Creating a "Disaster Culture":
The Case of Ban Nam Khem Village
in Southern Thailand

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1. Introduction

Following changes in the global climate and people's lifestyles, Thailand has increasingly been devastated by large-scale natural disasters in recent years. Consequently, the Thai government is improving the infrastructure, procedures and social system for disaster management. This paper focuses on one example of these improvements, a community project to create a "disaster culture" in Ban Nam Khem village in Phang-nga province, which experienced the most serious damage from the tsunami that hit the coastal areas along the Andaman Sea after the 2004 Sumatra Earthquake.

The Ban Nam Khem villagers have successfully reconstructed their lives and installed their own risk management system since 2004. Their village has attracted much attention in Thailand as a model of community-based risk management (CBRM). Their volunteer disaster team was recognized by the government as a model organization. The village dramatically changed its profile from being the ground zero of the 2004 tsunami to the advanced center for CBRM in Thailand.

Research on the influence of the Sumatra Earthquake and its tsunami on communities was initiated immediately after the disaster by researchers and NGOs. In the field of social science, a study by Jin Sato of the University of Tokyo found that villagers were responding to land problems after the tsunami by constructing a new solidarity between local communities and external organizations.[1] Several studies have been conducted in the field of anthropology. Narumon Arunotai and Yuki Suzuki explored the local knowledge of the Moken, an ethnic minority of the Andaman coast, and their response to the tsunami.[2] Hisashi Ogawa investigated the discourse of tsunami in a Muslim community of southern Thailand,[3] while Chulalongkorn University researchers conducted an integrated investigation of social problems and the reconstruction of the social system in tsunami-hit communities. A research group led by Surichai Wankaew published "The Sociology of Tsunami," a research collection that analysed the subjects of tsunami relief and reconstruction from various perspectives.[4] Other social researchers have interviewed victims of the tsunami, focusing on its effect on women and minority groups.[5]

However, the majority of this research focuses on the impacts of the disaster and the responses of tsunami-hit communities. The effort of communities in improving the infrastructure and social system for tsunami prevention over the past eight years has not been studied. This study will focus on a community's behaviors and mental

transformation in post-tsunami reconstruction, which involves a value system for disaster prevention and management in their everyday life and culture. This paper does not discuss the disaster management of Ban Nam Khem village from an institutional perspective, but analyses it more holistically through narratives by community members and volunteers with a focus on their mentality and motivations. It proposes that Ban Nam Khem village's CBRM and disaster culture are stimulating individual motivations to participate in volunteer activities by reproducing a communal memory of the disaster and flexibly organizing members to receive support from the Thai government.

The research reported in this paper was conducted in two phases—from December 26, 2012 to February 26, 2013, and from June 30 to August 1, 2013—around Ban Nam Khem village, Ban Muang sub-district, Takuapa district in Pang-nga Province. More than 150 households in the village and the surrounding tsunami resettlement areas were interviewed. Over three months, data was collected on family situations, pre- and post-tsunami livelihoods, suffering and evacuation caused by the tsunami, fear and feelings about the tsunami, and trust in the volunteering team.

This paper begins by defining the concept of "disaster culture." Then it explores how the "disaster culture" has been created in the community of my research site through following sections. The fourth section shows how villagers in my research site keep communal memory of the tsunami in their lives and create new value system through participating communal events and disaster volunteering team. Next the paper examines the balance between external influence by the state organizations and participant's motivations in disaster volunteering team. It also examines vulnerability of the "disaster culture", emigrating villagers and Burmese labours. Through these discussions, this paper shows the village's structure to create and recreate "disaster culture."

2. Defining "disaster culture"

Disaster culture is an academic term of disaster studies. Most common Thai people are unfamiliar with this term. Thai governmental officers also use various kinds of specific terms on cultural aspect of disaster management as disaster culture (*watthanatham phai phibat*) or disaster-prevention culture (*wattanatham khwan phlot phai*). The concept of disaster culture was firstly developed by Harry E. Moore in 1964.[6] His disaster culture is a set of cultural defences such as norms, values, beliefs, knowledge, technology, and legend. He proposed that disaster culture included "those adjustments, actual and potential, social psychological and physical, which are used by residents of such areas to cope with disasters which have struck or which tradition indicates may strike in the future."[7] After his work, other scholars redefined his definitions and created variations in the concept of disaster culture.[8] In cultural anthropology and ethnology, the term is associated with traditional customs or local knowledge. This topic has been widely discussed in Thailand, and it has mainly been noted that the Thai people, with the exception a few ethnic groups, did not have the traditional knowledge to escape from the 2004 tsunami. This lack of traditional consciousness is evidenced by the lack of an original Thai term for tsunami. "Tsunami" was taken from English meteorology texts that translated the

original Japanese term, and became widespread throughout the country after the 2004 tsunami. The Thai term *Kluen Yak* only referred to a big wave before the advent of the tsunami.

Even in Thai academia, tsunami was a new disaster concept. Dr Smit Thammasrot was well known as the first person who tried to introduce the concept of tsunami to Thai society. In his 1991 book *Natural Disaster of Thailand*, he categorized tsunami as a disaster that Thailand had never experienced.[9] His tsunami warning in 1998 caused a hysterical reaction in southern Thailand, especially in Ban Nam Khem village. Even though most of the villagers did not know what a tsunami was, they evacuated from coastal areas and fled to a district school. However, since then the term was forgotten until the tsunami in 2004. When the tsunami hit Khaolak in 2004, most of the hotel workers called their family to evacuate from the seashore, but they do not have a word to explain tsunami at that time.

There are, however, several cases of ethnic minority groups in Thailand whose inherited knowledge led them to suitable reactions to the tsunami. The story of the Moken people in the Surin islands of Phang-nga province is particularly famous.[10] Based on their local knowledge of tsunami, which they call *laboon*, the Moken immediately understood the unusual ebb tide of the sea as a sign of the tsunami and escaped to the hills, saving tourists with them. A study by Narumon Arunotai found that the Moken's local knowledge based on their life on the ocean was useful for disaster management.[11] The indigenous knowledge of tsunami seems widespread among ethnic groups who live along the Andaman Sea. The elders of the Urak Lawoi, an ethnic subgroup of the Moken in Rawai beach in Phuket province, also understood the unusual ebb tide and warned villagers and tourists to evacuate to higher ground. These stories illustrate how these people kept the memory and experience of past tsunamis that had repeatedly devastated their villages in their tradition.

