6 Sensitivity

6.1 Introduction

The second dimension of vulnerability - sensitivity - captures the pre-existing economic, social, political, and ecological conditions that can influence the form the shocks and stressors may take in destinations, and shape anticipatory and immediate response capabilities to shocks. Whilst the preceding chapter examined the physical attributes of the social-ecological system that increased its exposure to the tsunami, this chapter focuses on the strengths and weaknesses of the social systems in Khao Lak, Patong, and Phi Phi Don prior to the tsunami. It explores how these influenced their ability to anticipate and immediately respond to the tsunami disaster, as highlighted in white in Figure 6.1. This involves an examination of each destination’s tourism business attributes (seasonality, main markets and marketing strategies, and developmental histories), and an exploration of access patterns and resource entitlements prior to the onset of the tsunami, along with those structures and processes that influence unequal resource distribution and the mismanagement and misuse of biophysical resources.

An inventory of the differential levels of economic, human, social, political, and environmental resources accumulated by community members in the three destinations before the tsunami, coupled with the destination-specific differences between the destinations, goes a long way in explaining why the more established destinations of Patong and Phi Phi Don were able to recover faster than the newer destination of Khao Lak. Yet a deeper examination of context - dominated by power systems, ideologies, cultural norms, perceptions, and agendas - helps explain why these differences were so great. This chapter will show that identifying factors is not enough to understand destination vulnerability; it is the way in which these various factors combine in a given period of time and place that is most important. This chapter demonstrates the role governance and agency played in facilitating resource access to some over others, it highlights how multi-scaled relationships and networks were used to increase resource access. It also explores the multiple narratives, agendas, and cultural attributes that drive actor choices, (in)action, and destination vulnerability in Khao Lak, Patong, and Phi Phi Don.
Figure 6.1: Factors influencing sensitivity levels in tourism destinations
6.2 Tourism-specific sensitivities

As argued in Chapter 2 and Section 3.4.3.2, destination vulnerability is influenced greatly by the very nature of the experience-based product destinations offer to tourists and the mode of production and delivery of that product in the destination. Accordingly, these tourism specific sensitivities - tourism seasonality, markets and marketing strategies, and destination image - feature as the first sensitivity sub-category in the DSF as shown in Figure 6.1. Included in this comparative analysis of tourism-specific sensitivities is an evaluation of the roles that a destination’s development history and destination positioning play in determining differential vulnerability levels and coping capacities. The following sections explore and compare the extent to which each of these tourism-specific sensitivities influenced differential vulnerability levels in Khao Lak, Patong, and Phi Phi Don. Throughout the examination of these four tourism-centric factors, the importance of context - encompassing the elements of place, scale, and time (see Figure 6.1) - in determining destination vulnerability come to the fore and help explain why destination vulnerability levels differed across and within destination host populations.

6.2.1 Seasonality levels and main markets

Seasonality levels, along with the type and size of a destination’s main supply markets (tourists), are identified in the literature (Section 2.4) and the DSF (Section 3.4.3.2) as crucial factors in determining differential destination vulnerability levels (Amelung and Viner, 2007; Calgaro and Lloyd, 2008; Casimiro and Calheiros, 2007; Elsasser and Bürki, 2002; Méheux and Parker, 2006; Nyaupane and Chhetri, 2009). An evaluation of the differential seasonality patterns and clientele base in Khao Lak, Phi Phi Don, and Patong further supports this assertion. Khao Lak’s business is highly seasonal; which leaves it very vulnerable to shocks like the tsunami that coincide with peak earning periods and effectively wipe out annual earnings and leave the affected community with few other means from which to draw income (Calgaro and Lloyd, 2008; Calgaro et al., 2009b). Strong market demand generated from Europe fills Khao Lak resorts for six months of the year from late October to March. This provides the community with the bulk of its yearly earnings that are used to sustain them throughout the low season (April to mid-October), when occupancy rates average between 20 to 30 percent\textsuperscript{17,56,71}. Khao Lak’s high seasonality can be attributed to two closely linked factors. First, Khao Lak has a very heavy wet season. Average monthly rainfalls in the low season range between 342 and 462mm (Weather2Travel.com, 2009). To compare, average monthly wet season rainfalls in Patong and Phi Phi Don are considerably less, ranging between 334-398mm for Phuket and 259 to 373mm for Phi Phi Don (Weather2Travel.com,
Second, Khao Lak’s client base consists mainly of German and Swedish families and retirees looking for sun-filled getaways during the northern hemisphere’s winter. Khao Lak’s wet and humid low season cannot compete with the coinciding warm northern hemisphere summer. This leaves Khao Lak very vulnerable to shocks, like the tsunami, that coincide with peak earning periods, as these effectively wipe out annual earnings, and leave the affected community with few other means from which to draw income. With such low visitor numbers through the low season, the majority of businesses (with the exception of larger accommodation providers) choose to close for the low season, but the choice is a forced one. One participant summed up the seasonal business dilemma in Khao Lak by exclaiming “How can I survive on low season [business]? [The] town is like a ghost-town it’s so quiet.”

The choice to close down business operations for six months due to low tourist and capital flows highlights the impact tourist product and travel time preferences that are shaped by weather patterns in both tourist home countries and in the destinations have on destination activity, destination business earning potential, and their subsequent vulnerability to shocks and stressors. Referring back to the DSF (Figure 6.1) and the element of time (see Section 3.4.5.3), this finding also reinforces the importance of recognising how contextualised rhythms of time and the use of that time influences destination vulnerability (Hall and Page, 2002). A high dependence on six months of business for yearly earnings also influences the nature of the Khao Lak tourism product. The type of product and experience offered in Khao Lak is generally of a higher standard, and costs more, than those found in other Thai destinations, to maximise profits needed to sustain a business throughout the low season. However, as argued in Section 2.3, vulnerability and resilience levels are not uniform within populations (Cannon, 2008; Fulu, 2007). In Khao Lak, support businesses, such as grocers, internet and copy shops, and basic restaurants, proved less vulnerable to high seasonality levels than pure tourism services, because they service the needs of the local population year-round.

A high dependence on niche markets and a narrow client base also increases vulnerability levels (Shaw and Williams, 2004). As a destination in the early stages of development, Khao Lak lacks the strong market presence of its highly branded and popular neighbouring destinations of Patong and Phi Phi Don. When a shock or stressors occurs there are fewer tourists to take the place of lost markets, particularly when the image is tainted by negativity. Events in key supply markets also pose a threat to tourist flows. For example, prolonged economic downturns, such as the 2008/2009 recession, have the propensity to affect tourist
flows from Europe, which could further compound Khao Lak’s vulnerability. Recognising this market-based weakness, medium and larger accommodation providers in Khao Lak are diversifying their low season services to capture the conference market, whilst other are turning their attention to Asian and domestic markets who do not covert constant sunshine\textsuperscript{30,55, 71}.

The tourism seasons in Phi Phi Don and Patong are more varied, as is their market base, both of which proved instrumental in aiding their recoveries. As noted in Sections 4.3. and 4.3.2, Patong and Phi Phi Don attract an array of tourists from different countries, who choose to travel at different times of the year. Accordingly, seasonal flows are less of a problem in both destinations. Greater flows of business throughout the year decreases dependence on securing high capital flows at one particular time and in doing so decreases their vulnerability to shocks that may coincide with peak earning seasons.

Phi Phi Don’s high season (between November and April) is highly Eurocentric; Scandinavians account for 60 percent of the foreign tourists whilst the French, Italians, Germans, and British make up the remaining 40 percent\textsuperscript{203,211,232,241}. Business is excellent for these six months\textsuperscript{226,248}. The cheaper low season (May to October) is dominated by the Asian market (with a growing demand coming from China and Korea), Australia (over the winter break), and Israel, all of which are looking for bargains as prices drop by as much as 50 percent\textsuperscript{203,211,232,248,251}. The July/August period also attracts bargain hunters from the European summer market, and divers, with diving conditions being optimal at this time of year\textsuperscript{227}. Since the tsunami, the seasonal flows have changed and evened out further\textsuperscript{233}. Due to a reduced amount of accommodation available on the island post-tsunami, demand often outweighs room supply, leading to a more even flow of tourists throughout the year\textsuperscript{233}.

Patong has three seasons which provide income throughout the year: „peak season” (November to January), „high season” (February to April), and „green (low) season” (May to October). Peak and high season tourism flows are defined by European charter flight schedules: the first charter flight arrives on 1\textsuperscript{st} November and the last one leaves at the end of March\textsuperscript{109}. This is another example of how the travel preferences of tour operators and tourists directly dictate tourist flows (see also Hall and Page, 2002). The enduring strong demand from Europe sustains average occupancy rates of 80 – 90 percent\textsuperscript{109,169}. The market for the low season shifts to Australians, Dutch, and the Asia market, including domestic business, all of which are looking for bargains and low prices\textsuperscript{109}. Although occupancy rates are lower during the low season (ranging between 50-60 percent), the level of income
generated throughout the low season is considered to be adequate to meet costs and achieve profits for most businesses\textsuperscript{109}. The exception to this general rule are some of the foreign bar owners in Patong, who are most likely to fail in managing their finances to cover the whole year\textsuperscript{141}. According to one foreign bar owner, this is due to the types of people that buy and run the bars located along Bangla Road (Patong’s nightlife hub). Many of the small bars along Bangla Road are owned by young male expatriates from Europe (England and Sweden in particular) and Australia who are attracted by the lure of cheap alcohol, girls, and an easy life\textsuperscript{141}. Many of the young bar owners drink their profits and do not plan for the low season. After three to four months, they run out of money, and therefore need to sell their bars off again very cheaply. This mismanagement of profits means that there is a high turnover, but there are always new businesses to replace them. At first glance, it may be argued that bar mismanagement heightens their vulnerability. But this is disputed by a successful bar owner I interviewed, who observed that these young men just return to their home countries and former occupations\textsuperscript{141}. The availability of this alternate livelihood option reduces their economic sensitivity to business failures brought about by mismanagement, shocks or compounding stressors.

6.2.2 Access to markets and types of clientele

As noted in Sections 2.4 and 3.4.5.1, a destination’s vulnerability is heavily influenced by business marketing strategies, tour agent and operator preferences and marketing skills, and the type of clientele they attract (Ichinosawa, 2006; Knox and Marston, 2004; McKercher, 1999). Access to financial capital is a key factor in facilitating a swift recovery following a disaster, a point that is discussed fully in Sections 6.3, 7.2.2, 7.3.1.1, and 7.3.1.2. Equally important is (re)gaining access to a constant flow of tourists to fill the resorts and help pay off newly accrued financial debt once the rebuilding is complete. Marketing strategies of destination businesses therefore directly influence its capacity to cope, respond, and adapt to shocks. As noted in the previous section, Khao Lak’s smaller market base leaves it more sensitive to shocks or stressors than Phi Phi Don or Patong, both of which have more varied markets and a more established brand and recognised brand to sell. However, individual businesses do have the power to influence their own vulnerability levels based on their choice of marketing tools, the strength of their professional business networks (particularly with market suppliers), and client types they attract (Calgaro and Lloyd, 2008; Calgaro et al., 2009b). Findings across all three destinations reveal both the advantages and disadvantages of different types of marketing strategies in the context of vulnerability to shocks like the 2004 tsunami.
Chapter 6

Smaller accommodation providers in Khao Lak and Patong source the majority of their clients (individual travellers) through guidebooks, internet sites, walk-ins, repeat business, and personal recommendations\(^{36,56,59,153,187}\). They also benefit indirectly from the international tour operator coverage of their larger counterparts, which creates destination awareness and interest from those looking for cheaper alternatives\(^{59}\). Contracts with travel agents are a rarity\(^{56,59}\). For medium and larger resorts, the core client base comes from package tour guests sourced largely through the brochures and promotional efforts of large international tour operators. European tour operators such as TUI AG (Touristik Union International Aktiengesellschaft), Trans Orient, and LTU (Lufttransport-Unternehmen GmbH) (Germany), Fritidsresor and Apollo (Sweden), Star Tour (Denmark and Norway), Thomas Cook (Germany, Scandinavia and U.K.) and Thompson (U.K.) dominate Khao Lak\(^{17,18,20,23}\). Patong, however, benefits from European and Australian tour operator exposure sourced from companies such as My Travel and Apollo from Sweden, Thomas Cook (Germany, Scandinavia and U.K.), Dertur, TUI, LTU and Mayer and Mayer Reisen from Germany, and Creative Holidays, Thai Airways, Singapore Airlines Holidays, and Freestyle Holidays from Australia\(^{109,112,113,117,122,144}\). Patong also has a great reliance on charter flights from the UK, mainland Europe, and Australia operated by 11 different tour operators, including TUI and LTU (Phuketmagazine.com, 2009). As illustrated in Section 6.2.1, charter flights define the high and peak seasons in Patong\(^{109}\). Supplementary business is sourced from internet bookings, travel agencies in Bangkok, repeat guests, and word of mouth\(^{56,78,113,117,122,137,144}\). This group also uses large annual international tourism conventions, such as the Internationale Tourismus Börse (ITB) in Berlin, to promote their product to international tour operators\(^{18,78,80}\).

Such dependency on the marketing decisions of international companies, with their own agendas, leaves these larger accommodation providers with limited direct control over business flows\(^{23}\). This proved detrimental for Khao Lak in the 2005/2006 high season (the first high season after the disaster) when the majority of tour operators chose to divert much needed business to alternate destinations\(^{17,71}\). Consequently, larger resorts and reliant support businesses that were open and ready to receive guests, but suffered from huge reductions in clientele, little access to markets, and no control over tourism flows\(^{23}\). With limited tour operator support and inadequate marketing assistance from the TAT (see Section 7.3.1.4), these business owners used their long-established European marketing partnerships that had facilitated Khao Lak’s pre-tsunami boom, to help access core markets and attract guests back\(^{18,20,28}\). One Khao Lak family with multiple tourism businesses deliberately choose not to source business through tour operators and outside agents.
because they did not want to relinquish control over tourist and business flows. Instead, they rely on word of mouth and repeat business. From a marketing perspective, smaller bungalow and resort owners proved more resilient than their larger counterparts due their direct access to clientele through internet sites and word of mouth.

In Phi Phi Don, this lack of control over tourist flows, coupled with the added cost and hassle of remote advertising and fulfilling annual allocation agreements with tour operators, has caused businesses - large and small - to favour alternate marketing avenues such as personal referrals, websites, and walk-ins. One hotel owner explained that:

During the high season, I don't need to do sales calls. They all come to me. It's like the property sells by itself so I don't need to do more for the high season. During the low season, I have to do a little bit.

A member of one of the dominant landowner families on Phi Phi Don reasoned that having allocations with international tour operators “creates more trouble than it is worth for the hotel business” because tour operators demand payment in advance for their bookings, and restrict the selling freedom of the hotel.

One destination sub-sector that does not possess direct power over tourist flow numbers are support businesses and service providers such as restaurants, souvenir shops, tailor and health spa facilities, taxi services, local tour guiding businesses, beach activity providers, and scuba diving companies. This group is highly dependent on the marketing success of accommodation providers to attract clientele. This is particularly the case for two groups: tailors, and beach activity providers (beach masseurs, kayak and paragliding operators, long-tail boat operators). Tailors are highly dependent on high-end clientele and resort referrals, whilst beach vendors and activity providers solely rely on the successes of accommodation providers, travel agencies, and destination marketers to attract business and sustain tourist volumes.

Marketing aside, repeat clientele can be a valuable stabiliser for destinations, particularly for those destinations with niche markets like Khao Lak (Calgaro and Lloyd, 2008). Khao Lak’s focus on building close relationships with clients has created a strong repeat client base, ranging from 20 percent for larger resorts to 80 percent for some smaller properties. Seen more as old friends and "family" than clients, the loyalty and patronage of this large repeat-client base has brought stability and growth to Khao Lak throughout its developmental history, and this continued to boost Khao Lak’s recovery and its resilience to shocks and stressors. This solid market-base is typified by German and Swedish patrons and
the close-knit diving community that has developed over the years\textsuperscript{19,20,70,86}. This enduring and personal relationship between Khao Lak operators and their international guests, and the emotional and business stability it provides to the host business community, is captured in the words of a member of one of Khao Lak’s original families:

Khao Lak can give something to the guests. Not the same as Phuket and Krabi. Most of the hotel have repeat guests… They come to visit us again after the tsunami in 2005. Some of them stay in Phuket, drive the car for just looking… So this is the symbol of Khao Lak [as a] destination\textsuperscript{78}.  

Significant numbers of divers and their families returned to Khao Lak as early as February 2005 to lend support, while some businesses reported stronger business returns after the disaster due to the sudden influx of repeat clients accompanied by their family and friends\textsuperscript{19,20,55,70,76,86}. Access to these types of personalised relationships where guests become more like friends (social capital) has further strengthened the community’s resilience against external shocks. Their firm presence did more than raise much needed capital following the tsunami. They gave businesses renewed strength and resolve to rebuild, they sent positive messages back home to counter negative reports (all of which were not true), and increased visitor numbers by returning to Khao Lak with family and friends\textsuperscript{19,20,51,55,70,78,86,97}. The marketing and business benefits of these strong scaled relationships between localised operators and international guests gives further credence to the worth and power of seeing scaled actions as being founded upon relationships as argued in Section 3.4.5.2. These relational networks can be controlled (to a point, like any two-way relationship), utilised, and mobilised to help fill the resorts in good times and called upon for extra financial and emotional support during times of hardship.

