

Durham Research Online

Deposited in DRO:

10 March 2009

Version of attached file:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Rigg, J. and Law, L. and Tan-Mullins, M. and Grundy-Warr, C. (2005) 'The Indian Ocean tsunami : socio-economic impacts in Thailand.', *The geographical journal*, 171 (4). pp. 374-379.

Further information on publisher's website:

<http://dx.doi.org/10.1111/j.1475-4959.2005.001753.x>

Publisher's copyright statement:**Additional information:**

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full DRO policy](#) for further details.

The Indian Ocean tsunami: socio-economic impacts in Thailand

Jonathan Rigg (Department of Geography, University of Durham, South Road, Durham DH1 3LE, UK, J.D.Rigg@durham.ac.uk)

Carl Grundy-Warr (Department of Geography, National University of Singapore, 1 Arts Link, Singapore 117570, geocerg@nus.edu.sg)

Lisa Law (School of Geography and Geosciences, Irvine Building, University of St Andrews St Andrews, Fife, KY16 9AL, Scotland, UK, Lisa.Law@st-andrews.ac.uk)

May Tan-Mullins (Department of Geography, National University of Singapore, Singapore, maymullins@yahoo.com.sg)

Introduction

On the morning of the 26th December 2004 large areas of coastal southern Thailand were transformed when a tsunami, generated by a powerful submarine earthquake in the Indian Ocean, swept ashore. Officially, there were 5,395 confirmed deaths in Thailand with another 2,932 people listed as missing.

In February 2005 a team led by Dr Ben Horton of the University of Pennsylvania was awarded an SGER grant by the National Science Foundation to undertake exploratory research on the tsunami in Malaysia and Thailand. This report summarises the preliminary conclusions of the social science element of the Thai fieldwork. The team undertook fieldwork in three main sites during July 2005: Koh Lanta, Koh Phi Phi and Khao Lak. We chose Koh Phi Phi as a small, tourist (backpacker)-oriented island economy with high levels of damage and casualties; Koh Lanta as a site with a significant population of fisherfolk with a long presence in the area; and Khao Lak as a mainland site with the highest number of casualties in Thailand and with a mixed tourism-fishing economy.

THEMES

We gathered, through interviews, a rich database of qualitative information on the tsunami and its impacts and effects, and on patterns of rehabilitation and recovery. We were told of people's frantic efforts to escape the waves; their serendipity or, alternatively, the sheer bad luck of their wives, daughters, sons and husbands who lost their lives. We heard stories of government intransigence and of great personal courage and generosity. We found instances of resurgent community cooperation and, in a few cases, of dysfunctional response to the crisis. It is important to recognise the uniqueness of geographical place and personal circumstance and the degree to which these will mould – and often determine – any detailed understanding of the tsunami and its aftermath. However we are also aware of the need to explore themes that link the three main sites and the diverse experiences of the people and groups we interviewed in the course of the fieldwork. With this in mind, we identify in this paper four themes that provide an explanatory, linking structure:

- Geographies of crisis: local impacts, extra-local effects
- Geographies of recovery: local, national and transnational circuits of social capital
- Geographies of fear, psychologies of explanation
- Spaces of opportunity

Theme 1: Geographies of crisis: local impacts, extra-local effects

One of the durable themes of our research is that the impact of natural disasters is never merely local. While the physical damage was concentrated along a relatively narrow coastal fringe, in human terms the tsunami's impact, like the earthquake and resulting tsunami itself, rippled outward from its epicentre.

Our own research base was in Krabi town, for example, a site that was not severely hit by the wave. Yet in terms of human impacts, the town has been a profound site of trauma since the tsunami struck. The Krabi Chinese Temple effectively became the makeshift morgue for the deceased of Phi Phi, who in turn needed to be identified, repatriated, cremated/buried or put on ice until their remains could be claimed. Krabi Hospital overflowed with hundreds more of the

injured, stretching emergency services to the limit. The town was ill equipped to cope with a disaster of this magnitude, and relied on the goodwill of many tourism operators and volunteers who helped with accommodation, translation and distributing donations of food and clothing. Six months after the tsunami the temple was empty, but reminders of the event remain. The survivors of Phi Phi are a significant presence in Krabi town, especially at the Nong Kok refugee camp. Furthermore, Krabi itself was a site of tourism before the tsunami, as a gateway to the off shore islands of Koh Phi Phi and Koh Lanta, and a good starting point for the nearby tourist sites of Ao Nang and Railay Bay. Yet tourism to all parts of Krabi has dwindled, regardless of the local severity of the impact.

The tsunami also produced other extra-local impacts that are not apparent on the severely damaged coasts. Many of the sites affected by the tsunami in Thailand have attracted migrant workers as well as domestic and international tourists. Men and women from other provinces in southern Thailand and from the Northern and Northeastern regions have migrated to provinces such as Krabi and Phang-nga to find employment in the tourist service sector. In some sectors employment networks stretch even further afield. Migrant workers from Burma (Myanmar) are employed in the deep-sea fishing industry in Phang-nga (and Ranong).