Although disaster culture has been widely discussed in relation to local and traditional knowledge by academics, modern lifestyles must still be considered. Televisions, the internet, and convenience stores are common even in rural villages along the Andaman Sea coast. The Thai government installed the modern disaster prevention system using a satellite and provided disaster information through an advanced social system. It is necessary to consider disaster culture from a broader perspective, including the context of modernity in communities. Thus, disaster culture refers not only to the traditional knowledge of local communities, but a physical and metaphysical disaster management system rooted in modern Thai society. Therefore, the concept should be reviewed in terms of the definition of culture by the anthropologist Clifford Geertz:

> [I]t denotes an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes toward life.[12]

In this definition of culture, first, symbols embody a pattern of meanings; thus,

members who share the same culture can immediately understand a web of meanings by glancing at a symbol. Second, the symbol and the set of meanings are organically connected with the knowledge, actions, and attitudes in their lives. Third, culture is a system historically transmitted, communicated, and developed among people and by generations.

With this definition, disaster culture can be reconsidered in combination with modern technology as a symbolic system of the net of meanings. For example, if an earthquake is a symbol here, members sharing the disaster culture can first understand a certain set of meanings such as the collapse of houses, the possibility of a tsunami, land crack, or landslide from an earthquake. Second, the imaged set of meanings connects to patterned knowledge and attitudes such as turning on the television, evacuation from one's house, and escaping to higher ground. Third, this system preserves and develops the set of meanings and pattern of behaviors for future generations. In summary, a disaster culture is a system that makes members understand the symbol and develop attitudes toward a disaster in a certain pattern.

3. Research site

Ban Nam Khem village, the research site of this study, is located about 90 kilometres north of Phuket International Airport (Figure 1). It is administratively part of Ban Muang sub-district in the Takuapa district of Phang-nga province. In 2004, a tsunami of over five metres hit the village and caused serious devastation. Officially 824 were reported dead, but villagers believed the figure to be about 1,500. Almost all houses in the village collapsed. Victims were housed in temporary shelters for about a year before they could reconstruct their houses and livelihoods.

Housing reconstruction after the tsunami was mainly implemented in three locations: (1) the original site, (2) resettlement areas in the village such as Ban Mangkhon 1 and 2, and (3) resettlement areas outside the village such as ITV Ban Muang and Phlu Tiau. Although some people moved from Ban Nam Khem to other areas, a follow-up survey could not be conducted for this study due to time constraints.

The population of the village previous tsunami is about 4,000, mainly composed of Thai Buddhists. The largest group are undersea tin mining workers, who immigrated from various parts of Thailand in the early 1980s, and their descendants. Next are the Burmese labourers, who comprise one-third of the total population. They work in fisheries, rubber tree plantations or resorts. The village also has an aboriginal ethnic minority, the Moken, numbering only about 100. Muslim residents are hard to find in the village.

The main industries in the village are fishing and tourism. The wharfs and piers for fishing boats are located along the coast to the north. On the wharf, fishermen are busy with landing, selling and carrying out fish in the morning, while in the afternoon many Burmese labourers hired by Thai owners are mending the fishing nets. The docks of shipbuilding factories are located along a canal to the west of the village, where the small vessels are at anchor. There are also several seafood processing factories in the village, which manufacture fish balls, fish powder, and dried fish, and ship them to Phuket or Bangkok.

Most young villagers are engaged in the tourism industry. There are a few resort

Figure 1: Map of Ban Nam Khem village and surrounds.

hotels in the village, but many villagers commute to the hotels of neighbouring areas such as the Kaolak and Khokhao islands as hotel staff, cooks, or tour guides.

4. Reviving a communal memory of the tsunami

The term tsunami can be seen and heard everywhere in Ban Nam Khem village now. A large signboard is over the gate to the village proclaims, "Ban Nam Khem, a strong community with disaster prevention: The village of the tsunami legend (*tamnan suenami*)" (Figure 2). *Tamnan* means ""an old record, a tale and a legend" and provides the image of old tradition mainly. *Suenami* is a new word coined from the Japanese *tsunami*. Thus, *tamnan suenami* is a complicated word that mixes old and new concepts. The motto was created by Maitri Congkraicak, one of the leaders in the Ban Nam Khem Tsunami Victim Liaisoning committee. He said that "*Tamnan suenami* shows the future of Ban Nam Khem village. It states our will to tell the story of the tsunami calamity to future generations." [13] Thus, the term reflects the community's role in handing down local knowledge to their children and grandchildren like an old tale, as well as the communal intention to create new knowledge

Figure 2: The gate of Ban Nam Khem village.

and a system for disaster preparedness in response to the newfound threat of tsunami disasters.

Ban Nam Khem village has introduced two commemorative events as a mechanism of reproducing the communal memory of the tsunami. A tsunami commemoration ceremony is held on December 26 every year in Ban Nam Khem (Figure 3) and all over Thailand as part of a national disaster prevention event called "Thai Disaster Drill Day," which was designated to commemorate the Sumatra Earthquake. The village ceremony in the Tsunami Memorial Park has become one of the largest events in Thailand on that day. It is attended by representatives of the government or province, as well as journalists and television stations that broadcast the ceremony. Before the ceremony, local villagers bring photographs of lost families and offer flowers to the name plates in the park. In consideration of all the religions in the village, Buddhist, Christian, and Islamic prayers are offered.

Most families in Ban Nam Khem village continue to attend even though people who moved out from the village now find it difficult to do so. At the ceremony, villagers enjoy having lunch with friends at the many food stalls or playing soccer competitions. The annual event is also attended by many children and young people who have not experienced the tsunami.

Another tsunami-related event is the mangrove reforestation on the king's birthday. It was originally an event to do good things for the king because the mangrove forests surrounding Takuapa district are disappearing.[14] However, it has now become a commemorative event for tsunami victims. Ban Nam Khem villagers including school children, the staff of the sub-district administrative organization, volunteers and NGO members carry mangrove seedlings by boats and plant them along the coastline. A field survey on the tsunami-mitigating effect of mangrove forests in Ban Nam Khem village was conducted by a Japanese group led by Hideaki

Figure 3: Administrative staff of Ban Muang sub-district praying in silence
at a tsunami commemoration ceremony.