Patong and Phi Phi Don also benefit from repeat business but their reliance on repeat clients is much lower due to their wider market-bases. Repeat business levels of 20 percent supplement steady tourist flows to Phi Phi Don, whilst Patong repeat levels range between 10 to 15 percent for larger businesses and reaching as high as 60 percent for smaller guesthouses and hotels\textsuperscript{122,187,203,29,236,243,257,262}. However, there is an economic downside to attracting large numbers of repeat-clients. Repeat business limits revenue for some sub-sectors of the destination business-base\textsuperscript{55,109}, a Patong travel agent and small hotel owner advised that repeaters do not spend as much in a destination and do not go on as many tours because they have done them before\textsuperscript{109}. Furthermore, hotels are more hesitant to raise room rates just in case repeat clients are deterred\textsuperscript{55}. But for Khao Lak business operators and workers, the advantages of high repeat business levels far outweigh the disadvantages\textsuperscript{55}. 

175
6.2.3  Destination image sensitivity: exploiting opportunity amongst the despair

As discussed in Section 2.4.1, the fragility of destination images to negative perceptions of risk has long been recognised as a major contributing factor to destination vulnerability (Huan et al., 2004; Mansfeld, 1999; Richter and Waugh, 1986; Sönmez and Graefe, 1998). This proved true for all three destinations in the short-term. The incessant negative images and stories of devastation (some true and others not) re-branded the Andaman Coastal destinations as a disaster zone, causing tourists to drop significantly in 2005\(^{59,113}\) (Birkland et al., 2006b). Negative and cautionary reports came from the international media and supply country travel warnings released by foreign governments\(^{37,59,71,78,80,86,113,121,146,154}\) (Sharpley, 2005). The drop in tourist flow numbers as a result of the negative media coverage correlates with Kasperson et al’s (1988) Social Amplification of Risk Framework introduced in Section 2.3. Risk perceptions and risk-induced stigmatisation of the Andaman Region as a disaster zone was amplified through media channels (Ichinosawa, 2006), with the knock-on effects rippling out across multiple scales to affect tour operator promotion choices (Section 6.2.2) and tourist flows. As noted in Section 4.7, Asian markets were particularly deterred by culturally-laden ghost superstitions\(^{71}\) (Chuenpagdee, 2005; Cohen, 2008; Handmer et al., 2007; Henderson, 2007a; Vongs, 2006). The run-up height markers dotted along beachfront and roads and evacuation route maps communities of Khao Lak and Phi Phi Don serve as constant reminders to the communities and their visitors of the disaster event (Figure 6.2)\(^{7,20,71}\). However, these same images and stories broadcast around the world also had positive long-term benefits.

The free worldwide media exposure and heightened curiosity in the disaster and its legacy opened up new markets in all three destinations, and helped stimulate greater long-term tourist flows\(^{20,55,56,70,86,109,132,157,158,193}\). Patong was the first to experience greater interest as a result of the tsunami. Patong benefited directly from the diversion of tourist business away from its severely damaged neighbouring destinations of Phi Phi Don and Khao Lak, which were experiencing slower recoveries\(^{141,154,157}\). This was not the first time that Patong had benefited from another destination’s misfortune. Patong was also the recipient of greater tourist numbers following the Bali bombings in 2001 and 2005, as was Phi Phi Don\(^{141,154,210,241}\). Since the tsunami, Finnish, Norwegian, and American tourists have joined Khao Lak’s traditionally dominant markets of Germany and Sweden, Switzerland, and Austria\(^{55,56,71,86}\). Many of these new markets originate from young volunteers who encouraged family and friends to visit, a process that has a multiplying effect\(^{55}\).
Curiosity about the disaster and its legacy has also attracted new visitors, who want to see the police boat that washed 1.5 kilometres inland (shown in Figure 4.18 in Section 4.6) and look at tsunami-damaged hotels along the beachfront that are yet to be removed or renovated\textsuperscript{28,51,69,70,86}. Some savvy foreign businesses in Khao Lak and Phi Phi Don used this additional exposure to their advantage by highlighting their plight in their home countries which, in turn, generated much interest in their business and the destinations. A German restaurant owner in Khao Lak recounts his experiences with the media:

\begin{quote}
Now after the tsunami, I have never seen business like this, I have never had [this] before. It was crazy this year [2006/2007 season]. OK in November [2006] a German TV team came here and they sent a [report] before Christmas [to] the German TV. You can see this in all the European lands. Like Switzerland, Austria\textsuperscript{65}.
\end{quote}

Following this documentary film, the restaurant was fully booked all season, creating more business than the owner could cater for. Another Danish restaurant and business owner based on Phi Phi Don used the incessant international media to his advantage, highlighting his need for business and money to rebuild\textsuperscript{248}. The tactic of using the international media as a tool for gaining funding support and greater market share was also successfully employed by the founder of the Ecotourism Training Centre\textsuperscript{22} in Khao Lak (see Section 7.3.3 in Chapter
The successful actions of these individuals clearly demonstrates the power and tactical advantage of using strategic scaled actions to gain access to resources needed to fulfil their goals (Adams, 1996; Agnew, 1997; Leitner, 1997). Reflecting back to insights deduced from relational scale (Section 3.4.5.2), social actors that recognise this tactical advantage and exploit all opportunities available to them experience greater levels of success in securing the resources they need (Marston, 2000).

6.2.4 Destination developmental histories and destination positioning

Differences in damage levels (as outlined in Chapters 4 and 5), seasonality, and the size and type of markets that each destination attracts, all proved to be important determinants of destination vulnerability when comparing pre- and post-tsunami conditions across Patong, Phi Phi Don, and Khao Lak. Findings from the comparative DVA also establishes a strong correlations between a destination’s developmental history and its vulnerability and resilience to shocks and stressors. Empirical evidence from Khao Lak, Patong, and Phi Phi Don clearly shows that the stage of a destination’s development not only determines the strength of a destination’s brand, market position, and its consequent capacity to attract a broad range of markets, but also influences the availability of financial resources, business stability, and the strength of supporting industry bodies and governance structures. In doing so, this thesis demonstrates that contextualised differences experienced in places and influenced by time and scale as shown in the DSF (Figure 6.1) greatly influence vulnerability levels across and within populations.

Patong’s resilience and its ability to recover so quickly could on the surface be wholly attributed to the minimal physical damage it sustained from the tsunami. Patong was fortunate to only lose approximately 15 percent of its total room capacity, compared to Phi Phi Don and Khao Lak who sustained heavy losses and took longer to recover. Yet closer inspection reveals that Patong’s swift recovery from the tsunami is directly related to Patong’s long and strong developmental history that spans 30 years. Patong is the oldest and most established of the three destinations, starting from humble beginnings in the 1970s. Over this time Patong businesses have built up a solid profit and credit base, creating a stable and highly profitable tourism business sector with excellent investment viability. Such conditions facilitated easier access to the financial credit needed to rebuild (see Section 6.3 for more detail) This financial stability and fortitude is complemented by Patong’s strong international presence as a destination. Patong’s enduring presence on the international tourism scene over the last 30 years, coupled with strong business marketing campaigns, has created a solid and broad market base and
strong international branding that has made Patong the second largest and most lucrative
destination in Thailand, beaten only by the capital, Bangkok (Birkland et al., 2006a). This
strong international branding and business marketing experience enabled Patong to draw
upon a diverse set of markets, even in times of crisis, to stabilise tourist flows. Underpinning Patong’s destination branding and the strength of the destination’s business community are its strong and powerful industry associations, who use their power and political connections to ensure that the business interests of Patong’s tourism community are considered at the highest levels of government and that they are fulfilled (see Section 6.6.3.1). Patong’s consequent success in attracting business investment and tourists alike has facilitated an effective recovery.

Like Patong, Phi Phi Don’s resilience and its capacity to swiftly respond to the disaster is a product of its longer development history, and the stability and wealth of its tourism community grown over the last 20 years. The tsunami had a large impact on both Phi Phi Don and Khao Lak in terms of lives lost and destruction levels; as stated in Section 4.6, Phi Phi Don lost 70 percent of its built environment compared to Khao Lak’s 90 percent. But this is where the similarities end. Phi Phi has for the most part rebuilt, where possible (see Section 7.3.1.3 in Chapter 7 for details on planning delays). Like Patong, Phi Phi Don has built a strong market over the past 20 years and benefits from an assortment of business from backpackers, divers, and the more mainstream individual tourist looking for an island paradise. This strong market base helped the businesses get back on their feet when the many volunteers left in the latter parts of 2005, after the basic needs of the community had been met. The high demand for Phi Phi Don among Scandinavians, Australians, Israelis, French, Italian, and German tourists ensured high demand and adequate tourist flows, pre-and post-tsunami. Furthermore, the island’s longer developmental history meant that many businesses were well-established, with strong business and profit levels prior to the tsunami. The temporal rhythms (represented in the DSF as time) dictating the evolution and stability of both Patong and Phi Phi Don as destinations (places where vulnerability is experienced), therefore, greatly increased their capacity to effectively access a wide range of resources and markets (sourced from local, national, and international scales), which in turn, increased their resilience to shocks.

There is one marked difference between Phi Phi Don and Patong; Phi Phi Don’s collective strength is based upon the wealth and connections of the five dominant families who own much of private land on Phi Phi Don (see Sections 6.3.2.2 and 6.5.1) instead of relying on tourism representative groups (see Section 6.6.3). This difference does not detract from the
resilience of either destination. Instead it demonstrates the importance of context in determining destination vulnerability levels. Identifying individual factors is not enough to understand destination vulnerability; it is the way in which these various factors combine in a given period of time and place that is most important in determining differential vulnerability and resilience levels within and across destinations.

Having such a strong destination branding, however, is a double-edged sword, resulting in both favourable and unfavourable consequences for destination vulnerability. The high marketability of both Patong and Phi Phi Don, coupled with their solid investment reputation, underpinned their recoveries and makes them, as destinations, more resilient to shocks. Those that are able to access the resources they need to survive the shocks benefit in the long term from the strong selling power of the destinations’ international reputations. This tourist pull factor makes Patong and Phi Phi Don good investments despite the impact shocks may have on the destinations in the short term. However, a look under the perfect destination veneer suggests that individual business owners and their workers remain vulnerable to shocks. The downsize of such high demand means that those business owners who could not access resources quick enough were forced to leave their businesses behind to start up somewhere else, where possible (Rigg et al., 2008). The newly vacated land and shop space was quickly filled by new businesses looking to take advantage of the opportunity afforded to them, and cash in on the popularity of the destinations and their famous brandings. High demand also pushes up rental prices and limit rental options for micro and smaller businesses. Out of desperation some tenants entered into informal and non-binding rental agreements, leaving them vulnerable to immediate eviction or extreme rental hikes. Price rises continued after the tsunami with some landowners raising rents to cover reconstruction costs. These individuals are vulnerable while the destination recovers without them. As argued in Sections 2.3 and 6.2.1, these findings again prove that vulnerability is not uniform within populations (Cannon, 2008; Fulu, 2007).

Being in the early stages of development, Khao Lak’s destination host community proved more vulnerable to stresses and shocks than its older and more developed neighbours of Patong and Phi Phi Don. Khao Lak’s recovery following the disaster was greatly hampered by problems in securing financial capital (see Section 6.3) and attracting substantial and sustained market share. Khao Lak’s recent development as an international tourism destination meant that many businesses were relatively new, with some in the final stages of completion when the tsunami occurred. Accordingly, business owners here were least likely to have access to savings or large profits, as most of the money had been
invested and reinvested in the building of the business\textsuperscript{36,55,76,77,80,83,86} (see Section 6.3). The positive influence of business developmental histories on resilience levels is also evident within the Khao Lak destination area.

There were also substantial differences between the response and rebuilding capacities of businesses in the more established village of Nang Thong, and the younger village of Bang Niang (as shown in Figure 4.10 in Section 4.3.3). Business recovery in Nang Thong was swifter and more advanced than in Bang Niang. Here development is more established and business owners are more likely to have more than one business\textsuperscript{17,18,28,55,83}. The strengthening of business portfolios and the establishment of strong credit histories enabled faster access to financial capital in the aftermath of the tsunami\textsuperscript{18,55,76}. Being home to many of the original inhabitants, Nang Thong also benefits from stronger family and social networks than Bang Niang, which consists of newer inhabitants\textsuperscript{18,28,29,35,56,78}, many of which have come into the area from other parts of Thailand and other countries, including Western European expatriates who came to Khao Lak as visitors and never left (see Section 6.5.2).

Access to finances depends upon a household’s capacity to respond, whereas access to market share is a destination-wide challenge that is, in part, outside the control of individual and collective destination efforts. As discussed in Sections 6.2.1 and 6.2.2, Khao Lak benefits from a loyal yet small market base, and its infancy as a destination means that tourism flows are concentrated on a few key European markets, making it more vulnerable to any stressor or shock that may change tourist patterns, including market trends and international operator preferences. Local industry association membership has boosted marketing reach and facilitated greater access to financial capital among some business sub-groups, but smaller businesses and workers remain ill-represented and therefore more vulnerable (see Section 6.6.3).

The sluggishness of Khao Lak’s recovery, particularly in Bang Niang, Khuk Khak, and Laem Pakarang (refer back to Figure 4.10 in Section 4.3.3), had a negative knock-on effect on tourism flows; it hindered Khao Lak’s success in attracting tourists back. Rebuilding delays in Bang Niang, Khuk Khak, and Laem Pakarang left an “incomplete” destination landscape, which lessened its international touristic appeal, whilst ongoing construction noise has caused tourists staying in neighbouring properties to leave prematurely in frustration\textsuperscript{26,51,56,59,75}. One foreign Bang Niang business owner explained how these delays were affecting his business:
Many tourists were here [pre-tsunami]. It's a nice area. But you can see around you now that it is not so nice. People do not want to come now when Khao Lak is unfinished ... many people stay short time. I'm losing business.35

As of September 2007, Bang Niang and Khuk Khak were littered with vacant lots, abandoned structures, and „for sale” signs, while most of Laem Pakarang’s larger resorts were left dormant until 2007 when construction began again (shown in Figure 6.3). Prior to the tsunami, Bang Niang was rivalling Nang Thong for most popular centre, due to the laid-back atmosphere emanating from the many small bungalows and restaurants that were scattered throughout the greenery. As of September 2007, this atmosphere was still missing, causing it to feel very much like a „ghost town” instead of the tropical getaway it once was59,75. This harmed Khao Lak’s destination image and was lowering investor confidence, causing a catch-22 situationB; the landscape cannot recover without strong investment but investors are hesitant to invest in an uncertain business venture causing some to wait25,B. Low tourist flows to Bang Niang have caused some new businesses to close, demonstrating high levels of business vulnerability (field diary, January and September 2007). Yet mirroring the experiences in Patong and Phi Phi Don, these closures, along with a greater access to cheap credit, also opened up new opportunities for the surviving businesses (predominantly larger 4 and 5 star hotels) to expand their pre-tsunami business ventures36,96.

This new place-based sensitivity in Khao Lak brought on by its slow recovery (acknowledged in the red-outlined box in system adaptiveness dimension in the DSF) again highlights the important role time (represented in blue in Figure 6.1) plays in determining vulnerability levels as outlined in Section 3.4.5.3. The vulnerability of business activity in particular areas of Khao Lak’s vulnerability rose after the tsunami because of the negative knock-on effects of a slow recovery. Referring back to Figure 6.1 and the DSF, this negative feedback relationship between the negative consequences of a slow recovery and their impact on future sensitivity levels is portrayed in the DSF by the red feedback arrows. However, planning delays do not automatically result the failure of destination business ventures and low tourist numbers. Phi Phi Don has also experienced delays in the rebuilding process (explained in-depth in Section 7.3.1.3) but increased demand from old and new markets cancelled out the possible negative effects. Reaffirming observations made earlier in this section, this example again shows that identifying factors is not enough to understand destination vulnerability; it is the way in which these various factors combine in a given period of time and place that is most important in determining differential vulnerability and resilience levels within and across destinations.
6.3 Access to economic capital

The DSF shown in Figure 6.1 lists many interlinked factors that determine destination vulnerability and resilience levels. However, two factors are fundamental to a destination’s existence. The first is the ability to create and maintain an attractive tourist product that a broad range of tourists are willing to purchase over a long period of time. Sections 6.2.2 and 6.2.4 have demonstrated how important this is in influencing destination sensitivity levels to shocks and stressors. The second (listed in the sensitivity dimension of the DSF in Figure 6.1) is access to the economic capital needed to build and sustain a business, which in turn creates income and jobs. The findings from the comparative DVA of support this claim; access to economic capital proved to be the most important factor in determining the ability of businesses in Patong, Phi Phi Don and Khao Lak to rebuild their livelihoods (ILO, 2006).

