village began to change significantly.

Although the indigenous knowledge, which served as a "tsunami warning system", has already been widely known through the media, the other knowledge like the selection and construction of the traditional huts were not recognized nor appreciated. There was no serious effort in consulting a community before rebuilding a new village. As a result, the new huts were built with a large setback space, and set in a tidy row, with little space between the huts. This is quite different from the pre-tsunami village where stilted huts were built right on the beach for the convenience of anchoring and boarding the boat. In addition, combining two communities together may lead to the deterioration of community health, social and physical well-being, and the deterioration of natural resources around the village.

A large village with a large population may create an impact on Moken physical health and hygiene, on the local natural resources, and on Moken social cohesion as follows:

Physical health and hygiene – due to increasing crowdedness, there will definitely be a problem with garbage, waste, and discharge in the future. And this will result in Moken physical health and hygiene problems. Grid-designed settlement prevents huts in the back row to get full ventilation, and the people in the huts are not able to observe the sea, the weather, the waves, or the boats approaching the village directly from their huts.

Natural resources – as the Moken usually forage on their "backyard", the exploitation of natural resources will become intensified in the patches nearby the village, which will result in

the gradual degradation of local resources.

Social cohesion – previously the spread of the population and the frequent migration/travel serves as social mechanism against conflict and fights. Nowadays when the Moken live in a larger group, there is also a stronger tendency for conflict. At the same time, moving away to join the other village(s) within the Surin Islands is no longer an option for them.

It is unfortunate that Moken cultural identity expressed through huts and villages has been changed in the post-tsunami reconstruction phase in southern Thailand. Furthermore, the large new settlement may create social, environmental, and health impact in the future. Therefore, we should review the change and look back to the traditional knowledge to find solutions and preventions for the negative things that might come with the change.

It is unfortunate that several forms of traditional knowledge are now limited only to the Moken adults and the elderly. It is gradually forgotten and rarely passed on to the young generations. The fact is, these knowledge and skills are crucial to Moken cultural survival, they are a significant part of the culture as they reflect that the Moken are an ethnic group with their own knowledge and “technology”.

This kind of “technology” or “know-how” is used for many purposes – to strengthen social relations and solidarity, to cure sickness, to prepare and help a mother to give birth, to select and use appropriate forest plants for medical ingredients, to build the traditional boat, or even to survive the tsunami.

Rebuilding the new village, rebuilding new lives

ROLES OF MEDIA

Mass media had a significant role during the post-tsunami period. They publicized the physical, social, and psychological effects of the disaster, and volunteers and other helps were recruited for emergency relief through mass media. The volunteer phenomenon during this period was very striking; perhaps it is a single occurrence that brought the greatest number of Thai and international volunteer together in the Thai history, as stated in “Tsunami Thailand, One Year Later”, “Effective engagement of civil society and the private sector was a striking feature of the relief effort. The contribution of Thai civil society and the private sector, both nationally and in the affected areas, can hardly be overstated” (United Nations Country Team in Thailand, 2006).

The mass media have also followed up on human rights issues in the area, mainly among marginalized groups like the Moken, Moklen, Urak Lawoi, and Burmese migrant workers and their plight during the post-tsunami period. One news reporter of a national newspaper was even shot and injured by a firearm because his report uncovered a forceful land claim by a very influential person.

Thanks to such news coverage and the effort by local Non-governmental organizations and academic institutes, several committees have been set up by the government to resolve various problems, ranging from land rights issue and marine resource conservation to nationality. A sub-committee on land right issues has already identified solutions for 13 areas with land disputes, allowing over 1,000 households to secure their

residence over the land that they used to live prior to tsunami destruction (Community Organization Development Institute (CODI) website, cited in "Tsunami Thailand, One Year Later", 2006).

It should be noted that many of these problems have existed prior to the tsunami incident, but they became widely exposed afterwards; for example, the problem of land ownership right in the former mining area nearby Tabtawan Community (Sub-committee on the Water and Mineral Rights, 2005). While the tsunami brought a tragedy, it also brought an opportunity to bring problems to the open and find ways to correct those problems.

Although the Moken need to be thankful of the media, their cultural integrity can be threatened by its intrusion. The annual lobong festival (the celebration of ancestor's spirits) in 2005 was joined by many film crews. Thom Henley, an environmental educator who visited the village during the time noted that, "They [the Moken] had the added stress of having to perform under the glare of camera lights and pushy foreign television crews" (2006).

Worse than that, tsunami volunteers and health officers stationed temporarily in the village also turned on karaoke and VCD loudly to show to the children and young adults while the elders sang, danced, and got into trance during the spirit ritual. The loud machine music blast on over midnight while the traditional music continued in the elder circle. It was very obvious that the spiritual value of such traditions was dying with the coming of a more attractive and exciting form of media. Therefore, the "roles" of the media during the post-tsunami rehabilitation period need to

be praised as well as questioned in the Moken context.