Yanagisawa in 2006. According to their numerical analysis, which was deduced from the destructive situation of mangrove forests, the mitigating effect of the mangrove forests was not strong enough against the tsunami in 2004.[15] They estimated that damage to houses may be reduced by mangrove shrubs if a tsunami was lower than 1.6 metres high. Regardless of the academic research, villagers continue planting mangroves to protect against tsunami damage and commemorate the tsunami victims.

From a local cultural aspect, villagers also accept these events with locality of Ban Nam Khem. Ms Saibua (age around 50 years) vice chairperson of the Ban Muang sub-district administrative organization, said:

The tsunami commemoration ceremony and mangrove planting are communal events of Ban Nam Khem village, which is an immigrant workers' community with few such events shared by members.[16] Through these events, villagers revive the memory of the tsunami and raise consciousness of disaster prevention.

> I think a disaster culture (*watthanatham khwan phlot phai*) is like merit making (*than bun*). You saw the tsunami commemoration ceremony in this village, didn't you? It is carried out every year and it reminds us not to forget about the suffering caused by the tsunami disaster.

She explained the importance of the tsunami commemoration ceremony as follows. First, she explained merit making in Thai tradition as a Buddhism concept of performing religious rituals or giving alms to earn merits to wish for a better life in the next life or to send merits to help dead relatives have a better position in the next life through reincarnation. Second, she emphasized the importance of repeats of the

tsunami commemoration ceremony as merit making. This idea of the ceremony as merit making was also expressed by many of the villagers who were interviewed. Mangrove planting is also understood similarly. As a result, these events have become important communal apparatuses to revive a communal memory of the tsunami and forge a community identity.

5. Disaster volunteering team and disaster politics

The volunteer disaster team (*Asasamak pong kan phai fai phon ruean, or Por Phor Ror*) in Ban Nam Khem village is now well known in Thailand and considered a model of CBRM. Through its activities, the team serves to reproduce tsunami experiences and consciousness of the disaster at the level of the individual.

The team is composed of 80 regular members and involves 40 public health volunteers and 20 Burmese labourers as associate members. According to its organizational chart, there is one leader and two vice-leaders. The organization is separated into two departments: an administration department (secretariat, public relations and accounting) and an operating department (alarm, liaison, traffic control, first aid and rescue). The main activities are evacuation guidance, rescue, disaster prevention instruction, and disaster prevention research. Under normal circumstances, the team is responsible for traffic control during village street events, such as marriage ceremonies, funerals, or religious parades. The frequency of mobilization is high, at two or three times a month. Since they are volunteers, each member decides whether to participate or not every time they receive notice by community radio or transceivers. Elderly people and women tend to participate during the day, when young male members usually work outside the village. In an emergency such as a tsunami evacuation, a flood, or an accident at sea, the members gather at the main village volunteer centre that stores lifejackets, hand siren alarms, transceiver sets, and lifeboats.

These preparations for a disaster are implemented by not only volunteers but also all the villagers. Twice a year, the entire village is involved in an emergency drill, which is attended by those who are responsible for disaster prevention in the province and district administrations. Emergency plans are made by each administrative level and then they are integrated in the drill. The volunteer disaster team guides people to the local elementary school according to their evacuation plan. The disaster prevention plan was revised and developed to suit the actual conditions of the village by repeating actual evacuations and disaster preparedness drills in cooperation with external agencies. For example, when an earthquake occurred in Indonesia on February 12, 2007, the Ban Nam Khem villagers had to evacuate in rain at midnight and traffic control became confused. Therefore, the evacuation drill conducted on July 25, 2007 also reviewed problems of evacuation routes and behavior by utilizing a disaster risk map.[17] The village was divided into three zones: the danger, risk and safety zones (Figure 4). Disaster volunteers set up evacuation routes in the danger and risk zones by grouping streets and ensuring that the routes did not intersect. In addition, they decided traffic rules such as stipulations that pedestrians walk on the right and cars drive on the left. They also investigated the locations and conditions of those who need assistance to evacuate such as the elderly, the handi-
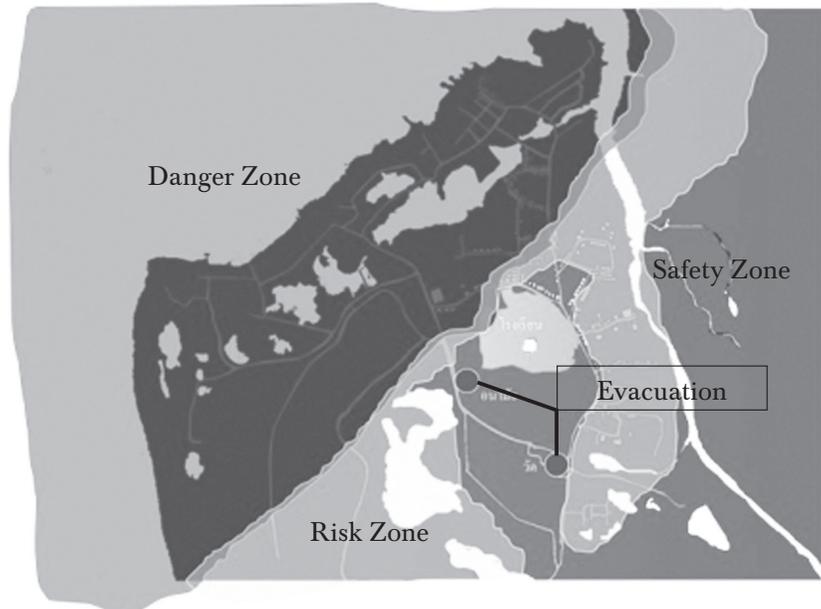
Figure 4: Disaster risk map of Ban Nam Khem village. (Provided by Maitri Congkraicak)

capped, and pregnant women.

Although the volunteer disaster team operates well with local villagers' independence and consciousness on disaster in Ban Nam Khem village, this team is in fact a nation-wide organization under the Department of Disaster Prevention and Mitigation (DDPM) in the Ministry of the Interior. The team was officially founded in 1988 based on the 1979 Civil Disaster Prevention Law (which was changed in 2007 to the Disaster Prevention and Mitigation Law).