Taking a macro destination-based perspective, Patong and Phi Phi Don proved most successful in accessing the financial resources needed to withstand and cope with the onset of the tsunami. As discussed in Section 6.2.4, Patong and Phi Phi Don’s capacity to quickly access economic resources was directly related to the well-established and stable nature of
the tourism business ventures found in both destinations. Savings and credit histories in both destinations were solid, having been built up over many years from multiple and ever-expanding tourism business enterprises. This created a strong financial base for tourism stakeholders to use to finance the rebuilding of businesses and cover costs when tourism numbers were down. This enduring stability also gave investors and banks confidence in the future longevity of tourism business activity in both Patong and Phi Phi, prompting banks to be more willing to lend out to affected businesses. Furthermore, Patong and Phi Phi businesses and households were less likely to be servicing large debt, due to the more established nature of the businesses and in Phi Phi Don’s case Muslim religious beliefs that prohibit the payment of interest on credit (see Section 6.3.2.1 for more detail).

Khao Lak businesses, however, struggled to access the finances needed to rebuild following the tsunami and remain financially viable whilst tourist numbers were low. As noted in Section 6.2.4, Khao Lak is a new destination, and therefore, generally lacks the financial stability and solid financial base (accrued from sustained profits and reinvestment) found in Patong and Phi Phi Don. Khao Lak business owners were also most likely to be servicing new debts due to the surge of development and growth that had occurred in the lead-up to the tsunami. There was one common trait amongst all those interviewed in Patong, Phi Phi Don, and Khao Lak, which was a desire and pride in their abilities to help themselves and be financially self-sufficient. But this overview only tells part of the story.

Access to economic resources is dictated largely by the financial circumstances of households and businesses. As discussed in Section 3.4.3.2, households and businesses derive economic capital from a range of sources including livelihood portfolios, liquid and fixed assets, credit institutions, and insurance providers, and their access is influenced by employment opportunities, business stability, credit histories, the availability of welfare safety nets in times of unemployment, and underlying power systems that regulate the coupled human-environment system (see Section 6.6 for the influences of power systems on resource access). Findings from the comparative DSF revealed considerable differences in the success households and businesses experienced in accessing enough financial resources to enable them to recover. And these varying success rates were largely due to differences in livelihood portfolios, ownership patterns, size, and age of businesses. The following section (Section 6.3.1) examines the linkages between livelihood portfolios and
vulnerability. The discussion then moves on to chart the varying success different groups across the Patong, Phi Ph Don, and Khao Lak host destination communities (Thai businesses in Section 6.3.2, foreign businesses in Section 6.3.3, and employees in Section 6.3.4) had in accessing the different types of economic capital listed above and examines how this affected their capacity to withstand, cope, and recover from the tsunami. The final section on economic capital, Section 6.3.5, focuses on insurance levels and the contextualised factors that influenced peoples insurance choices pre- and post-tsunami.

6.3.1 Links between livelihood portfolios and destination vulnerability
As outlined in Section 2.4.1, a high dependence on tourism (or any single livelihood source) leaves the host destination community very vulnerable to shocks (Baker and Coulter, 2007; Handmer and Choong, 2006; Moreno and Becken, 2009; Nyaupane and Chhetri, 2009; Ritchie, 2004; Tervo, 2008). To combat this, livelihood diversification is recommended as a key strategy in reducing vulnerability and building resilience against a wide range of shocks (Moser et al., 2001; Turner et al., 2003). All three destination communities rely heavily on tourism, thus making them sensitive to shocks. Yet the comparative DVA reveals that differential vulnerability levels within and across each community were caused by variations in livelihood portfolios and business ownership patterns, making livelihood portfolios a key determinant of differential vulnerability and resilience.

Khao Lak and Phi Phi Don are heavily dependent on tourism income for two reasons. First, land resources are scarce and livelihood options are limited. Before the introduction of tourism, Khao Lak inhabitants relied on a combination of rubber and fruit plantations, subsistence fishing and farming, and shrimp farming [17,20,41,69,83]. Livelihood choices on Phi Phi Don were confined to coconut plantations, and subsistence fishing and farming [237,252,273,278]. Phi Phi Don’s isolation from the mainland further limits livelihood options. Tourism created a plethora of new opportunities for people in both communities to start their own businesses, opened up new markets for local produce, and created thousands of new jobs, causing high levels of migration into the destinations [18,20,26,45,71,203,237,266,267]. Opportunities include those directly related with the tourism industry (accommodation and support businesses, such as restaurants, tour operators, guides, souvenir shops, and tailors) and suppliers of local goods, including fish, meat, vegetables, fruit, and building supplies [22,23,64]. Second, given the profitability of tourism operations, there was no economic incentives to diversify prior to the tsunami, when risk levels were considered low (see Section 6.3.5). In the words of a Thai resort owner in Khao Lak, “In this area, if you are not involved in tourism, you cannot earn much money” [58].
Furthermore, alternate income sources do not generate enough income to support the needs of the household. Another Thai resort owner in Khao Lak explains that “before the tsunami, all [tourism] businesses [earn] very good money...They [do] not need to make more”\textsuperscript{25}. Consequently, these alternate sources are only used to supplement tourism earning, particularly during the low season\textsuperscript{19,26,95,99}.

Patong’s tourism business community does not suffer from isolation or limited livelihood opportunities; it is an integral component of Phuket’s thriving economy, which generates the second highest per capita income of any other province outside Bangkok (Partnership of Phuket Agencies, 2007). But the inclusion of alternative non-tourism businesses in livelihood portfolios does not make financial sense in Patong. Strong and constant financial benefits from high tourism business demand and strong profits outweigh the risk of shocks to tourist flows\textsuperscript{106,112,146}. Alternative livelihoods in coconut-derived products, fishing, and rubber plantation are available to the populace but prove less attractive due to lower profit margins\textsuperscript{45}. But a high level of dependency on tourism does not automatically make all destination-based stakeholders vulnerable to shocks and stressors that negatively affect tourist flows; the nature and make-up of a household’s livelihood portfolio greatly influences its financial options and economic sensitivity.

In keeping with the assertions of Moser et al. (2001) and Turner et al. (2003), the findings from all three destinations show that those with a diversified livelihood portfolio (particularly those based in alternate locations) were most resilient to the tsunami. Financial resources (earnings and collateral) from unaffected alternate business can be used to secure additional credit needed for rebuilding, pay staff, and supplement earnings if profits are temporarily low\textsuperscript{127,132}. Additional businesses can also be sources of much needed equipment to meet short-term needs\textsuperscript{226,245,278}. Those with one business are susceptible to losing everything when shocks occur. Empirical evidence from Patong suggest that the majority of business owners in Patong have at least two businesses, which reduces the reliance on one income source and can enhance resilience levels\textsuperscript{132,133,140,143,149,151,162,168,171,183}. In Khao Lak, 72 percent of business owners or co-owners interviewed across the spectrum of business types have more than one business (Calgaro et al., 2009b), whilst in Phi Phi multiple business ownership is most prevalent amongst the five main landowners, namely the Cabana Group, Chao Koh Group, Phi Phi Hotel Group, the village headman and his relatives, and the PP Princess Resort conglomerate\textsuperscript{203,206,232,252,269,274,278}. Some smaller business owners have also been successful in diversifying livelihood options and income sources through land or rubber plantation ownership based on the mainland\textsuperscript{240,245,247}.
Common livelihood portfolios with more than one livelihood source fall into three broad categories: (i) those with a different tourism businesses located in Khao Lak, Patong, or Phi Phi respectively, (ii) those with additional businesses that are an expansion of the first business – another branch – either in the main destination or an alternate destination location in Thailand or abroad, and (iii) those where the second business is in an alternate sector, most commonly in agriculture (rubber tree farming, fruit orchard) and fishing. However, the capacity to redistribute resources among multiple businesses and the resilience of multifaceted livelihood portfolios depends on the type and location of the second business and the nature of the shock. For example, if tourist flows are interrupted in multiple Thai destinations by political unrest or health epidemics, such advantages of having multiple tourism businesses diversification could be lost. Some business owners in Patong and Phi Phi also had businesses in Khao Lak which were either destroyed physically by the tsunami, or business flows were too low after the tsunami to sustain business activity. Those households with substantial earnings from non-tourism activities are the most resilient to these types of stresses and shocks.

Adapting to the heightened perception of risk following the tsunami, some foreign business owners in Khao Lak, for example, have chosen to diversify their tourism portfolio by either building an alternate business in Khao Lak or choosing to relocate one of their businesses to another Thai destination. Such adaptations increase chances of resilient futures. But those that do not have alternative sources of income remain the most vulnerable to business interruptions caused by a shock. These include informal sector groups such as beach masseuses, beach vendors and employees. The following sections examines the different patterns of access and entitlements to resources that were found between small and larger businesses across Patong, Phi Phi Don, and Khao Lak, and those that were owned by Thais and foreigners, and analyses the impact these differential patterns of access had on their economic sensitivity to the tsunami.

6.3.2 Thai businesses

6.3.2.1 Micro and small business enterprises

Micro and small businesses were found to be more vulnerable than their larger counterparts due to hardships in accessing the necessary funds needed to rebuild. Like most business development in Thailand, most tourism investors in Patong, Phi Phi Don, and Khao Lak started with small ventures sourcing capital from family, savings, and profits to expand their businesses over time. However, there are considerable differences between micro and small businesses in each destination. Smaller businesses in
Patong are largely well-established and had long benefited from strong profits\textsuperscript{109,112,121,131,142}. However, there was a marked difference in recovery levels between those that had established credit histories with banks and those that had only used profits to expand. Those Patong businesses with established credit histories and solid business relationships with lenders were successful in securing bank loans to finance a swift recovery\textsuperscript{41,142,157}, whereas those without a credit history (most commonly beach masseuses and beach vendors with low start-up costs) could only secure a commercial loan if they had a guarantor, and most did not\textsuperscript{15,145,152,157,173,187}. The only other options available to small businesses were to either borrow money from friends and family or to take out private loans from money lenders at high interest rates (10 to 20 percent per day/week/months depending on the negotiated terms) that sometimes proved difficult to pay back\textsuperscript{116,121,145,152,201,M}.

Unlike their more established counterparts in Patong, micro and smaller businesses in Khao Lak did not have a history of strong profits and savings to spend on a recovery; all available capital was invested in the new ventures, leaving little money left to finance the recovery\textsuperscript{20,21,29,31,86}. Those with credit histories and pre-existing loans (24 percent of those interviewed) were left with high repayment commitments but little means to repay them\textsuperscript{20,21,31,76}. The majority, however, had no credit histories at all. Failing to secure (enough) credit, micro and small businesses relied upon meagre savings\textsuperscript{69,79}, pre-existing social networks (see Section 6.5.1), NGO assistance, and the kindness of donors (see Sections 7.2.4.2 and 7.3.3 in Chapter 7) to secure financial capital. Most small businesses accessed money from friends and family\textsuperscript{21,26,28,29,42,44,46,47,51,79}. Some were fortunate enough to gain additional financial support through social networks abroad, including newly formed friendships as a result of the disaster\textsuperscript{21,37,46,67}. This was particularly the case among those with a foreign expatriate partner who had the option to return to their countries of birth to work and raise additional money to support the rebuilding process\textsuperscript{21,67}.

Informal sources of capital such as pawning personal effects were used to secure smaller amounts for day-to-day expenses, whilst high interest loans from private creditors (commonly 20 percent accrued on a daily, weekly, or monthly basis) were used to fill longer term credit needs\textsuperscript{51}. Some smaller enterprises were able to secure funds through programs set up by Khao Lak Small and Medium Enterprises (SME) Group (see Section 6.6.3). The various avenues and multi-scaled relationships people simultaneously utilised to secure funding reinforces the important role multiple-scaled actions are in securing the resources stakeholders need to fulfil their objectives (Marston, 2000). Returning to the main messages of relational scale theory presented in Section 3.4.5.2, knowing what social pathways to use
and at what scale is crucial in bringing about favourable outcomes. Yet despite all forms of assistance and generosity, small business owners (both Thai and foreigners) were still struggling financially (as of September 2007) and were taking one day at a time. Comparative observations of business activity made in January and September 2007 revealed that new businesses that had opened for the 2006/2007 high season had already closed in that time (field diary, January and September 2007), a testament to the village’s heightened vulnerability.

Despite being a more established destination, micro and small businesses in Phi Phi Don faced different challenges in accessing finances needed for rebuilding. First, savings amongst this group was limited. The small business owners interviewed gave two reasons for this. Limited space on Phi Phi has raised living costs on the island, leaving less money available for savings and emergencies like the tsunami. Others attribute this to the characteristics of the island’s population:

Many people on the island did not save their money. If they have 1 million baht one day, it is gone the next. The local people are not educated and do not understand the importance of managing their money properly. They do not plan to the future - they only consider today. Many local villagers only think short term and do not have a long-term vision for tourism business on the island.

Second, many smaller enterprises were ineligible for loans. Religious beliefs of the dominant Muslim population living on Phi Phi Don deter them from paying interest (or Riba in Arabic), ruling out bank loans as a financial option. Furthermore, most small businesses rent shop space and land for their businesses from the five dominant landowners, and therefore do not have the land deeds needed to secure loans. That said, some did have pre-existing bank and private loans prior to the tsunami, making their recovery more difficult. Some had access to small loans based on assets located in other parts of Thailand, including the sale of houses, land, and businesses. But most have rebuilt slowly using limited savings, borrowed money from family and friends, and growing profits. However, sea gypsies living on the island were found to be the most financially vulnerable. They did not use banking facilities, preferring instead to keep cash with them, which was washed away when the tsunami struck. Much needed financial support therefore came from private lenders and NGOs (see Sections 7.2.2 and 7.3.3). These collective financial limitations slowed the recovery of micro and small businesses and left them financially weakened and ill-prepared for future shocks and emergencies.
6.3.2.2 Medium and large businesses

Medium and larger resorts and support businesses in all three destinations had the most success in accessing financial capital needed for financing their recovery, due to strong credit ratings, multiple investments, and strong profits accumulated over space and time\(^{18,23,25,55,80,112,137,203,211}\). These businesses were found to be more stable, better established, and more resilient, confirming the strong correlation between access and entitlements to resources and the developmental stage of businesses and destinations.

Like their smaller counterparts, larger businesses started from smaller beginnings and grew over time and space\(^{36,55,77}\), often branching out and opening further tourism ventures\(^{18}\). Loans were commonly used to expand business operations, creating strong credit histories\(^{18,20,25,36,55,78,278}\). Capital was also sourced from other business ventures to finance the rebuilding effort, be they tourism-related businesses or alternate ventures, often belonging to the family unit\(^{18,25,55,203,278}\). This was most prevalent in Patong and Phi Phi Don where substantial savings and investment portfolios were drawn upon to fund business reconstruction\(^{143,233,236,278}\). Strong credit histories also helped larger businesses secure special governmental soft loan provisions set up to assist the swift recovery of tourism businesses (see Section 7.3.1.1). However, delays in the finalisation of new government developmental plans for the redevelopment of Phi Phi stalled the rapid recovery of some of the larger developments on the island, a point that is discussed in-depth in Section 7.3.1.3.

6.3.3 Foreign businesses

Strict ownership laws limit foreign or "alien" ownership of land and business operations in Thailand\(^{28,59}\). Foreigners are not allowed to own land in Thailand\(^{59}\). However, business activity is possible if non-Thai stakeholders partner up with a Thai partner who holds a minimum 51 percent share\(^{28,158}\) (BOI, 2006). Accordingly, foreign business ventures involve either a silent or active Thai partner. Part-owned foreign ventures in the Patong, Khao Lak, and Phi Phi fall largely into three categories: (i) those owned in part by Western expatriates, (ii) those owned by South Asians, and (iii) larger four- and five-star properties owned by multi-national companies. The Western expatriate business owners and workers fall into two categories: (i) those that have married a Thai and started a joint family venture, and (ii) those that came to Thailand as tourists and chose to stay\(^{17,35,50,56,59,65,71,83,91,141,154,157,158,215,216,226,237,240,241,273}\). Businesses owned in part by western expatriates are generally small to medium sized businesses and are found in all three destinations. South Asian business owners and workers originate mostly from Nepal and Myanmar (referred to here as Burmese to match their self-identities) looking for a better
South Asians were most prevalent in Patong and to a lesser extent Khao Lak. Very few South Asians work on Phi Phi Don but one Phi Phi Don participant believes that there has been an increase of South Asian workers on the island since the tsunami. The Nepalese work mostly as tailors and in souvenir shops, whilst the Burmese work largely in construction, with some crossing over into tailoring to work with the Nepalese.

The larger four and five star multinational resort chains are a prominent feature of the Patong business scene, whilst their presence in Khao Lak is growing with a noticeable spurt following the tsunami, as smaller operators either could not or chose not to rebuild (Field diary, June 2005 and January 2007). Financing options for foreigners are limited by the fact that they cannot own land and therefore are not in possession of the land deeds needed to secure credit from banks. One advantage of not having access to loans (pre- and post-tsunami) was the lack of debt burden leaving them in a stronger financial position once the initial hurdle of securing initial financial stability was overcome using funds obtained from private loans from family, friends and donations. That said, financial accessibility varied markedly between the small and medium Western expatriate business owners, the large multinationals (found predominantly in Patong) and Nepalese and Burmese business ventures.