PARTNERSHIP

Not long after the tsunami incident, disaster relief and rehabilitation projects have been underway to bring communities and businesses back to their own feet again. However, since there are various international, national, and local agencies, organizations, and foundations, many of which have different mission and goals, the earlier rehabilitation projects were not as successful as they aimed to be. Some communities became fragmented because of this. And many tsunami victims chose to be easy aid recipients instead of standing up and getting on with their lives and livelihood. Therefore, relief efforts should be well coordinated and harmonized, instead of "competing" for their own "target" groups. Partnership is an important recipe for the success of rehabilitation project.

In some situations, partnership with the government posed a constraint to the help and rehabilitation of the most marginalized and disadvantaged people in the society. Not only is the government procedure "bureaucratic", but the government offices usually need legal documents, papers, or proof of registration before carrying on with relief help. These forms of document are lacking in the most disadvantaged groups like the Moken and the Burmese migrant workers.

The most important component of "partnership" is the involvement of or partnership with the "third party" like academic institutes or independent units of government offices to a) conduct surveys to assess the process of aid distribution, and b) serve as a central registry and a coordinating point to direct rehabilitation effort.

These “surveys”, “central registry”, and “coordinating point” were a part of suggestion proposed by the the University of California Human Rights Center due to the many cases of arbitrariness in aid distribution which shows the local administrative office’s lack of accountability and transparency and the lack of integrity and honesty on the recipient’s side (Fletcher, 2005). Our own team even encountered a villager who offered us a sale of a donated long-tailed boat.

Another sound suggestion by the Human Rights Center is to establish an independent body in collaboration with government agencies, local non governmental groups, and aid organizations to monitor human rights during the reconstruction and rehabilitation period, to generate policy recommendations, and to bring cases of serious violations to the attention of authorities, international organizations, and the media (Fletcher, 2005).

The lesson learnt from the past was that there was little concerted effort by academic institutes which collected data in the tsunami affected areas. As a result, tsunami victims were victimized over and over again through set after set of questionnaires. Therefore, partnership and harmonized effort among different agencies and organization is really needed at the outset of the rehabilitation process.

CAPACITY BUILDING

Capacity building is another crucial strategy for rehabilitation project, which has been given a low priority or even totally neglected, because it takes so much effort and time, and may not yield a satisfactory output within one short project cycle.

However, it became apparent that the communities which have been

through capacity building process especially participation, decision-making, and carrying out their own development projects are likely to be more successful in post-tsunami recovery and rehabilitation. On the other hand, the communities without that kind of experience, but with on-site facilitators for capacity building could also make quick recovery; for example, Tabtawan Community (Moklen community in Phang-nga province) and Pak Triam Community (Thai Muslim fishing community in Ranong Province).

As for the Moken of the Surin Islands, becoming a celebrity also attracted several forms of relief aid. They were given clothes, tools, building materials, kitchen utensils, rice, canned food, and medicine. In other words, all the “4 necessities” in life were provided for them. The two main things which are lacking have been the effort from a larger society to understand, recognize, and appreciate their entire culture and the effort to promote self-organization and build community capacity.

Experiences from around the world teach us that contacts between the indigenous or tribal communities and the larger society usually resulted in assimilation or segregation. These small communities either adopted the mainstream language and culture or became segregated in “reservation” or some wasteland. After the tsunami, the Moken have more frequent and intense contacts with different components of a larger society. Moken culture is very fragile. If we compare it to a tree, it is the one with weakened roots.

The help for the Moken of the Surin Islands included the building of two public structures – a “school” and an “all-purpose pavilion”. Certainly “school” as a structure is important,

but what is more important is a continuous funding for teachers who understand Moken culture and who determine to build cultural confidence among the Moken children. "All-purpose pavilion" is also perhaps less important than political will and practical support towards self-organization and self-administration.

END NOTE

The next tsunami might come earlier than expected in the Moken legend (once every two generations) due to unstable geological conditions, less natural protection in the form of healthy ecosystem like mangrove forest and coral reefs, more extreme weather related to global warming and other human-made phenomenon. In addition, the next tsunami or other natural disasters may have a more devastation effect. The past tsunami and the

relief/rehabilitation effort have become our lessons. Through these lessons, we could be wiser and better equipped to cope with similar thing next time around.

This text is adapted from the paper on "Capacity Building, Partnership, and Roles of the Media in the Post-Tsunami Rehabilitation Period -- Some Remarks on the Moken community on the Surin Islands, Phang-nga Province, Thailand" presented in The Workshop on Post-Disaster Assessment and Monitoring of Coastal Ecosystems, Biological and Cultural Diversity in the Indian Ocean and Asian Waters, held in Phuket, Thailand, 20-24 February 2006.

NOTES

xxxix This was the census count in February 2005.



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