The character of the volunteer disaster team as a subsidiary body of a governmental institution can be seen in its entry qualifications and training content. According to the detailed regulations prescribed by the 2004 Ordinance of the Ministry of the Interior concerning civil volunteer disaster teams, applicants must have no mental disease or previous offenses, they must be Thai nationals, and they have an obligation to respect the Thai democracy with the king as head of state. In addition, they need to participate in a five-day DDPM seminar. Applicants are assembled in one place and uniformly educated in the requisite knowledge and skills, including loyalty to the state. Only upon passing this training are they finally appointed as disaster volunteers. Although a salary is not given to volunteers, compensation is paid for any injury or death incurred in the course of volunteering for the state.

Furthermore, the government supports and supervises the volunteer team as a part of Ban Nam Khem's CBRM. The DDPM presented the concept of CBRM in 2004 and included it in the National Plan of Disaster Prevention and Mitigation from 2010 to 2014.[18] The Eleventh National Economic and Social Development Plan from 2012 to 2016 also proposed a similar concept of people-centred disaster prevention, which involves empowerment through community participation and the improvement of resilience to climate change and disaster.[19] In introducing the con-

cept of CBRM, the plan states that community participation helps to strengthen social resilience, effectively use local knowledge, and promote self-help in disaster prevention.

However, there is also the political perspective of the state's governance over its people. Disaster politics can be seen as a new method of governing people through disaster management. First, disaster policies help the state strengthen its power to govern and provoke nationalistic sentiment among the people. Second, the state intends to use people's cooperation to implement national disaster management more efficiently. This is reflected in the following extract from a letter by Prime Minister Yingluck, which was read at the Eighth Tsunami Disaster Commemoration Ceremony held in Ban Nam Khem Tsunami Memorial Park on December 26, 2012:

> The Thai government now faces various disasters, such as natural disasters and man-made disasters […]. The government is working hard to educate people about these disasters and to implement disaster prevention measures in various fields. In other words, we are creating a consciousness and culture of disaster prevention. With the sincerity and efforts of people in all fields, this consciousness and culture shall be rooted in households and organizations, and it will also extend to the community, government, and mass media. Through this, the government will advance the establishment of stable national management. (Underlined by author)

In this letter, Prime Minister Yingluck explained that "creating a consciousness and culture of disaster prevention" must extend to various levels, including the community level. She clearly intends to promote community participation in disaster prevention. However, we need to focus on the conclusion of her message, which states that community participation should result in "the establishment of stable national management." It is clear that the government regards community participation in disaster prevention as one means of national integration.

The relationship between the cooperation in disaster relief and nationalistic sentiment can be seen as a universal phenomenon at many disaster-hit sites. Even when the East Japan Earthquake occurred in 2011, the nationalistic mottoes of "*Ganbare Nippon*" which means "Cheer up, Japan," can be seen in the tsunami-hit areas to cheer up victims. Regarding a natural disaster as a common enemy strengthens the authority of the government. Moreover, a state of emergency makes it easy for people to accept subordination to the governmental order. Social pressures and morality in times of emergency compel people to contribute to humanitarian aid and obey to government orders. This also creates a structure in which uncooperative attitudes toward governmental decisions are easily blamed as immoral behavior.

The Thai government realizes the political importance of disaster governance. Improvements of the national disaster prevention system were propelled under the Thaksin government, which unified the relevant departments scattered across the ministries into the DDPM in the Interior Ministry in 2002.[20] After the Sumatra Earthquake and Tsunami in 2004, which was the first large-scale disaster for the DDPM, Prime Minister Thaksin visited Ban Nam Khem village and promised di-

saster support to the victims. Many villagers remember his visit well, as housing restoration applications were initiated during that time.

This visit and aid work seem to have a political intention related with the general election in 2005. After his visit, a great deal of aid from the Thai Rak Thai (TRT) party arrived in the village and its surroundings, and the ITV Ban Muang resettlement area was built by ITV Corporation, a subsidiary company of Prime Minister Thaksin's Singh Corporation. Thus, Thaksin's government steadily captured the heart of local villagers in tsunami-hit areas. In the second division of Phang-nga province (Takuapa, Kraburi and Thai Muang districts), although Juluet Laksanasit of the Thai Democrats was considered a strong candidate, Kalut Sifa of the TRT party, who prioritised post-tsunami reconstruction in his campaign, achieved a historic win in the general election. According to the analysis of ASTV, "Mr Kalut worked hard to save victims and to accept rescue teams from the TRT party after the tsunami disaster in a timely manner. He succeeded in gaining the trust of tsunami victims."[21] His assistance to tsunami victims led to an increase in the number of votes he won.

The Ban Nam Khem volunteering team was formally developed with the effective support of the DDPM's disaster management policy. Over the years, DDPM has strengthened community participation in disaster management by creating a basic plan of disaster prevention and mitigation. The 2009–2013 plan proposes the importance of community participation as:

> Community-based risk management is a structure newly founded to root a disaster culture in Thai society.[22] It urges people to be prepared for natural disasters and to form self-help organizations that enable the entire village to initiate disaster prevention and mitigation activities in the event of a disaster before the arrival of external rescue teams.[23]

This indicates that a disaster culture functions as a source of power that involves the community in disaster prevention as part of an administrative system.

Community participation is also seen as cheap manpower for disaster management. The Director of Policy Making Division at DDPM stated in an interview:

> DDPM is focusing on disasters that occur frequently. However, by using CBRM, we also ask people to understand the importance of disaster prevention and organize themselves for disaster management. Community management can cover disasters that do not occur frequently such as tsunamis.[24]

For the government officials, it has become very difficult to distribute resources and manpower for the prevention of disasters that rarely occur. In this situation, DDPM itself adopted a strategy to increase the efficiency of unitary disaster management by installing an Incident Command System to centralize authority. In this system, there is only one commander who exercises the authority to command all officers at the headquarters. All members obey orders consistent with the objectives of the plan of the commander. To use the system efficiently, DDPM have also start-

ed to install information and communication technologies such as a satellite tele-communication system, community radio, and computer programs controlling the database of individual victims in emergency.

However, it is clear that manpower is short in an emergency, even after DDPM has improved the efficiency of their management system. Their plan recognizes the difficulty for the government to respond efficiently in the event of a large-scale disaster and stresses the need to establish a cooperative relationship with civil volunteers. With DDPM's growing leadership capability, civil disaster volunteering teams are becoming essential for disaster prevention and cooperation with the national emergency response system. Core volunteer CBRM organizations have established local civil volunteering projects, such as a civil disaster volunteering team, the One Tambon, One Search and Rescue Team (OTOS)[25] and Mr Warning.