Inevitable and understandably, the focus of media attention and government and international efforts were concentrated on the immediate site of death and destruction. This is where the casualties occurred and this is where the physical damage and the associated economic costs were also highest. However this NSF-funded research has revealed how it is necessary to place the tsunami and its impacts within a livelihoods framework where space is more broadly drawn. While we were not in a position to map the tsunami's socio-economic 'footprint' in detail we can say, with confidence, that the livelihood eroding effects of the tsunami stretch in often surprising ways to inland provinces of Thailand and to other countries.

Theme 2: Geographies of recovery: local, national and transnational circuits of social capital

While the physical damage to Thailand's western coastal areas was uneven, so too, we suggest, are the geographies of recovery. Not only did the tsunami differentially affect communities across the region, but there is also differentiation in terms of response rates and the effectiveness of recovery programmes. How communities affected by disasters are able to recover depends on a number of factors, such as the kind and extent of damage, the timeliness and effectiveness of assistance from various institutional structures, village cohesiveness, and community access to economic, social and political resources. We suggest that social capital – here understood as the ability to mobilise access to resources through prior or post-tsunami social networks – plays a crucial role in recovery activities. These networks often stretch across a number of scales, from networks within the community to those that span international borders.

To appreciate the social patterning of recovery in Thailand, it is necessary to understand the presence and role of state and non-state agencies. How these agencies gain access and carry out their activities in turn depends on the kinds of communities affected, whether they are cohesive fishing communities, mixed tourism-fishing communities or international tourist sites made up of diverse migrant populations. In Koh Lanta, for example, organisations such as UNICEF, UNDP and the Thai Red Cross provided donations of rice, water, medicine, clothing, kitchen utensils and basic infrastructure materials to help people rebuild their homes and boats in the first weeks after the tsunami. The Muslim community at Ban Hua Laem spoke of collective efforts to clean-up affected sites and distribute aid donations in the early days. As the months progressed the community was able to replace fishing boats through official channels to the Fisheries Department, and acquire more than a dozen new boats through the Prince's Royal Project. The community also prepared a visual record of the destruction to the village and has approached organisations in Kuwait for financial support (Figure 1). Ban Hua Laem thus activated local, national and transnational social networks in their efforts to rebuild the community.

On Koh Phi Phi, however, the community response was less unified, and certainly less 'local'. The population scattered across numerous sites in the first weeks, and no clear strategies to re-establish the community were proposed. State efforts focused on initial clear-up operations and constructing the refugee camp in Krabi, rather than re-establishing the community on-site. Instead, Phi Phi has relied on personal donations from abroad, and a buoyant supply of tourist volunteers, to begin the task of rebuilding the community in situ. In many ways Phi Phi's cleanup and rehabilitation has relied on the backpacker/tourist network flowing through this renowned tourist site. Such transnational social capital has been crucial to the rehabilitation process, but has raised issues of sustainability and leadership. A particularly controversial scheme, initiated by the volunteers, is the setting up of a tsunami museum beside the pier. This is not favoured by the Thai community, however, who do not want a constant reminder of the tragedy. Added to this are the cultural insensitivities that see volunteers clearing up in bikinis and shorts in a largely Muslim community.

These examples show how affected sites and communities not only receive different levels of support from different sources, but are also able to summon different support networks. The state and international organisations – even in a country which is as wealthy and centralised as Thailand – are unable to provide support which reaches to every area, every settlement, and every household.

Theme 3: Geographies of fear, psychologies of explanation

The nature and unprecedented scale of the tsunami in the Andaman Sea created an intense sense of fear; in particular, the fear of the unknown, the uncertain and the uncontrollable. The months since the tsunami have seen local people trying to come to terms with the event, managing their losses, and attempting to explain and rationalise the *khluen yaak*, or giant wave. This rationalisation has involved an engagement both with the science of earthquakes and tsunamis, and the incorporation/embedding of this science with traditional Thai beliefs. These are not contradictory or mutually exclusive but have become part of a continuum of explanation where it is hard to draw a line between 'science' and 'science fiction', or between science and culture.

Explanations for the tsunami often combine science, religion and culture. The media has played a role in educating the public that the tsunami was generated by an earthquake in the Indian Ocean. Nonetheless, many still do not understand the science, providing an opportunity for scientific terms to become melded with cultural and religious explanations. There were several instances when more elderly informants, and particularly Muslims, told us that the tsunami was 'God's way of telling us that we have sinned'. On Nopporathara Beach in Krabi province, one informant told us that it was because younger Muslims had deviated from Islam, consuming alcohol and drugs. As retribution, God sent the tsunami to cleanse the area of sin. Pin, a Buddhist grandmother in Khao Lak said the wave was 'not natural [*thammachaaŋ*]' but caused by a *khluun yaak* or a 'giant wave'. The implication was that this was an abnormal event (which, of course, it was) but she also seemed to imbue this with a supernatural quality.