6.3.3.1 Small businesses owned in part by Western expatriates

Similar to their Thai counterparts, Western small businesses ventures were financed from savings, family loans, and the sale of assets accumulated in their home countries, with the profits being used to expand their businesses over time. Yet savings levels at the time of the tsunami did differ between Patong, Phi Phi and Khao Lak. Given Khao Lak's early stage of development, this practice limited the liquid capital availability in Khao Lak needed to finance the recovery. Businesses in Patong and Phi Phi fared somewhat better, particularly in Patong where profit earnings were more established and the physical damage was much lower than in Phi Phi and Khao Lak. Loans amongst Western expatriates were uncommon, with the exception of those businesses run by Thai-foreign couples where the Thai partner held land deeds. Compounding problems of access to liquid assets and loans was the timing of the disaster. With the event taking place on 26 December, substantial monetary takings earned on Christmas (the busiest and most lucrative day of the year) were washed away by the water; owners had not had the time to deposit the money in the bank. Those with savings used these to rebuild slowly. Those without sufficient financial capital often returned.
home to work, returning months later when sufficient funds had been saved\textsuperscript{50,59,158,262}. One foreign guesthouse owner also benefited from life insurance but this was an isolated case\textsuperscript{240}.

6.3.3.2 Nepalese business owners and Burmese workers

Nepalese business owners running support businesses (most notably tailors and souvenir shops) had also built up their businesses slowly from savings, family loans, and profits collected over time\textsuperscript{79,81,82,121,131}. But their financial recovery proved difficult. Savings and private loans from family members were used where possible to rebuild, whilst some were fortunate to receive financial support from old customers\textsuperscript{79,81,82,115}. As described in the previous section, loans were not an option due to them not having land deeds of the properties they rented\textsuperscript{79,81,82,115}. These support businesses faced another challenge; like other support businesses, they relied heavily on resorts to attract business to their destinations, leaving them with little control over tourist flows\textsuperscript{79} as noted earlier in Section 6.2.2.

Burmese workers make up a significant part of Patong’s and Khao Lak’s low-skilled tourism workforce, working as manual labourers, restaurant staff, tailor shop staff, and in menial resort jobs (Chit, 2005). The Burmese population are the most disadvantaged financially, socially, and politically (Robertson, 2007). All foreign workers, including the Burmese, are required by law to register with the Thai Ministry of Interior. Burmese workers are issued with temporary one-year residency ID cards (Tor/Ror 38/1) which allow them to stay in Thailand and to apply for work permits that are registered to one employer (costing USD100) (TAG, 2005). Those with work permits are entitled to health insurance, medical assistance, and protection under Thai labour laws (TAG, 2005). However, having their work permits registered and held by one employer means that any employee requests to change employers is at the discretion of the employer who holds the documents, which can lead to employee exploitation (see Section 6.5.2)\textsuperscript{81}.

The large majority of Burmese, however, are undocumented, causing them to be regularly targeted and harassed by the police for financial gain\textsuperscript{81,82,115}(IOM, 2007; Robertson, 2007). Those with valid permits are also routinely harassed, generating a constant circle of bribe money and corruption (see Section 6.5.2). Furthermore, the precarious legal status of most Burmese negates their access to banking services, causing them to hide their money in their houses (Robertson, 2007). The tsunami washed substantial amounts of savings away leaving the homeless Burmese with little means of survival (Robertson, 2007). Accordingly, their job security is low, their financial capital routinely depleted by regular bribe payouts, and
their basic rights non-existent\textsuperscript{81,115,158}. These combined factors left them extremely vulnerable to the tsunami and further abuse following the event (see Sections 6.5.2, 7.2.2 and 7.3.3). The collapse of the tourism industry caused some employers to abandon their migrant workers, making it difficult for them to replace work permits lost in the disaster (Oberoi, 2005). For others, the death of their employer made it impossible for them to prove their legal working status, leaving them vulnerable to deportation, while some found it difficult to break work contracts due to the increased demand for cheap manual labour for rebuilding efforts (Chit, 2005; ALTSEAN Burma, 2005).

6.3.3.3 Medium and large foreign businesses

Foreign owned medium sized businesses (found predominantly in Patong) used savings and capital sourced from alternate and unaffected businesses to help fund the recovery\textsuperscript{169}. Alternate businesses that were unaffected were used to secure additional credit needed for rebuilding, fund staff, and supplement profits from the recovered business when profits were temporarily low\textsuperscript{126,127,128}. Furthermore, expensive equipment such as dive equipment was redistributed among the centres to cover the immediate loss and need of the affected business\textsuperscript{127}. Larger foreign-owned hotels and resorts did not face such hardships, having the financial backing of offshore hotel chain corporations\textsuperscript{112,113}. The recovery of these businesses was funded by the international companies through the redistribution of funds from their multiple business concerns to the tsunami affected businesses and therefore proved the most resilient\textsuperscript{112,113}.

6.3.4 Access to social security and staff benefits

As outlined in Section 4.6, the destination communities of Patong, Khao Lak, and Phi Phi experienced both direct and indirect impacts from the tsunami. Businesses were destroyed, tourist flows dried up, jobs were lost, and the workforce needed to run newly opened businesses was severely depleted (UN, 2005; Handmer and Choong, 2006). While the previous sections (Sections 6.3.2 and 6.3.3) focused on the capacity for business owners to access financial capital for financing the rebuilding effort, this section explores the accessibility of social security nets to the thousands of workers that were left unemployed (UN, 2005).

The reduction of short-term job availability and opportunities following the tsunami generated great financial stress for newly retrenched employees causing many to seek short-term unemployment benefits through Thailand’s established Social Security Fund. In Thailand, the Social Security Act of 1990 (updated on 01 January 2004) entitles all full-time Thai employees (with the exception of bars and restaurants) to social security benefit in the event
of unemployment, injury or sickness, disability, maternity, death, child welfare, and pensions\textsuperscript{51,78,105,141,174} (Ministry of Labour, 1990). Under the Act an employee is entitled to receive 50 percent of their wages for 180 days in the event of job losses and includes entitlements to basic medical care (Ministry of Labour, 1990). The payment timeframe was extended to six months by the Royal Thai Government following the tsunami, to provide assistance to the thousands that had lost their jobs (Friedrich Ebert Stiftung, 2005). Contributions to the Social Security Fund are sourced from the government, the employer, and the employee, but the onus of responsibility of staff registration for the entitlements lies with the employer (Ministry of Labour, 1990). Additional financial assistance was made available through the Office of Labour’s „Social Fund for Tsunami Workers“, with 1,555 workers out of 1,600 receiving Fund contributions\textsuperscript{87}. However, evidence from Patong, Phi Phi Don, and Khao Lak shows that the disbursal of social security benefits is not universal, despite it being a legal mandate.

In Khao Lak, employees (excluding extended family members working in family businesses) were found to be covered by workers insurance, but amounts were minimal, necessitating alternative arrangements until jobs were restored\textsuperscript{25,35,55,56,78,80,96}. Some hotels paid staff full salaries during the closure periods because social security payments were considered too low to support a good standard of living\textsuperscript{35,80}. Other employers shared basic provisions and passed on donated money to their staff to guarantee their livelihood\textsuperscript{55,56,79}. In Phi Phi Don, social security coverage was most prevalent among employees working for large-scale businesses, but there were instances where coverage was also available to those working in smaller establishments\textsuperscript{197,204,217,247,248,273,278}. However, a number of employees had trouble gaining access to benefits as the process was very complicated and overly bureaucratic\textsuperscript{243}. Some employees requested redundancy over a continuation of their contract, wanting a lump-sum payment instead of a steady flow of income from social security payments\textsuperscript{273}. Other employees were fortunate enough to be paid 50 to 100 percent their pre-tsunami salaries whilst their employers rebuilt their businesses\textsuperscript{203,215,247,248,262}. The larger hotels and resorts on the island also paid compensation to surviving staff who had lost family members and to the families of deceased staff members\textsuperscript{201,209,224,228,258,263,264,269}. Staff who were not covered returned to their families for support\textsuperscript{251}. In Patong, field evidence indicates that employee entitlements to social security benefits was available to a substantial number of employees working for both smaller and larger businesses\textsuperscript{112,117,122,.154,158,160}. Here too, some hotels paid their staff full salaries during the closure periods\textsuperscript{112,117,122,137,169}. This strategy not only helped staff financially but also encouraged staff to stay with their employers\textsuperscript{112,117,122,137,169}. This outcome helped lessen a common problem for tourism
businesses in all destinations - finding and retaining skilled staff to run tourism enterprises (see Section 6.4).

Access to social security benefits proved most problematic among self-employed workers (particularly masseurs), along with part-time Thai staff and foreign staff who are not eligible for insurance benefits under the Social Security Act. This left this group most financially vulnerable to employment losses. Few employees had substantial savings to rely upon in the event of job losses and union membership is non-existent. Encouragingly, there is some evidence to suggest that employee saving levels have increased post-tsunami as a result of heightened awareness of risk and the need for preparedness strategies which has the propensity to help them financially cope with future shocks or stressors.

6.3.5 Levels of insurance

An examination of insurance coverage in Khao Lak, Patong, and Phi Phi Don prior to the tsunami clearly shows a direct correlation between business size and insurance levels. The majority of the micro and smaller businesses either had no insurance or were underinsured, a common trait that heightened their vulnerability to the tsunami event (Bell et al., 2005c; WTO, 2005). Only nine percent of the small businesses interviewed in Khao Lak had comprehensive insurance, whilst 11 percent only had basic insurance for fire and/or water damage as the risk of a tsunami was unknown. In Phi Phi, only 10 percent of all businesses interviewed had insurance. Insurance levels among small businesses in Patong were also low, with the exception of car rental businesses. The informal sector such as beach vendors and masseurs rarely has access to or knowledge about, formal financial recovery mechanisms such as insurance (Handmer and Choong, 2006). Insurance coverage of business assets and property was most prevalent among medium and large scale commercial enterprises, most of which had pre-existing loans; insurance is a prerequisite for securing bank credit. Yet those small and larger businesses with comprehensive coverage still faced difficulties and economic shortfalls. Claim payments proved difficult to secure and payments often fell short of covering all costs (Handmer et al., 2007).

The reasons for such low levels of adequate insurance coverage are attributable to levels of surplus income, and the contextualised influences of risk perceptions and culturally-loaded social norms, included in the place element of the DSF shown in Figure 6.1. First, perceptions of risk among community members were low, as there was no known history of tsunamis amongst those interviewed. Second, insurance was seen as
an unnecessary and high cost\textsuperscript{31,32,65,90,210,220,258}. Third, awareness of the benefits of insurance is unknown among micro and small-enterprise owners\textsuperscript{20,165,201,267,196,204,218,267}. This is not unusual. Taking out insurance is not common in Thailand; those interviewed indicated that people do not see the value in spending additional money on risk that may never eventuate\textsuperscript{158,165,190,200,210,245,251}. Finally, those that rent shop space find it difficult to obtain insurance for the content of their premises\textsuperscript{26,259,275}.

After the tsunami, insurance was given more consideration, leading to a moderate increase in insurance coverage amongst those that had no coverage prior to the tsunami (six in Khao Lak, seven in Patong, and nine in Phi Phi Don). Yet for smaller enterprises, the high cost of insurance still outweighed the perceived very low risk of future tsunami events, especially when all their money was used to rebuild their businesses\textsuperscript{28,29,31,32,37,46,65,86,90,99,154,256}. The tsunami was considered a once in a lifetime event\textsuperscript{28,154,169}, with one participant exclaiming that “statistically, the chances are once in every 2,000 years”\textsuperscript{56}. This assumption is not necessarily correct, with Sieh (2006) predicting that one or two more great earthquakes and tsunamis close to the size of the 2004 event are to be expected in the same region within the next few decades. Irrespective of the existence of contradictory evidence, such beliefs led people to conclude that insurance as a preparedness strategy was unnecessary\textsuperscript{28,56,154,169}.

Supporting the results of Dash (2002) and Thomalla and Schmuck (2004) outlined in Section 3.4.5.3, this finding demonstrates the importance of time (blue element of DSF shown in Figure 6.1) and event-cycles (real or perceived) in shaping risk perception and subsequent action. High costs as a barrier to disaster planning at the business level (particularly among smaller businesses) also correlates with the findings of Hystad and Keller (2006) in their study of the tourism industry’s response to fires in Kelowna, British Columbia. Another reason prohibiting greater numbers taking out insurance premiums lies with changed insurance premium conditions; following the tsunami insurance providers are more reluctant to insure businesses in the tsunami-affected areas and insurance premiums have risen to match to higher perception of risk\textsuperscript{99,226}. There is also some scepticism that insurance companies would refuse to honour comprehensive policies citing the “act of god” clause\textsuperscript{18,86}. Instead, some are putting money aside regularly to cover unforeseen damage or shocks\textsuperscript{65,250,261}.

The multiple reasons behind pre-tsunami and post-tsunami choices regarding insurance coverage demonstrates that knowledge about potential risks alone does not determine action. As argued in Section 2.3, the way people interpret that knowledge, in the context of
experiences, beliefs, and the future expectations that evolve within a societal context (detailed in the element of place in the DSF), greatly affects action and inaction (Bird et al., 2010; Johnston et al., 2005; Paton, 2007; Paul et al., 2009; Rippl, 2002). Agency also plays a role as households and businesses weigh up the costs and benefits of risk preparedness actions against risk expectations and tradeoffs before a final decision is made (see Fischhoff et al., 2000; Metzner-Szigeth, 2009).

6.4 Access to human capital

The next type of resource needed to help destination communities prepare, cope, and adapt to change is access to human capital. As outlined in Section 3.4.3.2, human capital includes knowledge (including traditional and historical responses to past shocks and stressors), skills, and labour capacity. These factors are listed under the sub-heading of human and social capital in the sensitivity dimension of the DSF featured in Figure 6.1. High skill levels enable greater employment flexibility for individuals if employment opportunities are interrupted. Skilled staff are also essential participants in the successful production and delivery of the experience that is purchased by tourists. Without them, businesses cannot function. Knowledge about travel trends and risk is also very important in influencing destination vulnerability levels because it influences preparedness levels to risk and transforming events. The next two sections (analyse the impact labour shortages and worker skill levels had on destination vulnerability levels across all three destinations, and examine the role that knowledge and access to information on risk played in shaping levels of disaster preparedness in Khao Lak, Patong, and Phi Phi Don and, in turn, vulnerability.

6.4.1 Labour capacity and skilled staff shortages

From an individual or household perspective, possession of a greater skills and knowledge base not only enables the individual pursuit of a range of livelihood strategies, but also heightens people’s capacity to cope and respond positively to adversity and to take advantage of emerging employment opportunities (DFID, 1999b; Khasalamwa, 2009; Moser, 1998). A strong stock of skilled labour also enhances business and, from a tourism perspective, wider destination success (Calgaro et al., 2009a). As argued in Section 6.3, having good access to finances to enable the physical rebuilding of tourism businesses proved paramount. This, in turn, restores lost jobs. But once the physical buildings and infrastructure were restored, the next challenge became finding qualified staff to run the newly rebuilt resorts, hotels, and businesses, and provide the level of service and experience the tourist has purchased.
The Andaman Coast’s rapid economic development, spurred largely by tourism, has attracted large numbers of Thai migrant workers to the region looking for well-paying jobs to support themselves and their extended families, who remained behind in their home villages and towns spread across Thailand (Handmer and Choong, 2006; Rigg et al., 2008; Scheper and Patel, 2006). Patong, as the most established and lucrative destination in southern Thailand, draws much of this influx\textsuperscript{102,106,109}. Patong, therefore, did not suffer greatly from staff shortages prior to the tsunami\textsuperscript{102,106,109}. Little was changed by the tsunami event in this regard\textsuperscript{102,106,109} which demonstrates the destination’s resilience to shocks and stressors.

Competition for well-paid positions in the larger prestigious resorts and hotels in Patong is high; the allure of higher wages, better benefits, and the career credibility that comes with working in the more luxurious hotels ensures this\textsuperscript{102,106,109}. Another benefit for staff is the ongoing training that is offered to employees in the low season\textsuperscript{106,112}. To ensure an excellent standard of service, many of the hotels invest in their staff by training them during the low season\textsuperscript{112}. This keeps tourists happy and encourages repeat business and favourable word of mouth reviews and is advantageous for both employers and employees. The staff appreciate the training as it increases their skills-base and employability, which in turn, heightens good service and staff loyalty\textsuperscript{112}. The types of training offered are either job-specific (housekeeping, food and beverage, or front desk) or language-specific\textsuperscript{112}. However, the high demand for jobs in the larger and more prestigious resorts does cause ongoing staffing problems for smaller businesses in Patong; they provide staff with training only to have them leave to work in the larger establishments\textsuperscript{158}. But the problem of sourcing qualified staff (pre-and post-tsunami) is most acute in Khao Lak and Phi Phi Don.