As seen above, the civil volunteering teams is being expected to serve in two roles by the state—as political supporters and low-cost labourers for disaster management.

6. Participant's consciousness in disaster volunteering team

Local villagers who participate in the disaster volunteering team have a completely different view of their volunteering activities. In fact, when Ban Nam Khem villagers are asked about their motivations for participation, many people begin to relate their own tsunami experiences.

According to Maitri Congkraicak, a Ban Nam Khem village leader, volunteering activities in this village started with living assistance among tsunami victims in their shelter. Over 800 tents were installed in front of Ban Muang sub-district office for one year (Figure 5). Victims in the shelter organized themselves to participate in self-help activities for each other.[26] He also pointed out the importance of organizing self-help groups in the shelter, as follows:

> It is bad for disaster victims to merely wait for external support in an emergency. Since there are many disaster victims with many problems, it is very difficult to cope with them only through the state administrative system. If external assistance from other organizations cannot be expected either, the best solution is for victims to take actions to tackle their problems by themselves.[27]

Under the leadership of the village leaders, villagers in the shelter decided one representative in each of the 10 tents. Every three days, the representatives met to discuss not only internal rules such as the patrolling of shelters, but also whether to receive aid or not and how to distribute the relief goods. Their meetings are well known as "the coffee congress" in Ban Nam Khem. This later became the Ban Nam Khem village tsunami victim liaison centre, a central organization for village reconstruction. Some of these former representatives formed civil volunteer disaster teams.

Interviews with volunteers highlighted three general motivations to participate in disaster volunteering activities: encountering volunteers from the outside, contributing to their community, and feelings for tsunami victims. A female volunteer (age around 40 years) explained how she was motivated by encounters with external vol-

Figure 5: Temporary shelters and tents at the evacuation site.
(Provided by Maitri Congkraicak)

unteers as follows:

> During the tsunami rescue phase, many volunteers came from all over Thailand and overseas. However, we only received support from others at that time. Since I wanted to help someone next time, I participated in this volunteering activity. Since it is difficult to expect that others will come to help us immediately when a disaster actually occurs, I hope to be able to protect people close to me at least.

Moreover, Ms Chim (age 43 years), a female public health volunteer, had lived on the land which later became the Tsunami Memorial Park. When the tsunami occurred, she escaped with her husband and children by motorbike, but she lost an elder sister in the turmoil. She explained the reasons for participating in disaster volunteering activities as follows:

> Before the tsunami, I never imagined that I would join in volunteer activities. However, I found that many volunteers came to our village from all over Thailand and the world. And they brought much relief to the village after it suffered from the tsunami. For the first time, I thought that I wanted to do something for others. I can take care of the handicapped or the elderly, can't I? I am also taking care of my relative's child. It seems like putting a golden sheet on the back of Buddha statue [doing good things by stealth].[28]

Many members of the volunteer disaster team did not imagine being a volunteer before the tsunami. However, encounters with external volunteers changed their

consciousness, making them see that it was easy to volunteer to do something they could do.

Second, some villagers wish to make some contribution to their community. Mr Charuen (age 65 years) was a tin miner from Thap Put district of Phang-nga province. After retirement, he started a grocery store near the sea. When the tsunami came, he injured his leg and he was cared for by the Japanese emergency medical team. He said that he began disaster volunteer activities immediately after the tsunami since he wanted to contribute to his community. His has now been a volunteer for eight years.

Third, grief and regret for lost relatives motivates some people to join volunteering activities. Their wish to contribute to the community is also rooted in the regret for what they could not do for lost relatives and friends. Many villagers who lost relatives and friends sometimes express regret that they had done nothing for them. The wife of Mr Prayun (age around 50 years), head of the disaster volunteering team, said about her husband's sincere works as a volunteer that "he started volunteering since he felt something from the loss of both parents and relatives in the tsunami." Thus unresolved feelings of strong regret and memories of the tsunami also motivate villagers' participation in volunteer activities in the village.

However, there are almost no villagers who raised the contribution to the state as a reason of the participation. The disaster volunteering team's status as a subsidiary agency of national disaster prevention is just nominal for participants. The motivations of the team are rather based on the coordination of individual volunteers' memories and experiences during Tsunami disaster.

The volunteer disaster team plays an active role beyond the intention of government. When the flood of central Thailand occurred in 2011, the volunteer team went out for rescue operations from Ban Nam Khem village to Nonthaburi province carrying rescue boats (Figure 6). This rescue operation was decided to implement by members' meeting. Although the Ban Nam Khem volunteering team was accepted by the network of civil disaster volunteering team of DDPM, all of a volunteer's meals and accommodations had to be managed by themselves.[29] Similar rescuing operation were implemented in Songkhla province and neighbouring areas.

Their wish to contribute to others is expanding to not only Thailand but also overseas. For Japanese victims of the East Japan Earthquake which occurred in Japan on March 11, 2011, they sent a petition for sending members to rescue in Japan to the government. A female volunteering member said "Unfortunately, our petition was rejected. We have to be convinced of sending out professional teams to Japan on behalf of us. We joined to gather a charity for Japan instead of this."[30] In this way, the volunteering consciousness, born in Ban Nam Khem village is expanding beyond the boarder of Thailand, and also connecting to Japan. This shows that the conversion of village people's value system on the disaster volunteering activities are realized by communal experience and memory that they had collaborated with outside volunteers more than the education of the government.

While showing three motivations of volunteer participation, the experience and memory of Tsunami disaster surely become a core of these motivations in Ban Nam Khem village community. Villagers put individual or social value on disaster pre-

Figure 6: Disaster relief operation in Nonthaburi province.
(Provided by Maitri Congkraicak)

vention by experiencing and keeping memory of tsunami disaster and started to participate to the disaster volunteering team. It also leads to transformation of value system on disaster volunteers. Surely, social and political profits may be provided by volunteer participation. Volunteers may be offered lunch boxes during the activity. Some may be connected with the influential person of local community and have an opportunity of part-time jobs through the volunteering. However, volunteering activities usually waste time for working and face more risk during activities than its benefit in financial view. The benefits of volunteering activity seem more connected with their fame. Volunteering activities in Ban Nam Khem seem to be moral behavior like being ordained as a monk. It sometimes becomes a chance to show his/her morality or ability as a local leader. By transforming of value system among the villagers, participating in disaster prevention became a right and honorable deed of role model in Ban Nam Khem village.