It is important, we feel, not to separate out those who adhere to a scientific explanation for the tsunami, and those who see it as supernatural or religious in origin. Those who explain and understand (and therefore come to terms with) the tsunami in religious or supernatural ways, were also generally quite willing and able to ally the supernatural/religious and the natural. So for many, perhaps most individuals the tsunami was both a natural event and a religious/supernatural occurrence.

Theme 4: Spaces of opportunity

An event on this scale may radically transform structures and processes of social relations and economic production. We suggest that it represents a historical break – or, in Thai, *taek* – in local trajectories of existence. It does, in a sense, throw the pieces of the jigsaw in the air. Some return to the place they originally occupied in the local picture; others become muddled and disjointed; still more are lost entirely in the confusion and the destruction. Post-tsunami reconstruction, therefore, does not mean a reconstruction and therefore a recreation of the

pre-tsunami state of affairs. The danger – and therefore the challenge – is that because a post-tsunami situation is one where people are characteristically emotionally and economically vulnerable, it may create opportunities for outsiders, for the worst of reasons, to take advantage of the situation.

Lek and Daa, two Muslim sisters aged 28 and 21 years old respectively, run a small pancake house on Koh Phi Phi, 200 metres east of the main pier (Figure 2). The shop sells assorted pancakes, drinks and deep fried snacks (bananas, jack fruit, spring rolls). The sisters ran a pancake house before the tsunami, although not from this corner plot. They operated from a restaurant nearby. They lost all their equipment with a total value of 25,000 baht (US\$625) and which they had to replace. In these terms, the tsunami led to a considerable initial loss. However it also afforded an opportunity which would not otherwise have arisen, namely the opportunity to move to a larger, permanent and prime corner plot. The damaged building they work from has a rental of 3,000 baht (US\$75) a month. Before the tsunami, when it was a clothing store, the rental was 10,000 baht (US\$250) a month. Daa and Lek illustrate the type of re-working of social and economic space that occurs following an event of this magnitude.

Lek and Daa's experience can be contrasted with Ban Laem Pom. Ban Laem Pom is a small fishing village around 25 km north of Khao Lak which has had a history of land disputes. Two years before the tsunami a powerful local business interest, intent on securing this valuable beach front land for tourism development, bulldozed some houses in the village to intimidate the villagers and frighten them into moving out. They resisted. The tsunami, however, provided an opportunity for this *nai thun* (capitalist) to restate his claim. Ban Laem Pom was hit very hard by the tsunami; there were many deaths, particularly of children. With the village abandoned by its inhabitants, the *nai thun* ordered his henchmen to encircle the village in barbed wire and posted armed guards around the settlement. When the villagers tried to return to reclaim the bodies of their wives, children, and husbands they were threatened with violence and prevented from entering the village. It was two weeks after the tsunami when national newspapers caught wind of the situation and sent photographers to take pictures of that village. Using the well-established tactic of mass re-occupation, the villagers managed successfully to confront the guards and re-enter the settlement to find and bury their dead.

Concluding Remarks

Social research in the aftermath of a sudden natural hazard event is urgent and challenging. Our team found there to be complex geographies of crisis and recovery in all the sites we visited. Political and administrative impediments to recovery are seen to operate within and across scales, which is partly due to the problems of inter-agency coordination involving very different bodies (e.g. international organizations, NGOs, and private companies) operating at different levels in the national hierarchy.

Some of the hardest hit communities and households – such as poorer fisherfolk, tourist resort workers and migrant workers – are often neglected or ignored. Sometimes this is entirely bureaucratic as officially there is 'no record' of undocumented workers and the boats of many poorer fishing households are not 'registered'. Furthermore, effects on migrant communities (including very large numbers of Thais), who contributed much to the local economies represents a mostly hidden dimension. Their stories are often absent from the official transcript. Transnational social capital and networks are another critical area for further research. We found significant variations in the forms of assistance relating to particular place-specific economic, social and cultural geographies. These ranged from communities reliant upon a plethora of recognized international organisations to communities where forms of assistance were low profile and locally specific.

In addition to the spectacular, tragic and obvious destruction, the tsunami event has produced numerous socially transformative challenges and opportunities that necessitate longer-term research engagement. We have tried to outline just some of these in this short summary paper.

Acknowledgements

The research team would like to gratefully acknowledge the support of the US National Science Foundation who funded the research. In addition we would like to record our thanks to Sophia Buranakul and Wendy Firlotte in Krabi, the Prince of Songkhla University, and to all our respondents and government and non-government agencies and organisations who gave up their time to talk to us and who so willingly spoke about an event which was traumatic for all and tragic for many.

Figure 1

The imam of Ban Hua Laem holds up the village's proposal for support sent to the government of Kuwait



Figure 2: Daa and Lek serve a customer at their pancake house on Koh Phi Phi