Access to qualified and well-trained staff was already problematic in Khao Lak and Phi Phi Don prior to the tsunami; the disaster only exacerbated this\textsuperscript{25,36,51,55,56,78,245,251}. Staff shortages are most pronounced in the accommodation and diving sectors\textsuperscript{18,36,40,70,71,74,78,80,86,91}. Divers do not feel comfortable or safe undertaking dive courses and expeditions with instructors who they cannot communicate well with\textsuperscript{70,81,86,237}. In Khao Lak, much of the tourism workforce is sourced from the greater Takuapa District and is semi-skilled, having little formalised tourism or hospitality training, with the exception of a minority who are university educated and hold higher level and management positions\textsuperscript{17,18,36,39,64,80}. Supplementary labour is sourced from other parts of Thailand, Burma, and Western Europe\textsuperscript{70,71,81,82,86}. The highly seasonal nature of Khao Lak’s tourism business is another factor contributing to skilled staff shortages for small and medium businesses that have to compete with larger and less seasonal destinations like Phuket, for skilled-staff; staff prefer constant work over seasonal
Phi Phi Don's shortage of skilled staff is attributed to three main factors. First, the isolation from the mainland coupled with high living costs and limited entertainment options on the island deters qualified staff who can work on the mainland, where rates of pay are higher and living costs cheaper. Accordingly, much of Phi Phi's workforce is sourced locally and is highly unskilled, this being the second factor. Third, stringent working visa rules hinder access to skilled foreign staff, many of which come to Phi Phi Don to work in the thriving diving sub-sector. To obtain work permits for foreigners a business must be registered and show proof of USD50,994 per foreigner with a maximum of 10 foreigners allowed in one business (BOI, 2006). These restrictions have large ramifications for dive operators needing to employ skilled dive masters who can instruct in the required language. The prohibitive costs of obtaining the required number of foreign work permits has resulted in the widespread illegal practice of hiring foreign dive staff without permits to meet demand.

Poor language skills is a great concern in both destination communities for a spectrum of businesses – travel agents, masseurs, long-tail boat operators, restaurant staff, guesthouse and resort staff, and Thai dive staff. Limited language skills inhibit access to higher paying tourism jobs in resorts, local tour operators, and dive operators. Smaller and family-run businesses also have concerns regarding their lack of good language skills and the negative impact that language-induced misunderstandings has on accessing clients, customer service, and repeat business. To rectify the skill shortage problem and promote staff loyalty, many of Khao Lak's and Phi Phi Don’s medium and larger hotels – like their counterparts in Patong – provide staff training in languages and hospitality during the low season. Those employers who do provide training for their staff, however, suffer high levels of staff turnover, as the newly trained employees leave to work in more prestigious hotels or businesses that offer higher salaries and better opportunities for career advancement. Staff working in small businesses rarely receive formalised training and only benefit from daily on-the-job training.

The longer-term consequences of qualified staff shortages caused additional stress for employers in Khao Lak and Phi Phi Don after the tsunami (UN, 2005). The loss of lives and disruptions in working patterns led to a drastic depletion in skilled tourism industry workers (WTO, 2005). After the tsunami, many staff returned to their home towns, due to trauma and after-shock fuelled fears, while others sought work in alternate destinations like Hua Hin and
Koh Samui. This was most pronounced in Phi Phi Don where immigration levels are very high. Some returned shortly afterwards to help with the clearing of debris and rebuilding, whilst others waited months until this process was completed. Some never returned. Outmigration caused by a massive drop in job opportunities in the immediate aftermath of the disaster coupled with the fear of returning left newly built resorts and businesses with acute skilled staff shortages, which degrades the quality of their product and service (Rigg et al., 2005). In the case of Phi Phi, the high levels of outmigration also highlighted their vulnerability to forces like the tsunami that drive staff away and limit human capital availability. But the consequences of these livelihood disruptions were felt well-beyond the affected destinations; the loss of jobs and subsequent income earned by migrant workers in the affected destinations also caused their extended families living in other parts of Thailand and overseas to miss out on the regular payments that are sent home to support the greater family unit (Rigg et al., 2005).

In 2007, market demand for labour stood at 10,000, whilst 9,324 continued to be underemployed. These shortages prompted a proliferation of NGO tourism skills programs (outlined in Section 7.3.3). Education and training collaborations between tourism representative groups in Phang Nga and Phuket, NGOs, and the Ministry of Labour also helped to improve the skill-base of current staff and train potential workers (see Section 7.3.3). Such proactive measures test the resourcefulness and engagement levels of industry representative bodies and determine their effectiveness in accessing the human resources needed to create and retain a skilled and committed workforce through periods of growth and decline brought about by the onset of shocks and stressors.

6.4.2 Linkages between access to information and disaster preparedness
As shown in Section 2.3 knowledge of risk is not the only factor that determines risk perception and subsequent action or inaction (Bird et al., 2010; Johnston et al., 2005; Paton, 2007; Paul et al., 2009; Rippl, 2002). However, a lack of risk awareness, due to limited access to information, robs people of the choice to increase their preparedness to those possible risks which, in turn, curtails their ability to cope and effectively respond and recover from hazards (US-IOTWS, 2007). Risk and the defining of risk is also highly politicised, as major values such as employment and economic gain are at stake (Douglas, 1999; Slovic, 2000a). The act of defining risk is, in itself, an expression of power (Slovic, 2000a). As discussed in Section 6.3.5, few people in the three destination communities were aware of the risk that a tsunami posed to the Andaman Region prior to the event, and information about this risk was scarce. Accordingly, they were completely ill-
prepared for the tsunami event. One reason behind the scarcity of available information on risks to tourism-reliant destination communities relates to the weighing up of risk levels against potential negative consequences to tourist levels if those unsubstantiated risks were known.

Potential risks in destinations are often played down for marketing purposes, as the potentially negative consequences of known risks to destination images and resultant tourist flows is considered too great to warrant disclosure and forewarnings (Cassedy, 1991; Drabek, 1992; Drabek, 1995; Murphy and Bayley, 1989). This proved to be the case in Thailand. In 1998, the Director General of the Meteorological Department issued a warning to the government pertaining to the likely threat tsunamis posed to Thailand’s Andaman Coast (The Nation, 26 July 2005), that subsequently featured in media reports broadcast in Phuket at the time. However, these claims were played down by the central government as the negative ramifications of the perceived risk upon tourism flows to Phuket and the surrounding area were considered too costly (The Nation, 26 July 2005). With hindsight, the socio-economic ramifications of not issuing a warning were far greater than those of a false warning. The repression of this information for economic reasons attenuated all interventions for risk reduction. The ramifications of these politically loaded decisions strongly demonstrate how the agendas of the central government directly influenced vulnerability at the local scale. Returning back to the DSF and the theories of place (Section 3.4.5.1) and relational scale (Section 3.4.5.2), the influence of outside agendas on access to information about risk and levels of preparedness experienced in the destination as a place reinforces the importance of identifying who contributes to vulnerability and resilience of a given place and population and how the actions (including inaction) are shaped by decisions taken by social actors operating outside the destination.

The importance of knowledge in determining immediate responses, coping capacities, and timely recoveries are clear when reviewing post-tsunami actions. Knowledge about who to approach to receive emergency aid (see Section 7.2.2), financial capital for rebuilding (see Section 7.3.1.1), institutional support from industry representative bodies (see Section 6.6.3), and securing basic human rights (see Section 7.3.3) were more successful in securing the resources needed for a speedy recovery. Those that did not, either missed out on aid and financial provisions or arrived too late to benefit. An increase in risk perception has also led to the choice of some Khao Lak businesses to relocate businesses to alternate Thai destinations.
6.5 Access to social capital

As outlined in Section 3.4.3.2, social capital - that includes kinship networks and groups - is instrumental in promoting cohesion, connectedness, reassurance, and stability in times of need. Kin and traditional community networks based around village structures are particularly important in the Thailand's collectivist culture (refer back to Section 4.4) (King, 2008; Irwin, 1996) as they underpin the workings of every day life and social order. As such, these networks also shape differential and uneven access to financial capital and power networks, and in turn, vulnerability levels. Social networks and kin groups as determinants of vulnerability is recognised in the DSF (presented in Figure 6.1) and listed under the sub-heading of human and social capital. But the effectiveness of these networks in facilitating or constraining access to resources is dependant upon the social positioning, connectedness, and agendas of the social actors that work through them. Returning to relational scale presented in Section 3.4.5.2, the social actors that are most effective in tapping into the multiple networks that exist within a society and understand how to use these to manipulate power systems are also the most successful in fulfilling their aims. The next two sections examines the role social networks played in facilitating greater access to financial and emotional support pre- and post-tsunami. They also highlight the role these grouping and networks can have in facilitating the social exclusion of minorities that do not belong in the major societal groupings and networks and how this affects the vulnerability of minorities.

6.5.1 Access to social networks

The resilience of a household and community is heightened through access to strong social support networks, that often stretch across scales (existing both within communities, between communities, and across national borders), with levels of cohesion and equity playing a major role in facilitating access to resources and recovery levels (Jäger et al., 2007; Miller et al., 2005; Rigg et al., 2005). Furthermore, social networks become particularly pertinent in a post-disaster setting where good relationships with one’s family, neighbours, and friends, can provide emotional support in spite of their losses (Handmer et al., 2007; Ito et al., 2005). Family structures form the backbone of Thai society, and these ties and support structures provided critical support to the tsunami-affected tourism populations of Patong, Khao Lak, and Phi Phi Don prior to the pre-tsunami by contributing to the success and growth of business ventures and throughout the rebuilding process17,20,28,69,77,79. Access to finances, governance, and power structures in Thailand’s collectivist society are intertwined due to the close relationship between family and historically-embedded community leadership structures (Irwin, 1996). This cultural norm (a contextualised factor included in
the place element of the DSF detailed in Figure 6.1) explains the vital role family and social networks played in the post-tsunami recovery of the three destinations. Types of support included financial backing for business ventures and the recovery (Section 6.3), monetary support whilst the newly unemployed looked for alternative work, child-minding by grandparents so that parents can work for the betterment of the whole family unit, plus psychological support and strength needed to overcome trauma and rebuild. (Handmer et al., 2007). The family unit also served as the basis for the development and growth of business opportunities, with various family members contributing to the success of ventures owned and run by the family. A resort owner in Khao Lak explained that his main motivation for rebuilding his beachfront resort was to ensure that the younger generations in his family would have a good source of income to live off when he was gone. Irwin (1996) stresses the great importance of honouring family obligations in Asia; the family in its extended form provides security and support to other members, but the price is a reciprocal obligation. Family unity is paramount and family self-sufficiency is prized, with the family providing its own welfare net against sickness and old age (Irwin, 1996). Thais do not naturally rely on governmental or private organisation support. As mentioned in Section 6.3, Thais take much pride in their ability to be self-sufficient and strong kinship ties help them achieve this. This family-orientated business model dominates tourism businesses in Khao Lak and the smaller establishments in Patong, but is most extreme on Phi Phi Don where isolation from the mainland and its small size has further cemented close family and village ties.

Phi Phi is a small island which exudes a strong community spirit. This community spirit and willingness to help each other was viewed by interview participants to be a primary factor in the island's ability to effectively respond to shocks like the tsunami. Those very characteristics of Phi Phi's community, along with family connections to the mainland, has also attracted many workers to Phi Phi, including many Western expatriates. One Western Dive Shop Manager summed up the attraction of Phi Phi's community feel:

I think I like the sense of community here. The island's small enough so that it truly is a community. You can't get away with bad behaviour here for very long...because everybody knows everybody...some people don't like it, find it claustrophobic. But actually, I kind of like it.
The small size of the community is not the only thing that promotes cooperation and strong bonds between community members. There are five main families and individuals who own and run much of Phi Phi Don: the Chao Koh Group, the Phi Phi Cabana Group, the village headman, the Phi Phi Hotel Group, and the owner of the PP Princess Resort and Charlie Beach Bungalows. The ownership of land and buildings is demarcated in some cases by the style and colours of buildings as well as by names (field diary, March 2007). Yet family ties are the strongest within the Chao Koh Group, whose members are among the early inhabitants on the island. Most extended family members either work for the group directly or have branched off to run their own resorts or support businesses on the island. Whilst money is important, those with money and local roots wield much influence on the island. These blood and marriage bonds are fortified by wider traditional village networks, whereby Thai village members consider each other as family members irrespective of bloodlines. Having such strong social networks to rely on in times of hardship provided much needed stability and hope and enabled people to better cope, respond, and recovery from the disaster.

According to the community members interviewed, the concentration of influence and money in the hands of the dominant families also benefits the Phi Phi Don community as a whole, a characteristic that was clearly evident following the disaster. First, the dominating families cooperate with each other resulting in a stabilised environment. Second, it promotes a cohesive business environment and support structure for tenants. Some landowners on the island offer long-term leases of 15 years to promote business stability and help facilitate continuity of the type of businesses and thereby tourism product that is found on the island. These ties served the community well following the tsunami, promoting support and cooperation among businesses and workers and providing funds to rebuild quickly. One landowner took responsibility for repairing the structural damage that was incurred and had the capital available to do this. Such a response was not only helpful to the many tenants but was undertaken for business purposes. The landowner recognised that the sooner Phi Phi Don recovered physically, the sooner tourist flows and profits would be restored for themselves and their tenants. Third, it also encourages community-led participation in island-related matters and community mobilisation (Tan-Mullins et al., 2007). The community’s capacity to self-mobilise as a unified force, and its effectiveness in petitioning for common needs, was very much evident in the strong demonstrations that were orchestrated in the face of the post-tsunami Designated Areas of Sustainable Tourism Administration (DASTA) planning proposals for the island (see Section 7.3.1.3).
Community cohesion and family ties are not particularly strong in Patong due to the high influx of migrant workers and business entrepreneurs (see Section 6.4.1). However, group cohesion and kin ties remain robust amongst beach workers (massage, vendor, and umbrella operators) and Patong’s bar sector. One bar owner explained the nature of these kin connections that often have their roots in village networks that stretch across the country:

Many of the girls that work in the bars come from the same villages - these village networks are very strong. The bar staff considered themselves to be one big happy family. Everybody eats together, and when someone is in trouble, the others provide support to them. This is how Thai social structures work.

The utilisation of these relational networks for support greatly helped people to cope with the psychological trauma and financial loss that befell them as a result of the tsunami. Many migrant workers with no direct family ties in Patong returned to their home towns and villages spread across Thailand in the few months after the tsunami, to benefit from financial and psychological support offered by family and village networks while waiting for their employers to rebuild their businesses.

There are, however, pitfalls to such close family networks. First, as in Phi Phi Don’s case, these dominant networks may stifle positive change and progress if the proposed measures are perceived to hinder dominant agendas, business interests, and profit margins. Second, those that lack family support networks are left with few social support alternatives and can become marginalised within the community. A strong Thai cultural tradition of social inclusion and exclusion based around family units leaves those individuals without strong family ties in the area with few support options and thus highly vulnerable to unforeseen shocks, and ostracisation by the more dominant family networks (see Section 6.5.2). Third, such links can also foster nepotism and the misappropriation of funds to family and friends over the intended recipients (see Section 7.2.2). That said, in some cases the shared disaster experience has strengthened community relationships. This was most notable in Khao Lak where comradery and community cohesiveness has increased amongst select factions (foreign expatriates, smaller businesses, and dive operators); the disaster caused people to reach out to each other in order to gain additional help and support (see Section 6.6.3.2 for examples of this).

6.5.2 Social marginalisation of minority groups and workers
As noted in Section 6.3.3, many low-skilled and semi-skilled jobs in Khao Lak and Patong are undertaken by minority workers from India, Nepal, and Myanmar. The main areas of employment include gardening and maintenance in resorts, cooking and cleaning in
restaurants, and construction work (Chit, 2005). Higher pay rates in Thailand enable Burmese workers to financially support their families at home in Myanmar (Robertson, 2007). However, working and daily living conditions for the Burmese are difficult and subject to widespread discrimination, abuse, and extortion making them very vulnerable to shocks like the tsunami\(^{25,81,82,115,158,1}\). Those from Nepal and India do suffer some discrimination but not at the same levels experienced by the Burmese\(^{81,82,115,121}\). Jäger et al. (2007) confirm that conflict and resultant migration can heighten vulnerability in receiving populations when migrants (legal or illegal) create new competition for resources, or upset tenuous cultural, economic, or political balances. This delicate situation can be further exacerbated in disaster situations when members of collectivist societies like Thailand tend to be more sensitive to alien workers (Brislin, 2000; Paton et al., 2008). This reaffirms the downside of the dominance of social networks that centre around kinship. Those who are not included in these networks can be ostracised and excluded, particularly in times of stress.

As noted in Section 6.3.3.2, Thai law requires foreigners, including the Burmese, to have working permits to work in Thailand. Yet possession of legal documents does not preclude routine exploitation. Both documented and undocumented migrants are subjected to paying monthly "security fees" or bribes to police and government officials (averaging THB1,500 to 2,000 or USD38 to 51) to avoid arrest\(^{81,82,115,141}\) (Rice, 2005; Robertson, 2007; TAG, 2005). If arrested, securing release can cost as much as THB30,000 to 50,000 (USD765-1,275)\(^1\). The migrants" lack of personal security was exacerbated by restrictions imposed by employers\(^{81,82}\). The illegal withholding of migrant documentation by employers stopped workers from leaving their employers and left them vulnerable to arrest and extortion, and salaries were withheld or paid only in part (Robertson, 2007; TAG, 2005).