Finally, the relationship between the government and disaster volunteering team should be considered once more. The active activities of the disaster volunteering team of Ban Nam Khem village are internally motivated by three motivations involving encounter of outside volunteers, a contribution and regret, which are based on Tsunami memory of a community. Moreover, it also has a function of subsidiary agency of the disaster politics as another facet of the two faced structure. Disaster volunteers are propelled by external interventions. However, two facets have a balance without mutual inconsistency. By praising the active activity of Ban Nam Khem village, the government interprets the Ban Nam Khem's activity as a national model of the efficient and cooperative CBRM which substitutes for governmental disaster prevention (Figure 7). Conversely, the disaster volunteering team can implement their activities with receiving national support and praise. Disaster culture of

Figure 7: The Ministry of the Interior's awards ceremony for the Ban Nam Khem disaster volunteering team. (Provided by Maitri Congkraicak)

Ban Nam Khem grew in the balance of this community and the government.

7. Dropouts from disaster culture

Ban Nam Khem village has created a strong disaster culture with volunteering, but there are some difficulties in this system. Pointing at a "House for Sale" sign in front of an empty house, a woman in her 30s said in an interview:

> After the tsunami, many villagers moved out of the village due to a fear of tsunami. Most of them moved to Takuapa city (Phlu Tiau resettlement area). The remained residents are mainly fishermen or Burmese labourers. You see, land is for sale everywhere in this village.[31]

She mentioned two general problems faced by the Ban Nam Khem community: residents moving out of the village and Burmese labourers who are not part of the community and disaster culture approach.

First, the residents moving out of the village lose their motivation to participate in disaster prevention activities. After the tsunami, two resettlement areas were built outside Ban Nam Khem village: ITV Ban Muang and Phlu Tiau (Figure 8). Ban Nam Khem villagers who lost their houses had to choose between rebuilding restoration housing on the original land or receiving new houses in a resettlement area. The villagers who chose the latter option had various reasons. One reason was their anxiety about future disaster prevention. Mr Mi (age 73 years), who moved to ITV Ban Muang, said, "I'm already old. If a tsunami hits again, I can't escape. I don't want to stay in Ban Nam Khem village."[32] Similarly, Ms Yuk, a middle-aged woman who runs a grocery store, expressed her anxiety as follows:

Figure 8: ITV Ban Muang resettlement area

> Although we lived in Ban Nam Khem village before moving to this house, we had to evacuate the village many times following alarms. Since we thought we couldn't escape with the elders and children, we decided to move into this resettlement area by selling the house in the village.[33]

To tackle this problem, the disaster volunteering team actually researches family structures and trains to help families evacuate to the safety zone. However, some people suspect whether the team will actually work in an emergency or not. It is also difficult to ease the anxiety among the elders, women, and children who are most vulnerable in the event of a tsunami.

Once people separate from their community, both physically and mentally, it becomes hard to participate in activities of their former village. If people move across administrative boundaries, they have to participate in different volunteer disaster organizations. There are few village members which actually participate in activity in resettlement areas compared with Ban Nam Khem village.

The behaviour that people moving away from Ban Nam Khem village to the safety zone can be explained as a rational strategy. However, it may also mean that tsunami memories and experiences are lost due to reduced participation in volunteer activities and training. It leads to the loss of a disaster culture as a system historically transmitted, communicated, and developed among people and by generations.

Second, there is a problem of the Burmese labourers who do not share the tsunami experience, lifestyle, and language of the Ban Nam Khem Thai community (Figure 9).

The difficulty of integrating Burmese labourers into the Thai community may be connected with the treatment of migrant workers by the Thai government. Although Burmese labourers can officially enter Thailand with work permit officially,

Figure 9: Burmese labourers working at a wharf of Ban Nam Khem village.

some have entered illegally without the permit.[34] Before the tsunami, illegal Burmese labourers in the village were occasionally exposed by police investigations. Some of their families built huts in rubber plantations far from the village in fear of forced repatriation to Burma. Therefore, a fear of Thai public institutions exists among Burmese labourers.

Many Burmese labourers in Ban Nam Khem village were able to access disaster relief like foods and water. However, the subsequent phase of community reconstruction has been advanced without their involvement. Thai public support prioritized Thai residents who had a formal national certificate and deed of land title, so there was less support to Burmese labourers.

Many villagers moved away from the tsunami danger zone along the seashore of Ban Nam Khem village and rented their houses to Burmese labourers.[35] Therefore, Burmese workers in the danger zone are needed to participate in the disaster volunteering activity of the village. At present, 20 people have participated in the disaster volunteering team, but it is not a sufficient number considering the population of Burmese labourers in the village. Moreover, there is an inflow of the new labourers who do not share the tsunami experience and knowledge, and they are not very cooperative in the village disaster prevention efforts. Indeed, they may become an obstacle against proper disaster management in the village. Thai villagers have complained that young Burmese labourers do not understand how to act in an emergency evacuation, dangerously escaping from the village by motorbike. Thus there is a gap in the disaster culture between Burmese labourers and Thais.

Ban Nam Khem village leaders are now implementing a consolidation policy with Burmese labourers, such as organizing Burmese labourers' groups or having joint religious events with Thai villagers. A female shipowner (age 69 years), who owns 10 fishing ships and hires many Burmese labourers, said, "there are many Burmese in this village. All of them are nice people. We get along with them."[36] However, a

group of women who once lived in Ban Nam Khem village and then moved to Phlu Tiau resettlement area rejected her comments, saying "her view is different from ours since the shipowner uses many Burmese labourers." [37] Ms Kkun (age 33 years), a female fish broker working in Ban Nam Khem, rebuilt her house in the village but then decided to buy a house in the Phlu Tiau resettlement area. [38] She said:

> Although my house was rebuilt on the land along the seashore of Ban Nam Khem village, the neighbours are all Burmese and nobody is there. The tsunami threat is also dreadful, so we decided to rent our house to Burmese labourers and escaped to this resettlement area. [39]

There is little visible discrimination of Burmese labourers in the village, but feelings of anxiety and rejection regarding the Burmese linger on among the Thai villagers. An NGO officer conducting youth training activities in the village for eight years also mentioned the Thai villagers' tacit contempt for the Burmese. He observed that their children are unwilling to play with the labourers' children. [40] Thus, there is a gap in communication between Thai and Burmese residents, which will not disappear easily. This makes it difficult for them to share a disaster culture.

8. Disaster culture in community formation

The disaster culture of Ban Nam Khem village is a system that succeeds and reproduces the communal memory and experience of tsunami disaster and reconstruction, and roots them into community formation by utilizing the tsunami as a symbol of the community. The Ban Nam Khem village community installed infrastructures such as the Tsunami Memorial Park and incorporated the Tsunami Commemoration Ceremony into its local annual events and traditional custom of *Than Bun*, fixing the community's consciousness of the disaster in everyday life.

In Ban Nam Khem village, the experience and memory of the tsunami's damage and encounters with volunteers from overseas and other areas of Thailand served as a driving force for positive participation in the disaster volunteering team and the autonomy of its CBRM.

Moreover, the expanding disaster prevention activity outside the village has helped to form a new memory of disaster management and promote education on the importance of disaster prevention in the community. Although another tsunami may not hit Ban Nam Khem for decades, disaster prevention methods and consciousness will continue to be maintained there as the villagers venture out to assist disaster victims in other areas.

Ban Nam Khem village also maintains appropriate relations with the government. The government supports and admires Ban Nam Khem's volunteer disaster work as a model case of the CBRM that it promotes. The villagers are in turn proud of the government's admiration and have changed their value system of participation in a disaster prevention activity. However, as seen above, the motivation of Ban Nam Khem village is not provided by a government framework but by its communal memory and experience. This proper distance from the government has fostered the disaster culture of community volunteerism in Ban Nam Khem.

To conclude, the disaster culture of Ban Nam Khem village is still developing. Discussions continue over how Thai villagers can create a good relationship with Burmese labourers or how Ban Nam Khem villagers can stop the exodus from the village. As this paper has demonstrated, the disaster culture of Ban Nam Khem village is a long-term project created from scratch. Over the past eight years, the villagers have gathered existing cultural concepts in the village, disaster prevention infrastructure, their grief over losing family in the tsunami, and memories of encounters with volunteers after the tsunami, and then newly created their own disaster culture. In this way, the disaster culture of Ban Nam Khem does not depend on tradition and customs, leaving space to create new ways of overcoming problems flexibly.

The 2004 tsunami claimed the lives of relatives and destroyed the properties of the Ban Nam Khem villagers. However, the tsunami has strangely been transformed into a symbol of unity, autonomy and creativity for the community, which has aided its reconstruction over the past eight years.

Acknowledgements

Notes

1) Jin Sato, "Moral economy in tsunami-hit area in Thailand [Tai tsunami hisaichi no moraru ekonomi]," in Tanaka Chiharu et al. ed., *The Civil Society* [Shimin shakai] (Tokyo: Keio University Press, 2008), 361–378.

2) Yuki Suzuki, "Created disaster—from flood legend to tsunami as an accident," in *The Area Studies—Special Issues, Disaster and Area Studies* [Chiiki kenkyu—sou tokushu: saigai to chiikikenkyu]. Volume 11, Number 2 (Kyoto: Kyoto University Centre for Integrated Area Studies, 2011), 139–160; Narumon Arunotai, "Saved by an old legend and a keen observation: the case of Moken sea nomads in Thailand," in *Indigenous Knowledge for Disaster Risk Reduction—Good Practices and Lessons Learned from Experiences in the Asia-Pacific Region* (Bangkok: UN/ISDR Asia and Pacific, 2008), 73–78.

3) Hisashi Ogawa, "Indian Ocean tsunami from the view of religious practice—one aspect of the tsunami disaster and the globalization of a Muslim village in southern Thailand [Shukyo jissen ni miru indoyou tsunami saigai—tai nanbu musurimu niokeru tsunami saigai to gurobaruka no ichi danmen]," in *The Area Studies—Special Issues, Disaster and Area Studies* [Chiiki kenkyu—sou tokushu: saigai to chiikikenkyu], Volume 11, Number 2 (Kyoto: Kyoto University Centre for Integrated Area Studies, 2011), 119–138.

4) Surichai Wankaeu et al., *Sociology of Tsunami—Cooperation for Disaster Prevention* [Sangkhomwithaya Suenami-kanrapmue kanphaiphibat], (Bangkok: Chulalongkorn University, 2007).

5) Chulalongkorn University Social Research Institute, *Final Report: Violence Against Woman in Thai-*

    land Post-Tsunami Context (Bangkok: Chulalongkorn University Social Research Institute, 2007).

6) Harry E. Moore, *… and the Winds Blew* (Austin, Texas: University of Texas, 1964).

7) Ibid., 195.

8) Researchers of Disaster Research Center in the Ohio State University (presently, the University of Delaware) took a leading role of research on disaster culture in 1970–80s. (Weger, D. E. and Weller, J. M., *Disaster subculture: The cultural residues of community disaster*, Disaster Research Center Preliminary Paper vol. 9 (Columbus: The Ohio State University, 1973); Haruo Hayashi, "The Creation of Disaster Culture" [Saigaibunka no keisei]," in The Behavioral Science in Natural Disaster [Shizensaigai no koudougaku], Lecture of Applied Phycology 2 [Oyoushinrigaku kouza] (Tokyo: Fukumura Shuppan, 2011), 246–261.) In addition, the significance of building a culture of safety and resilience is focussed in Hyogo Framework for Action 2005–2015, which Thai government also participated in. (International Strategy for Disaster Reduction, Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities (Hyogo: International Strategy for Disaster Reduction, 2005).

9) Before 1990, it may have been difficult for ordinary Thai people to imagine what a tsunami was. In this book, he explained the tsunami descriptively as follows: It is a phenomenon caused by an earthquake of more than 6.3 on the Richter scale, a volcanic eruption, or a submarine volcanic eruption. A big wave of seawater floods a coastal residential area and flushes away human beings and properties. (Smit Thammasrot, *Natural Disasters in Thailand—Students of Kingdom Protection with Private Curriculum in the Third Grade 1990–1991* [Phai Thammachat nai Prathaet Thai—Naksueksa laksut kanpongkan racha anacak phak rat ruwam ekachon run thi 3 pracamphikan-sueksa phuthasakarat 2533–2534] (Bangkok: unknown, 1991), 50.