A climate of impunity further legitimises the abuse of migrant workers in Phang Nga and Phuket, facilitated through an intricate system of corruption (Robertson, 2007). Their marginalised positions prevent them from reporting employer and law enforcement abuses (Oberoi, 2005). But this raises another question: to whom would they report their abuse? Migrants are banned by law (Labour Relations Act 1975, Section 101) from forming their own unions, but registered workers are entitled to join Thai unions (TAG, 2005). Prior to the tsunami, Burmese workers interviewed were unaware of NGO organisations that could help them and had no knowledge of local tourism representative groups\(^{81,82}\). Their only other option is to leave their employer, with the possibility of their employment documentation being kept instead of transferred to the new employer, leaving them undocumented, without healthcare access, and vulnerable to arrest\(^81\) (Robertson, 2007; TAG, 2005).
This institutionalised and widespread discrimination increased in the wake of the tsunami, with innocent Burmese being labelled as thieves and looters. Unsubstantiated Thai media reports about Burmese looting intensified anti-migrant sentiment among factions of Thai society, culminating in the mass arrest, extortion, and deportation of both documented and undocumented workers; 2000 workers were deported in the first three weeks following the disaster (Chit, 2005; Hulme, 2005; Maw, 2005; TAG, 2005; Robertson, 2007). One restaurant and guesthouse owner in Patong explains what she saw in the days following the tsunami:

I mean there was a tremendous amount of looting that went on. Sorry to say, most of the Thai people and some of the foreigners. The sad thing was that I saw a gypsy, a Thai person running up the road with armloads of stuff, T-shirts and stuff, still in the bags, and some little Burmese guy picked a T-shirt up and he was going to have to wash it...The Burmese only have to look at it and they'll be blamed for it. I think a lot of people helped each other. But I'm not saying that the Thais are brilliant at that. Jealousy, envious.

This caused many Burmese who had lost their working visas and jobs as a result of the tsunami to go into hiding for fear of being arrested or deported (ALTSEAN Burma, 2005; IOM, 2007). A Burmese worker in Khao Lak describes the multiple problems the Burmese faced in the immediate aftermath of the disaster:

Burmese were very [vulnerable] at that time because you know, you could [lose] your passport in the water and you could [lose] your [ID] card like that. And to be honest, at that time, in Bang Niang, everything was destroyed and I saw with my eyes, you know, Thais are collecting something. You know, things like that and of course Burmese [were] also collecting, and Burmese were [labelled as] thieves...it [created] a difficult situation for the Burmese and they paid. [They] feared to go to the providing centre because [they] could get arrested by the police, like that...And some of my friends, they are in Patong and they told me that some Thais are also arrested because they collecting things like that. But [these] things [were] not [on] TV and [only] Burmese...Because this is not our country so we could not do anything. You can do nothing. And just only one way is to survive - to go as long as possible.

Having no secure rights inhibited their access to humanitarian aid, financial support (see Section 7.3.1.2), and local social networks. The only support outlets available to Burmese migrants in Khao Lak and Patong were relatives and compatriots from their village or communities who were already in Thailand. Patong's Burmese community benefited from a strong network that met on a monthly basis at a local temple. Aid offered by these networks include: (i) the initial travel across the border; (ii) finding work with sympathetic employers and securing better paid jobs; and (iii) steering migrants to supportive Thai-based community networks and informal structure of assistance when the need arises (Robertson, 2007). These same networks became a critical source of assistance following the tsunami (see Sections 7.3.1.2 and 7.3.3). Like their Thai counterparts, some of those interviewed received donations and financial support from family members abroad (including those still in
Myanmar) and old customers but they were in the minority\textsuperscript{81,115}. The Western expatriates interviewed had not experienced any overt exclusion until after the tsunami, a point that is explored fully in Sections 7.2.2 and 7.3.1.2.

### 6.6 Governance structures and processes: mediating forces of action and inaction

Governance – including all stakeholder groups, structures, and processes that influence social order – shapes every aspect of the politics of daily life. As argued in Section 3.4.3.2, governance processes and structures, as well as the agendas of powerful stakeholders working through these structures influence:

- development patterns, plans, and types of structures built;
- allocation of assets and resource usage;
- the quality of social protection; employment opportunities;
- preparedness measures; and
- differential distribution of risk.

The regulation of social practices are mediated through a mixture of interconnected structures (governmental departments with responsibilities over specific resources, laws, policies, and right entitlements, and tourism business associations and networks) and processes (informal cultural processes, and levels of social stability). These factors are listed in the DSF’s *sensitivity dimension* under governance processes in Figure 6.1).

As resource mediators, their profound influence over differential vulnerability and resilience levels experienced in a given place demands in-depth understanding and attention, so as to identify meaningful and effective entry points for change and transformation. They are also reflections of and conduits for historically-embedded *cultural norms* and *power structures* that shape places as shown in the *place* element of the DSF. Accordingly, they can be difficult to change or challenge (Cannon, 2008; Pelling, 2003), particularly in collectivist societies like Thailand, where the preservation of unity, harmony, and deference to very strong social hierarchies of power are highly esteemed and closely adhered to, so as not to “lose face” and social standing (Irwin, 1996; King, 2008; Lustig and Koester, 1993; Paton et al., 2008).

The following sections explore the ways in which both formal and informal governance actors, structures, and processes have contributed to differential vulnerability and resilience levels found across and within the tsunami-affected destinations of Khao Lak, Patong, and Phi Phi Don. This includes the actions of tourism business associations who used multiple networks and established relationships which stretched across local, provincial, national, and
international scales to access the resources needed to recover following the disaster event.

### 6.6.1 Planning strategies and enforcement challenges

Jäger et al. (2007) stress that the vulnerability of local populations can be intensified by poor governance and a lack of capacity. Weaknesses in governance structures and processes proved to be a major contributor to the vulnerability of Khao Lak, Phi Phi Don, and to a lesser extent Patong, with these weaknesses limiting their capacity to respond and adapt to the tsunami. Despite the existence of well-developed tourism plans, implementation and enforcement is problematic due to a lack of capacity and expertise, budgetary constraints, and limited political engagement at the local levels (Calgaro and Lloyd, 2008). Corruption and an abuse of power by local elites further undermines policy and planning success, leaving the communities frustrated and disillusioned with the sincerity and effectiveness of governance structures.

As noted in Section 4.4, the decentralisation of governmental planning responsibilities in 2003 provincial governments was done to enable the tailoring of overarching planning and development strategies to match localised resources and development goals. The resultant localised plans for tourism are detailed in 3-year tourism development plans. Prior to the tsunami, both Khao Lak and Patong had 3-year tourism development plans to guide tourism development in a way that was consistent with wider district and provincial development strategies. Planning regulations in Khao Lak stipulated a 30 metre set-back line for beach development and regulated building density and height. Patong’s development plan outlined broader interconnected strategies on education, economy and tourism, livelihood improvement, infrastructure development, information technology, natural resource and environment, and urban management. The designation of Phuket as an Environmental Protected Area (EPA) in 2003 resulted in further development guidelines including: compulsory Initial Environmental Examinations (IEE) for hotels with 10 to 79 rooms, Environmental Impact Assessments (EIA) for hotels with 80 rooms or more, and coastal development setback and density restrictions in areas that exceed 40 metres above sea level (ADB, 2006a). However, these regulations were loosely enforced in both destinations - a common occurrence in Thai destinations (Elliot, 1997) - leading to ad hoc tourism development, planning and building code violations, environmental degradation in Patong (see Section 6.7.1), and the community’s mistrust in localised governance processes and capabilities.
Phi Phi’s planning history is somewhat different to that of Khao Lak and Patong but the outcome is similar – poor planning and ad hoc development. Few development plans have been drawn up or implemented for Phi Phi Don throughout its developmental history. Phi Phi Don was declared part of the Hat Nopparatthara-Mu/Phi Phi National Park in 1983 which forbade development on the island with the exception of pre-existing settlements that existed in the park’s periphery. Existing settlements were subject to height restrictions of two metres, 30-metre set-backs from the highest water tide and accommodation establishments were forbidden. Yet few development or building standards were enforced for existing settlements, enabling the burgeoning of grassroots development, including accommodation establishments that were structurally substandard and easily destroyed.

Despite differences in developmental and planning histories, the reasons behind these planning and enforcement failings are comparable across the three destinations. First, a lack of coordination between government departments and overlapping departmental jurisdictions over the coastal zone has produced unclear and conflicting coastal development policies, which hinders clear avenues for regulation implementation and enforcement (Phayakvichien, 2005). Cohen (2008) reflects that this governmental weakness has become a fundamental trait of Thailand’s political culture. This is an example of how historically-embedded practices become part of the cultural norm and shape people’s expectations (in this case lowering them) and consequently how people operate within these „naturalised parameters”.

Second, the constant rotation of governmental staff creates planning and enforcement inconsistencies and prevents the acquisition of knowledge and appropriate skills needed to effectively oversee tourism plans (Elliot, 1997). Therefore, whilst the decentralisation of tourism governance structures in 2003 signalled a positive step towards localised empowerment, it lacks logistical and financial support at the provincial, district, and sub-district levels, causing weakened governmental bodies that cannot fulfil their roles (Phayakvichien, 2005). These cross-scale administrative and political hurdles not only caused the breakdown of effective governance prior to the tsunami, they also obstructed the success of post-tsunami strategies (Section 7.3.1.3) (Rigg et al., 2005).

Third, district and sub-district governmental bodies lack the capacity, funding, expertise, real power, and motivation needed to effectively implement, enforce, and monitor plans and policies (ASIST-AP, 2004; Phayakvichien, 2005; Gilchriest et al., 2007a). From a
financial perspective, tourism projects in Khao Lak and Phi Phi Don, for example, are given a low priority by sub-district TAO administrators because they require a high proportion of the TAO budget. Thus there are no real ramifications for development violations and there are limited governmental staff available to monitor infringements (ASIST-AP, 2004).

Finally, TAO administrators in Khao Lak and Phi Phi show little interest in tourism-related planning, whilst the lack of community participation in planning strategies is a concern in all three destinations. Consultations between the TAO authorities and the community on tourism planning and development issues are irregular, despite the fact that (i) community-government participation is a key component of the TAO directive (ASIST-AP, 2004; Gilchriest et al., 2007a), and (ii) the private sector possesses the skill-base needed by local authorities to formulate robust tourism strategies. The Khao Lak community feels that they lack strong leadership at the local level to lead and support strong tourism development plans. This lack of governmental support and resolve also weakened the community’s capacity to effectively respond to the tsunami (see Section 7.2.1.3). Yet the lack of government engagement is most poignant on Phi Phi Don, which up until 2007 lacked a resident government representative. These weaknesses in the formal governance structures are further exacerbated by deeper issues related to informal power structures, corruption, and the vested interests of the ruling elite (see Elliot, 1997).

6.6.2 Steeped in culture: Access to avenues of power, vested interests, and corruption

As outlined above, Phi Phi Don’s governance problems are attributable in part to their geographical isolation and budgetary constraints. The Ao Nang TAO that oversees Phi Phi Don’s administration attribute their lack of spending and engagement on Phi Phi Don to the island’s isolation: the cost of supplying the island with these basic services is far greater than providing similar services on the mainland. Accordingly, local actions favour the mainland where more can be provided for less capital. The community has another explanation, believing that TAO’s inactivity is also an outcome of vested interests in maintaining mainland services where the Ao Nang TAO members reside. One resident exclaimed:

Krabi is extremely reluctant to come up with that money because they’re trying to develop themselves as a resort destination on their own. Understandably and you can see there’s been a lot of investment in Krabi.

Irrespective if this opinion is factually correct or not, the resultant disconnect between the community and their government representatives has left the islanders with few political
avenues for voicing concerns and resolving issues, causing much anger and frustration among residents. Furthermore, trust in the TAOs ability to bring about positive change has been eroded by ineffectual meetings and unfulfilled promises, that has dissuaded further community participation. The appointment of a resident district officer to the island in February 2007 was designed to rectify the growing divide between community and government, a move that was well-received by the community.

Corruption in the government only exacerbates these weaknesses and heightens the community's mistrust and apathy in existing power structures. Planning failures and development anomalies brought about by corruption and the vested interests of local elites is not isolated to Phi Phi Don or Thailand; it is a common tourism management problem. In the words of King, “lack of accountability and weak enforcement are key elements in situations in which corruption thrives” (2008: 174). Monetary bribes and political connections have routinely influenced land acquisition and development approval decisions on the island throughout its developmental history and this has not changed post-tsunami. In the words of one resort owner,

If you have money, you can do... And then, the government say, we try to enforce the city planning. How can you do ... I think you allow the people to do whatever they want.

Yet corruption and opaqueness in the building approvals and land acquisitions are not one-sided affairs. Acting in cohorts with the government are private interests driven by well-connected members of the local elite who belong to the island's landowner families. The illegal land acquisitions and routine planning violations that took place pre- and post-tsunami are well-known on the island, as were the main perpetrators. However, as noted in Section 4.10.5 there was a great reluctance among many of those interviewed on Phi Phi Don to speak openly about the blatant acts of corruption and the enabling power systems (public and private). Explanations for this reluctance to talk about, let alone challenge, the underlying power structures that shape development on Phi Phi Don can be traced back to the very foundations of Thai social structures – patron-client relationships that define the very influential informal governance structures and processes that operate in Thailand detailed in Section 4.4.

In their study of Thailand's political culture, Phongpaichit and Phiriyarangsans concluded that:

There is corruption at all levels of bureaucracy and the political system , and...for many of those involved the practices are legitimate under the patronage system although illegal in the context of modern laws (1996: 5).
Chapter 6

Seen as an extension of the patron-client relationship, corruption has become an integral component of Thailand’s informal political system, where support is gained through payment in kind (Scott, 1972). As outlined in Section 4.4 these patron-client relationships form the foundations of all social interaction in Thailand, and as such they are not questioned or challenged for fear of losing ‘face’, favour, and access to valued resources (Irwin, 1996; King, 2008). Unquestioned loyalty is expected by patrons – in Phi Phi’s case the dominant landowner families - which leads to the use of avoidance or other face saving techniques that protect the group from unfavourable occurrences, and uphold the dominant power positions of the ruling elite (patrons) (Lustig and Koester, 1993).

In contrast to Phi Phi Don, Khao Lak TAO authorities do not have the excuse of distance to justify their lack of interest in tourism development and resultant weaknesses in tourism policy and planning implementation. The local authorities consider the provision of basic infrastructure (road systems and pavements, water and waste management, electricity supply, transportation) as their main role and strength and therefore distance themselves from tourism concerns. Community members attest to being repeatedly ignored by local authorities when help and assistance are sought, thereby denying them a voice, support, and true representation. Frustrated by a history of limited government engagement, response, and accessibility, community members have lost faith and trust in local government and are increasingly reluctant to seek governmental assistance. These weaknesses are compounded by intransparent governance processes and corruption. Mirroring the experiences of Phi Phi, those with money and localised connections to power networks are able to secure developmental approvals that contravene planning regulations. A travel agency representative describes the undisclosed workings of the patron-client relationships:

There will be dependencies, there will be bribes, there will be favours, there will be other things in the background that you have no clue about.

Money is routinely paid to have legal development proposals passed, while those local ruling elite with money and political connections (including members of TAO and traditional village leaders and their kin) are granted building exceptions that violate planning regulations. Here again the patron-client relationships that dominates the social landscape (a deeply-embedded cultural norm) overrides more formalised governance processes and laws. A Khao Lak resort owner reaffirms the dominance of the patron-client relationship:
In Thailand if you have, if you have money to pay, [this is] more important [than regulations]. You can do everything [despite the] law … depends on what they want to do\textsuperscript{25}.

Arghiros (2001) and King (2008) observe that the decentralisation of tourism developmental processes in 2003 coupled with a move towards greater mass participation in political life has merely fortified localised patronage relationships and networks which, in turn, has perpetuated the unequal access to resources and vulnerability. Few members of the Khao Lak community are willing to protest against the routine violations and discrepancies for fear of reprisals and marginalisation\textsuperscript{18,25,46}. Those that have challenged regulation violations or the choices of the local elites have been faced with massive increases in rent to force them off prized land, property vandalism, loss of employment, and an inability to find tradesmen to work on crucial renovations—the workers were warned off by family members of the village headman\textsuperscript{28,33,46}. The village headman belongs to one of the most powerful families in Thailand. This far-reaching kin-based power network discourages opposition to the planning regulation violations of select family members that include the barricading of a public road that runs along Bang Niang Beach and claiming it as theirs\textsuperscript{28,46}. To regain vehicle access to their properties the surrounding landowners were forced to pay the Khuk Khak TAO THB 2 million (USD50,995) for a public road\textsuperscript{28,33,59}. In response to this abuse of power, one Thai resort owner exclaimed, “They have money. They can do anything they like. We are small. We cannot do anything”\textsuperscript{33}. Localised corruption practices have been reported to the provincial government and local parliamentary representatives but to no avail\textsuperscript{18,59}.

The continuance of such practices has created mistrust and apathy among the community with regard to the government’s intentions, their agendas, and their capacity to represent the best interests of the whole community over particular factions. Adherence to this historically-embedded cultural norm (a very influential contextualised factor that features in the place element of the DSF in Figure 6.1) and informal governance process is also perpetuating unequal access to avenues of power, resource distribution, and vulnerability levels within the Khao Lak community. The ruling elite continue to prosper from these unequal balance of power and resources whilst others are further marginalised\textsuperscript{28,59}.

Given the central role that power and political will plays in determining vulnerability, real efforts to reduce vulnerability and risk involves changes to the established political and economic systems that have the capacity to facilitate the redistribution of resources and decision-making powers among the various social actors (Adger, 2003; Pelling, 2003; Wisner et al., 2004). Investing in solid social relations and building strong social capital through better governance structures and networks, improving cooperation and equal representation,
not only lowers vulnerability levels but opens up opportunities for increased sustainable development and improved well-being (Jäger et al., 2007). However, considering the threat such actions pose to the power-base and influence of the dominant power elites, this is difficult to achieve (Cannon, 2008; Pelling, 2003), particularly in collectivist societies like Thailand where deference to very strong social hierarchies of power are closely adhered to (Irwin, 1996; King, 2008; Lustig and Koester, 1993; Paton et al., 2008). Such changes to the patron-client relationships are not in the best interests of the ruling elite, a situation the community members in Khao Lak understand well:

[The TAO] representatives only think about their own back pocket … See now we can have a chance to make a lot of black money … they should be interested [in tourism]. Who is paying their salary? But the corrupt people don’t want to stop being corrupt because they have a good income from that.  

The compounding effects of these informal and formal governance issues in both Khao Lak and Phi Phi Don have caused an ever-growing divide between the destination communities and local government bodies, who are deemed inaccessible and self-serving by both communities. The uneven distribution of aid (see Section 7.2.2) and limited governmental assistance for tourism businesses in the aftermath of the tsunami has worsened relations further. The Deputy Chief of Muang District and newly appointed resident officer on Phi Phi Don reasons that Phi Phi’s failure to secure support pre- and post-tsunami was the direct result of their limited access to avenues of power at the provincial and national level. Referring back to the main ideas of relational scale outlined in Section 3.4.5.2, this proves a direct correlation between access to scaled avenues of power (stressed in the scale element of the DSF shown in Figure 6.1) and vulnerability. Patong has these contacts (see Section 6.6.3.1) and benefited from a strong recovery; Phi Phi and Khao Lak do not. The further deterioration of governance networks in Khao Lak and Phi Phi that occurred after the tsunami lessens the communities’ collective capacities to cope and respond effectively to future shocks, and hence heightens their vulnerability. In the absence of sustained governmental support, the private sector in both Khao Lak and Phi Phi Don shape and advance tourism development in each destination. This is personified in Phi Phi Don with most of the power, money, and influence residing in the hands of the few dominant families. As argued in Section 6.5.1, the strong-hold of these five families and their money has created a strong community. That said, the dominant families do recognise that governmental assistance is needed to operate effective in the longer-term and therefore welcomes the appointment of a resident officer from the Muang District.
Vested interests of powerful business actors are also negatively affecting tourism development planning and implementation processes in Patong, but the contextual circumstances are very different\textsuperscript{135,144,149}. In contrast to Phi Phi and Khao Lak, governmental authorities like the Provincial Administrative Office (PAO) are trying hard to work with the private sector to design and effectively implement tourism strategies, but their success is hampered by resistance from the private sector who have money, influence, and the backing of the Phuket Provincial Governor\textsuperscript{106,109,110}. The private sector does not want heavy government involvement in tourism development, believing that the government should only have a supporting role\textsuperscript{109}. The General Manager of one of Patong’s large hotels sums up this sentiment, exclaiming that “business related practices should remain private”\textsuperscript{106}.

The community holds little respect for the Municipality of Patong and believes that the government does not understand the needs of tourists, and that policy processes are considered too slow to make an impact. This observation is supported by Elliot, who affirms that “public management systems can be slow, cumbersome, and out of touch with the needs of the [tourism] industry” (1997: 114). Respect for governance processes is further eroded by decision-making intransparencies: election aspirations of public office holders (including the Patong Mayor) lead to biased and plan-violating developmental decisions that favour supporting factions\textsuperscript{144,149,172,187}. Having little faith in localised structures, community members bypass the local levels of government, preferring to approach the Provincial Governor or Central Government representatives directly when petitioning for resources or desired changes and actions\textsuperscript{106,123,146}. The effectiveness of this multi-scaled approach - using multi-scaled networks of power and governance to facilitate swift access to resources – is well-illustrated in the actions of the Phuket Tourism Association (PTA) following the tsunami disaster (see below). Consequently, the private sector is the main driver behind tourism advancements in Phuket\textsuperscript{106,109}.

6.6.3 Tourism representative groups and business associations

The strength of tourism destinations and their capacity to respond to shocks is directly related to the strength, capacity, and leadership of tourism industry associations, and collective destination community action and cohesion (Cioccio and Michael, 2007; Scott et al., 2008). In the words of the Assistant Director of the TAT Southern Branch (Phuket), “Strong leadership and governance is the key to a quick recovery”\textsuperscript{102}. This proved resoundingly true when comparing the differences in strengths, power, and response capabilities between the tourism representative bodies operating in Patong, Khao Lak, and Phi Phi Don. The following sections outline the main actions taken by the various tourism
representative groups and associations operating in each destination and their effectiveness in increasing resource access for their members pre-and post-tsunami.

6.6.3.1 Patong
The main power base and driving force behind the private sector is the Phuket Tourism Association (PTA), which has played a pivotal role in the development, growth, and success of Patong as an international tourist destination\textsuperscript{106,109,146}. Other local associations and groups\textsuperscript{111} include: the Phuket Professional Guides Association (PPGA), Phuket Ecotourism Association, Patong Umbrella Group, Patong Beach Massage Group, Patong Shop Massage Group, Patong Beach Long-tail Boat Group, the Patong Beach Vendor Group, the Speedboat Group, and the Motorbike Taxi Group. The PTA has over 300 members who span the full range of businesses found in Patong, including transportation, restaurants, souvenir shops, hotels, and ticketing\textsuperscript{106}. However, membership is biased towards small businesses that a well-staffed, along with medium and large businesses\textsuperscript{109}. Membership numbers among small businesses tend to be lower for two reasons. First, the needs of smaller businesses are different to those of their larger counterparts; larger businesses are more concerned with destination marketing strategies whilst small (and often family-run) businesses are interested in day-to-day practices to keep their business running\textsuperscript{109}. Second, smaller businesses with skeletal staff are too busy running their businesses to spare time attending meetings\textsuperscript{109}.

Many of the PTA members are local politicians and successful large investors who are well-connected to local, provincial and national scales of power\textsuperscript{109,112,123,146}. They hold two seats in the Provincial government and sit in on provincial government meetings. They use this forum at the provincial level to negotiate for favourable planning and policy outcomes that are in alignment with the goals of their members\textsuperscript{106}. The PTA has direct links to the Ministry of Sports and Tourism and the President of the PTA sits on the National Tourism Council, a private sector lobby group that influences tourism policy and planning at the national level\textsuperscript{146}. Such levels of political connectedness are harnessed through the PTA, enabling them to effectively lobby the government as one unified and powerful force, in championing the collective needs of Patong’s private tourism sector\textsuperscript{106,109,123,146}. The Vice President of the PTA explained that, “[the PTA] use all of these power avenues available to us to push for our members needs and agendas”\textsuperscript{106}. Through these avenues, the PTA has a powerful and “loud voice”\textsuperscript{106}. The Vice President’s statement and the Association’s actions demonstrate their clear understanding of the politics of \textit{scale}. The PTA recognises that scale and scaled

\textsuperscript{111} Here a distinction is made between \textit{associations} and \textit{groups}. In Thailand, associations are registered bodies whilst groups are informal organisations that are not registered with the government.
actions are effective social tools through which to it can exploit and manipulate power to facilitate favourable business outcomes for themselves and their members (Jonas, 2006; Marston et al., 2005).

The powerful and well-connected tourism representative bodies of Patong and their strategically multi-scaled responses to the tsunami formed the backbone of the destination’s quick recovery after the tsunami and underpins their proved resilience to shocks. The PTAs power and connections were instrumental in facilitating and spearheading Patong’s swift recovery after the tsunami. On 4th January 2005, the PTA established the Phuket Recovery Centre (PRC), that was financed by select PTA members\textsuperscript{109,123,137}. The centre became a central resource for the affected Phuket tourism communities. This was made possible by coordinating their actions with with local, provincial, and national governmental departments and funding bodies\textsuperscript{123}. The centre’s five main activities are summarised in Table 6.1.

To operationalise these strategies quickly, the PTA utilised all the contacts and networks at the members’ disposal. The PTA approached Prime Minister Thaksin and the Minister of Finance directly with their requests for special financial aid and assistance\textsuperscript{109,137}. PTA members also pursued Parliamentary members who were close to Thaksin and the Minister of Finance at the time to petition for immediate action\textsuperscript{109,137}. In addition, PTA members approached other ministers related to planning and tourism to influence the drafting of special conditions for the affected population in all the six provinces\textsuperscript{109,123,137}. Approaching the Ministers and most senior officials directly was the quickest and most effective way to have their needs heard and get special measures approved\textsuperscript{109,137}. Subsequently, the PTA skipped the local and regional levels of government all together, because they did not have the power to allocate the resources needed to aid the recovery\textsuperscript{123}.

The PTA’s successful use of multi-scaled actions to facilitate a quick response from the government in the first few weeks following the tsunami demonstrates the importance of engaging in the politics of scale. As argued in Section 3.4.5.2, knowing what social pathways to use, which political buttons to press and at what scale(s), is crucial in bringing about favourable outcomes. The PTA representatives interviewed argued that they were much better placed to respond effectively to disruptive events compared to the government\textsuperscript{106,109,123,146}. In their view, the PTA has the tourism knowledge and connections needed to support an effective recovery\textsuperscript{106,109,123,146}. In the words of the General Manager of one of Patong’s large hotels, “It was easy to get [support from the central government], because of the big power”\textsuperscript{137}. The strength of the PTA and its ability to mobilise its members
### Table 6.1: Post-tsunami actions taken by the Phuket Tourism Association

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Actions</th>
</tr>
</thead>
</table>
| 1. Accurate reporting on tsunami impacts | • Set up PhuketTourist.com website to counter inaccurate and exaggerated reporting on damages sustained in Patong.  
• Supplied daily updates on recovery levels which included live webcam  
• PTA members gave regular media interviews to promote a positive image of Phuket and inform tourists they were open for business |
| 2. Provision of technical building advice | • Hosted a team of architects and engineers in the PRC to give building advice to businesses that suffered physical damage |
| 3. Support for small businesses | • Raised THB3 million (USD76,492) from PTA members to help fund the recovery of micro and small businesses in Phuket including those that had escaped physical damage  
• Provided information on loan options & acted a guarantor for micro and small businesses with no credit histories or assets  
• Petitioned the central government to widen eligibility criteria for post-tsunami loans (see Section 7.3.1.1)  
• Encouraged small businesses to set up a sub-group within the PTA that focused specifically on the needs of small enterprises |
| 4. Employment assistance | • Helped find jobs for the newly unemployed tourism workforce by matching employers with employees  
• Hosted government representatives in the PRC to assist the newly unemployed in accessing unemployment benefits |
| 5. Participation in multiple marketing strategies | • Used the PhuketTourist.com website to promote Phuket and reassure the travelling public  
• Worked in partnership with the TAT to host industry familiarisation trips for international tour operators from main markets & media representatives to restore consumer confidence  
• Participated in international marketing campaigns |

and fully utilise their political connections greatly enhances the resilience of Patong and its business community.

Other associations and sub-sector representative groups also played a role in supporting their members through the short-term phase of the recovery, but their actions were undertaken on a smaller scale. The Phuket Professional Guide Association (PPGA) organised language training programs in conjunction with Provincial Governor, the PAO, and the Ministry of Sport and Tourism. This training was offered to both PPGA members and non-members who wanted to improve their skills. The Beach Massage Group, in partnership with the Municipal government, offered massage training to improve the skill-base of its 300 members while business numbers were down in the aftermath of the tsunami.
tsunami\textsuperscript{145}. The group also mobilised its members to petition Prime Minister Thaksin directly for financial assistance\textsuperscript{142}. This collective action aimed directly at Thaksin was successful in securing financial assistance for members and non-members alike\textsuperscript{142}. The Longtail Tourist Boat Group, along with representatives from the Beach Massage Group, Beach Umbrella Group, Speedboat Group, Motorbike Taxi Group, and Beach Vendor Group, were involved in a very different cause. These sub-sector groups united against the municipal government to protest against and eventually overturn changes that the municipal government wanted to make to beach activity permits and zonings\textsuperscript{148,149}.

6.6.3.2 Khao Lak

Khao Lak has two tourism representative bodies with very different histories, aims, and capacities: the Phang Nga Tourism Association (PNTA) and newly formed Khao Lak SME Group. Like their Patong counterparts, both organisations and the swift actions of their leaders were instrumental in petitioning for more funding to hasten the rebuilding process, influencing development plans, and accessing core international markets in efforts to restore confidence and business (Calgaro, 2005; Calgaro and Lloyd, 2008). They achieved this by utilising established networks. Returning back to the core ideas of relational scale (Section 3.4.5.2), the actors that understand and exploit the tactical advantage of using multiple scaled networks and power relationships to increase access to desired resources and outcomes experience greater levels of success (Marston, 2000). The multiple and multi-scalar avenues used by each group to support the community’s recovery efforts are discussed below.

The PNTA has played a dominant role in shaping Khao Lak’s character throughout the destination’s developmental history\textsuperscript{18,20,23}. As of January 2007, the Association had approximately 55 members, half of pre-tsunami levels. The PNTA has worked hard to develop a strong professional relationship with Phang Nga’s Provincial Governor, to ensure that the needs and developmental concerns of the Khao Lak tourism community are voiced and considered by government\textsuperscript{17,18,23}. General cooperation and support is also sought from other regional and national industry associations (particularly Phuket and Krabi) and government bodies when needed\textsuperscript{17,23}.

The PNTA’s access to and utilisation of multi-scaled governmental and industry networks proved instrumental in accessing the financial and political capital needed to advance Khao Lak’s post-tsunami recovery. Weekly meetings with the Phang Nga Provincial Governor were used to air grievances over delays and the uneven distribution of financial resources\textsuperscript{18,23}. The
Chapter 6

Association also used its close connections with the local parliamentary member (a former president of the PNTA) to petition for additional financial resources and influence post-tsunami planning strategies for Khao Lak at the national level\(^{18}\). Founding PNTA members revived consumer interest and confidence through direct links with established European market partnerships that had facilitated Khao Lak’s pre-tsunami boom\(^{18,78}\). Marketing links and market support were strengthened further through a series of PNTA road-shows to key supply markets and joint industry and media familiarisation trips undertaken throughout 2005\(^{18,23,80}\). The Association’s ability to mobilise and respond to the tsunami as one collective force demonstrates the advantages of Association membership and the collective power of industry stakeholders. That said, the PNTA’s success always depends on the conviction of their leadership and members\(^{18,41}\). PNTA-led recovery actions slowed over time as members turned their attention to the recovery of their own businesses, which has lessened their ability to harness ongoing support from government and industry bodies\(^{41}\). Phuket’s PTA do not have this problem; they are more established and much stronger due their greater size and more established contacts with very influential people in the government and industry, giving them more power and political reach across scales than their smaller counterpart in Khao Lak\(^{109}\). One problematic characteristic that both the PTA and PNTA share is a low membership amongst smaller businesses and workers.

Membership to the PNTA is open to all tourism stakeholders but is dominated by medium and larger accommodation providers for similar reasons that limit small business membership to the PTA in Patong: mismatch of needs, time constraints, plus a limited awareness of PNTA, particularly among micro businesses\(^{36,47,B,C,E,G}\). Low group membership among some industry sub-groups not only heightens the vulnerability of the unrepresented groups, but also hinders community cohesiveness and lessens the community’s capacity to petition for change and action\(^{B}\). This extends further than just the PNTA. Strong community and business networks are an important component of sustainability and resilience (Cioccio and Michael, 2007; Scott et al., 2008), a point that is gaining recognition among destination sub-groups including travel agents, restaurant owners, and boat owners\(^{37,50,59,C,D,G}\). But active and widespread engagement remains a challenge, with responsibility of representation and action being projected onto others and not owned\(^{B}\). There are few alternative industry groups in Khao Lak, with the exception of a loose diving collective that has strengthened in the aftermath of the tsunami\(^{70,81}\) and the newly formed Khao Lak SME Group.

The Khao Lak SME Group was set up in direct response to the tsunami, giving small businesses a much needed voice when the need was greatest\(^{20,28,33}\). Members included any
SME in need, ranging from medium-sized resorts to small family beachside restaurants. The Group was successful in attracting political attention and immediate financial and marketing support for smaller enterprises that were struggling in the tsunami’s wake\textsuperscript{20,28,29,33,59}. The group actively sought political forums to voice their concerns regarding the formulation of the new building regulations\textsuperscript{20,28,59}. A Memorandum was presented directly to Prime Minister Thaksin Shinawatra in February 2005, outlining SME concerns regarding the rebuilding process\textsuperscript{20,28}. Financial donations were sourced directly from volunteers and indirectly from key markets through websites and distributed equally among members where possible\textsuperscript{17,20,28,29,33}. Additional capital was also sourced through the establishment of business sponsorships, whereby foreign donors supplied financial capital to smaller hotels and resorts for rebuilding, in exchange for annual time-share options at the resort (taken as payment in kind) until the debt was repaid\textsuperscript{17,33}. Immediate post-tsunami marketing support was secured through the use of accommodation websites. The Group used accommodation websites to reach their target markets in order to (i) update the travelling public on the progress of the recovery and (ii) advertise room availability in smaller guesthouses, bungalows and resorts\textsuperscript{28,33,76}.