10) Narumon, "Saved by an old legend"; Suzuki, "Created disaster."

11) Narumon, "Saved by an old legend."

12) Clifford Geertz, 'Religion as a cultural system,' in *The Interpretation of Cultures: Selected Essays* (New York: Fontana, 1993), 89.

13) Interview in Ban Nam Khem on January 10, 2013.

14) According to a survey by Yanagisawa et al. (2007), the mangrove forest around Ban Nam Khem village is a mixed forest mainly occupied by *Rhizophora sp.* as a pioneer species. *Cerrios* and *Buruguera* can also be seen there. At the sandbank and mouth of the river grows *Avicennia sp.* and *Sonneratia sp.* (Hideaki Yanagisawa et al., "Survey of the tsunami damage and destruction of the mangrove in Nam Khem village, Thailand [Tai nam khem deno mangurobu rin no tsunami higaichosa to hakairitsu hyoka]," in *Tsunami Engineering Technical Report*, Volume 24 (Sendai: Disaster Control Research Center, Tohoku University, 2007).

15) Ibid., 71–76.

16) Compared with the Thai community in northern Thailand, Ban Nam Khem has few events in which the whole village participates. They celebrate the beginning and end of the Buddhist Lent, the King's birthday (Father's Day), and the Queen's birthday (Mother's Day). Although most of the villagers are Buddhists, the temple has little power in the community.

17) The tsunami early warning system of Thailand is called the Deep-ocean Assessment and Reporting of Tsunami (DART), which is now operated by the National Disaster Warning Centre (NDWC). This system mainly consists of a surveillance buoy in the Indian Ocean, alarm towers, tsunami sign boards for evacuation, and tsunami shelters. The Thai Meteorological Department owns the surveillance buoy located 600 nautical miles away from Phuket to the northwest, with support from USAID. In the event of a tsunami, the data from the buoy is sent to NDWC through the National Oceanic and Atmospheric Administration (NOAA) network in the US. Then the alarm towers installed in about 130 places along the coast in Thailand emit multilingual alarms in five languages (Thai, English, German, Chinese, and Japanese). This system began operations in 2006, but has had some problems. In June 2009, it was found that the battery of the buoy had run out, and the sea level could not be observed for long period. ("Tsunami warning buoy for Phuket now dead in the water," *Phuket Gazette* (August 10, 2009).

18) Department of Disaster Prevention and Mitigation Policy Bureau (DDPMPB), *Disaster and Risk Reduction in Thailand* (Bangkok: DDPMPB, 2004) Retrieved on August 10, 2013, from http://www.

preventionweb.net/files/946_Thailand-report.pdf.

19) National Economic and Social Development Board (NEBSDB), *The Eleventh National Economic and Social Development Plan (2012–2016)* (Bangkok: NEDSDB Office of the Prime Minister, 2011).

20) DDPM was installed in 2002 by integrating a disaster-related section from the following five organizations in 2002: 1) Department of Local Development, 2) Civil Disaster Prevention Section in Department of Local Administration, 3) Office of Disaster Prevention Committee of Secretariat to the Prime Minister in Office of the Prime Minister, 4) Disaster Victim Support Section of Department of Public Welfare, 5) Department of Community Development.

21) "'Kalut Sifa' strongly declare! Defeat the Democrat Party, and raise the flag of the Thai Rak Thai Party." ['Kalut Sifa' prakatsakda! Khon 'pochopo' pakthong thorotho khet 2 phang-nga], *ASTV Phucatkan Newspaper* (February 7, 2005).

22) DDPM, *National Progress Report on the Implementation of Hyogo Framework for Action (2009–2011)*, (Bangkok: DDPM, 2011) Retrieved on August 10, 2013, from http://www.preventionweb.net/files/18764_tha_NationalHFAprogress_2009-11.pdf.

23) Ibid., 16.

24) It was interviewed at the DDPM office in Bangkok on March 14, 2013.

25) The OTOS project prepares dynamos, shovel cars and cutting machines for disasters at each sub-district office. Rescue members are trained in rescue and how to use the rescue gears for emergency response.

26) Maitri Congkraicak et al., *A process of tsunami victim-oriented livelihood reconstruction, a case study of the tsunami-hit areas in Andaman coast, Thailand* [Krabuan kan phuen fu withi chiwit doi phu prasop phai pen kaen lak krani: phuen thi prasop phai suenami chaifang andaman prathaet thai], (Hatyai: Southern Region Health Systems Research Institute, Prince of Songkla University 2012 (Retrieved on August 14, 2013, from http://hsmi.psu.ac.th/paper/426).

27) Ibid., 2.

28) Interview in Ban Nam Khem on January 8, 2013.

29) Interview in Ban Nam Khem on February 4, 2013.

30) Interview in Ban Nam Khem on January 19, 2013.

31) Interview in Ban Nam Khem on December 31, 2012.

32) Interview in ITV Ban Muang resettlement area on February 2, 2013.

33) Interview in ITV Ban Muang resettlement area on February 10, 2013.

34) According to a Burmese pastor in Ban Nam Khem, it is difficult for Burmese labourers to obtain and maintain a work permit. A work permit officially costs 4,000 baht, but in actual practice it is difficult to obtain without paying an additional 6,000 baht to an agency for help with the application. Work permits have several restrictions on the area and types of work permitted, and the restrictions change nearly every year. In some cases, those who were not aware of the changes have been caught by the police. In addition, they must return to Myanmar across the border of Ranong province every three months to update their permit. (Interviewed in Ban Nam Khem on January 21, 2013).

35) As of 2012, the rent for restoration housing in the risk area of Ban Nam Khem village was from 1,500 baht to 2,000 baht per month. The daily wage of a Burmese male is about 300 baht.

36) Interview in Ban Nam Khem on February 19, 2013.

37) Interview with a group of middle-aged women in Phlu Tiau resettlement area on July 12, 2013.

38) The land of the resettlement area was leased out for 30 years by the Treasury Department of the Thai Ministry of Finance. Houses were given to the victims for free. Although the selling of land and houses is not officially sanctioned, there is informal trading of the right of use.

39) Interview in Phlu Tiau resettlement area on July 17, 2013.

40) Interview at the office of Ban Nam Khem on January 17, 2013.