Supporting the claims of Ellem (2002), Howitt (1993), and Sadler and Fagan (2004) outlined in Section 3.4.5.2, the Group’s strategic and successful use of existing scaled structures to help Khao Lak SMEs recover clearly demonstrates the importance of understanding and utilising multiple scales of social organisation to bring about favourable outcomes. But the Group’s effectiveness and longevity were hampered by two factors. First, individual credit problems caused active interest to wane once the immediate financial and marketing needs had been addressed\textsuperscript{28}. Second, participants left due to misunderstandings about aid distribution and disagreements about how Group resources should be used\textsuperscript{59,E}. The loose network still exists as does SME interest in collective group action but actions and active participation have waned over time.

6.6.3.3 Phi Phi Don

Phi Phi Don’s destination community members are represented by three representative groups: Phi Phi Tourism Club; Krabi Tourism Association (KTA); and the Phi Phi Marine Resource Conservation Club (that incorporates the Long-tail Boat Operators Group and the Speedboat Cooperative)\textsuperscript{203,248,250,272,277,278}. But unlike Patong, and to a lesser extent Khao Lak, the industry representative associations are weak and ineffective\textsuperscript{203,244,250,253,278}. The consequential lack of solid representation left the community without a collective industry platform from which to voice their collective needs and petition the government for resources.
both prior to the tsunami and after the event when the need was greatest\(^{202}\).

The reasons for this are fourfold. First, membership numbers are generally low\(^{203,278}\). One exception to this is the Long-tail Boat Operators Group where membership is mandatory for all island operators\(^{248}\). The reason for low membership is related to the second issue - inertia and a lack of leadership\(^{209}\). Inertia and limited community engagement with the representative groups is due to a lack of faith in the ability of the various representative groups to bring about change\(^{203,209,278}\). Third, there is little interest among existing members to take on leadership roles and responsibilities causing a catch-22 situation; people want results but are unwilling to take an active role and continuously deflect the responsibility onto others\(^{203,250,278}\). Finally, community members feel that there is a lack of collective vision for the island with regard to development and Phi Phi Don’s market image due to a plethora of conflicting interests\(^{203,209,253,278}\). One large hotel owner interviewed believed that Phi Phi businesses were too preoccupied with profits which hinders the formation of collective long-term goals for the development of the island\(^{278}\). There is also a reluctance to counter the dominant families’ interests and agendas (a common issue raised in Sections 4.10.5, 6.6.2, and 6.7.2) which dampens people’s willingness to take the lead on group-led activity\(^{203,250,278}\).

These problems and the frustration they give rise to in the community is reflected in the words of a hotel manager who would like to see more collective action:

> What’s their goal? Sometimes they try to help all the people, all the hotels. Sometimes [they are] successful and sometimes not successful. And all the people here, they say the meeting is not important because they get the same results every time. They do the same thing. If they [do] something different [then]...many members don’t recognise [the difference]. [In] every meeting they [talk about] the same problem, the same but [they] never to do something... When you have something new, everybody cooperate then. If you don’t have anything new, nobody want\(^{209}\).

However, the lack of governmental support for Phi Phi Don’s post-tsunami recovery (see Sections 6.6.1 and 7.3.1.3) has revived wide-spread interest in community action and group membership\(^{263,289}\). Wider conflicting interests and competition between Phi Phi Don and other destinations in Krabi also limits the amount of support Phi Phi Don businesses receive from the KTA. The KTA’s aim is to represent all tourism businesses in Krabi\(^{232,239}\). In reality, the interests and loyalties of the KTA’s centre on the needs of Krabi mainland destinations such as Ao-Nang and Koh Lanta, that are in competition with Phi Phi Don for tourist business\(^{239,244,250}\).

Whilst the lack of collective industry representation and group participation on the island has caused frustration among some members\(^{209,253,268,278}\), it did not significantly reduced the
capacity of the island’s tourism business community to effectively respond to the tsunami. Instead, strength was derived from the actions of the dominant families who spearheaded the recovery (refer back to Sections 6.2.4 and 6.5.1) and helped the community mobilise action against the central government’s post-tsunami plans to significantly change the location and type of tourism development found on Phi Phi Don (see Section 7.3.1.3 for details). The swift actions of the close-knit Phi Phi dive community also did a lot to support the recovery. Whist they are not an organised group, the dive operators on Phi Phi Don work together to create a supportive business and working environment on the island\(^{210,226,237}\). This comradery proved instrumental in aiding the post-tsunami recovery of Phi Phi’s dive shops. These dive shops that had lost expensive dive equipment rented equipment from others, enabling them to continue to their tours and training and earn enough money to replace lost equipment\(^{226,237}\). These same close-knit connections also helped support the successful formation of Phi Phi Dive Camp, a newly formed group that helped in both the initial emergency stages of Phi Phi’s recovery and continue to support marine conservation (see Sections 7.2.4.2 and 7.3.3 for more detail).

Revisiting arguments made in Section 6.2.4, the factors and processes that significantly increase resilience in one destination (in the case Phi Phi) may be different to those that boost resilience in others (like Patong and Khao Lak). This finding reemphasises the importance of context in determining destination vulnerability levels. Individual factors alone do not explain why some destinations are more resilient; it is the way in which these various factors combine in a given period of time and place that is most important in determining differential vulnerability and resilience levels within and across destinations. The importance of place dynamics in determining differential vulnerability reiterates the need to emphasise place and time in vulnerability frameworks. The DSF presented in this thesis meets this requirement.

### 6.7 Access to physical capital and biophysical sensitivities

As shown in Section 6.6.1, a lack of capacity in local levels of government, along with budgetary constraints, limited political engagement, and corruption, severely curtailed the success of pre-tsunami planning initiatives. These same enduring governmental weaknesses have also led to the provision of inadequate infrastructure and long-term resource mismanagement, that have caused substantial environmental degradation in both Phi Phi Don and Patong, both of which market themselves as tropical paradises. The detrimental effect of environmental degradation on the long-term viability of tourism destinations cannot be stressed enough (see Santana, 2003).
As argued in Sections 2.2, 2.4.2, and 3.4.3.2, unregulated development, pollution, and environmental degradation of non-renewable natural resources pose great threats to the appeal and longevity of tourism destinations whose attraction depends on the maintenance of pristine natural environments that are ecologically sensitive (Burak et al., 2004; Cohen, 2008; Hall and Page, 2002; Henderson, 2007a; Mihalič, 2000; Petrosillo et al., 2006; Ritchie, 2008; Santana, 2003). As such, resource mismanagement and subsequent environmental degradation presents as a slow-onset stressor that both tourism destinations and resource managers have to respond to alongside more dramatic events like the tsunami. Both events require investment and resource-use choices but the *timeframes* of those responses, like the event-cycles themselves, differ making *time* (see Section 3.4.5.3) and the rhythms of coexisting multiple shocks and stressors (see Section 3.4.2) integral considerations in vulnerability assessments as shown in the DSF. As argued in Sections 2.2 and 3.4.5.3, action choices to overlapping events is, in part, dictated by priorities, risk perception, and acceptable trade-offs. The dramatic impact of the tsunami demanded the attention of millions around the world but the slow degradation of tourism environments is still a sensitivity that cannot be ignored.

The strong linkages between the viability of tourism activity, the health of the biophysical environment that supports it, and the vulnerability of destinations in the face of change is acknowledged in the DSF under the sub-heading of *physical and environmental* capital. The following sections investigate how infrastructural limitations, resource mismanagement, and increased developmental pressure undermine the attractiveness and viability of the destinations of Patong, Phi Phi Don and the wider biophysical implications for the vulnerability of tourism activity and that of alternative industries that share the coastal resource.

### 6.7.1 Infrastructure limitations, resource mismanagement, and environmental degradation

The natural environment of Phi Phi Don and Patong Beach was heavily degraded by man long before the tsunami devastated the islands. Phi Phi has long been plagued by substandard sanitation conditions and pollution brought about by poor waste management. With no central sewage system on the island, most small businesses and residential dwelling use inadequate and crude septic systems that led to pollution of Phi Phi’s surrounding marine environment. Only the larger resorts have installed appropriate waste water tanks. The limited capacity of popular poppy-ring septic systems has saturated the island’s water table, with the untreated overflow running directly into the sea. This waste water treatment method has persisted post-tsunami, raising real
community concerns about potential negative effects the resultant pollution and environmental degradation will have on future tourist flows\textsuperscript{203,211,273}. Growing pollution problems are exacerbated further by the absence of a central garbage disposal system on the island\textsuperscript{U}. The removal of waste from the island by boat is considered too costly for some businesses and residents, prompting the regular dumping of solid waste on vacant land plots or on sensitive ecosystems such as mangroves\textsuperscript{203,237}. If past waste management mistakes are not addressed there is a high possibility that Phi Phi’s pollution problems will severely damage not only its tropical paradise image (Cohen, 2008), but also its supporting ecosystem. Sustained damage to Phi Phi’s supporting ecosystem has the propensity to threaten the island’s main livelihood (tourism) and long-term habitation (see Petrosillo et al., 2006).

The lack of basic infrastructure is also affecting the quality of life and living costs on Phi Phi. Despite a decade of community petitioning, a sustained lack of involvement and investment by mainland-based local authorities has left the community with no centralised electricity, water, or waste management services\textsuperscript{203,211}. Public finance and investment in basic infrastructure is crucial for the long-term viability of tourism activity (Elliot, 1997). But local authorities reason that the costs of providing these services to a remote and small community are too high to justify initial expenditure and ongoing maintenance, despite the receipt of high taxes from Phi Phi businesses and landowners\textsuperscript{203,211,235,236}. Electricity is sourced from private generators that are prone to breakdowns, causing regular electricity outages, whilst water is privately sourced from the mainland and delivered by boat\textsuperscript{203,211,237}. The only pier on Phi Phi and connecting laneways are also too small and narrow for the simultaneous transferral of supplies and tourist traffic let alone to cater for emergency evacuations\textsuperscript{203,211,237}. The subsequent high costs of water and electricity increases the price of accommodation and goods on the island, which deters longer tourist stays and is out-pricing Phi Phi’s traditional core back-packer market\textsuperscript{203,237,243}. Patong also suffered from high pollution levels prior to the tsunami due to overdevelopment and the mismanagement of waste (Cohen, 2008). Overdevelopment is a common problem in established destinations where the pursuit of short-term economic gains have led to the surpassing of natural resource carrying capacities (Burak et al., 2004; Cohen, 2008; Hall and Page, 2002; Henderson, 2007a; Mihalič, 2000; Petrosillo et al., 2006; Ritchie, 2008; Santana, 2003). Patong does have a waste water treatment facility but its capacity is limited\textsuperscript{140,172}. Accordingly, only half of Patong’s wastewater is treated before being discharged directly into
Pak Bang Canal (located at the southern end of Patong Beach) and then Patong Bay (Phuket Gazette, 2005). The routine discharge of untreated human waste into the canal resulted in bacterial contamination and high levels of ammonia (Department of Marine and Coastal Resources, 2005; Phuket Gazette, 2005). Water quality in Patong Bay did improve after the tsunami. The number of different types of harmful bacteria detected in Patong Bay fell from over 1,000 recorded pre-tsunami to two in January 2005 (Phuket Gazette, 2005).

Cohen (2008) observes that the rejuvenation of the natural environment as a result of the tsunami was an unexpected positive outcome for Patong’s image. The cleansing of Patong’s polluted waterways reversed its growing image as a polluted and overdeveloped destination to one that had been reborn and returned to its natural splendour (Cohen, 2008). However, high nutrient levels quickly returned causing three algae boom events in 2007 (Phuket Marine Biological Centre, 2007). Patong’s recurring water pollution also threatens tourism activities as tourist complaints about the sea water quality increase. The degradation of Phuket’s 16.63 hectares of coral reef is another concern. A great number of boat trips and diving around the coral reef areas has damaged the coral reef in Patong Bay as has eutrophication (ADB, 2006a). Excessive algal growth, oxygen level reductions, and increases in turbidities over time reduce coral growth and lead to the decline of species (Tomascik and Sander, 1987).

Khao Lak does not have pressing environmental concerns. Prior to the tsunami, there was not enough development to place significant pressure on the natural environment. However, the community is worried that the unmonitored rebuilding of post-tsunami development (see Section 7.3.3) and future growth may place unsustainable pressure on fragile coastal ecosystems. There are rising concerns that the poor management of solid and waste water disposal systems will have a detrimental impact on Khao Lak’s physical environment and subsequent tourist flows and tourism livelihoods. Not all businesses have adequate waste water facilities and there is little monitoring or support from local authorities, despite multiple attempts to have this resolved at the sub-district and district level. If nothing is done to curb the mismanagement of natural resources and waste, environmental degradation may become an emerging sensitivity for Khao Lak. Khao Lak also has other pressing infrastructural needs that are affecting the destination’s appeal.

Despite the TAOs preferred focus on the provision of infrastructure (see Section 6.6.2), some parts of Khao Lak still lack some basic infrastructure such as street lighting, pavements, and adequate drainage (Gilchriest et al., 2007b). Street lighting along the inner Bang Niang...
streets has still not been replaced, pavements remain incomplete, and a lack of good drainage systems leads to flooding\textsuperscript{E,F}. Resort owners contest that bad infrastructure is creating an unfavourable tourism image and affecting business negatively. Their guests feel insecure walking down dark streets at night with incomplete pavements\textsuperscript{28,50,E}. The Khuk Khak TAO is responsible for infrastructure provisions in Bang Niang. However as noted in Section 6.6.1, there is a belief among resort owners that the TAO does not have the monetary resources or the political will to rectify the situation in tourism areas, as this type of repair does not benefit them directly\textsuperscript{28,50}. Whilst taxes and prices for electricity and water are high the poor quality of the infrastructural services is causing much community frustration\textsuperscript{A,C,F}.

6.7.2 Development demand and illegal encroachment on public lands

Persistent tourism development demand in the established destinations of Patong and Phi Phi Don is causing other land use problems. Increased development pressure is placing great strain on public lands and sensitive ecological areas, resulting in illegal land encroachment and a loss of those alternative livelihoods that depend on shared natural resources. Sustained development pressure in Patong has resulted in the government-supported sale of sensitive ecological public resources to private investors\textsuperscript{139}. The Pak Bang Canal and the adjacent mangrove forest - the last mangrove forest in Patong - is one of these areas that have subsequently been converted into lucrative palm tree plantations\textsuperscript{149}. Parts of the remaining public mangrove forest have been built upon illegally, whilst pollution and untreated waste water from Patong has depleted water quality and destroyed natural marine nurseries that once flourished in the mangroves\textsuperscript{139} (Department of Marine and Coastal Resources, 2005). The small fishing community that settled the area 40 years ago is facing immense pressure from Patong’s Municipal Government and large investors to abandon their land and boat piers to relocate further north\textsuperscript{148,149,177,178}. According to Elliot (1997), conflicts over shared resources is a common problem in the management of tourism, when wider public interests are displaced by the narrow economic interests of public and private stakeholders.

The impacts of the privatisation of the canal and surrounding land and increased illegal land encroachment into the forest are proving ecologically and socially detrimental. Once a natural buffer to storm surges, the removal of sections of the mangrove forest has left the canal unprotected from annual monsoonal storms (Department of Marine and Coastal Resources, 2005). From a social perspective, the livelihoods of the existing fishing community is being threatened, due to an inaccessibility to piers and docks needed to moor their boats, particularly during the monsoon season\textsuperscript{148,177}. Inaccessibility to public lands is
also a concern along the beachfront where sections of the public beach have been illegally claimed by 55 “beach owners” known as “Nai-Hua”. Small beach vendors, massage workers, and beach chair rental businesses pay as much as 30 to 50 percent of their earnings to the beach owners for usage of the public resource.

Phi Phi Don has a long history of land ownership disputes and encroachment on public lands. As noted in Section 6.6.1, the inclusion of Phi Phi Don as part of the Hat Nopparatthara-Mu Phi Phi National Park in 1983 forbade development on the island, with the exception of pre-existing settlements that existed in the park’s periphery. Land deeds for pre-settled land were not systematically issued, leading to some contention over land rights, particularly for those investors that bought pre-settled land from original settlers before land deeds were issued. Some 2,000 Rai of land (320 hectares) remain in dispute with land titles being the issue. In 2007 four cases of illegal encroachment on National Park lands were being processed by governmental authorities. Conflicts over access to land are heightened further by the ever increasing demand for land needed for the expansion of high yielding tourism development, the main beneficiaries being the local elites. Thailand’s national parks are under the control of the Royal Forest Department but regulation enforcement is difficult due to the absence of a forest monitoring station on the remote island.

6.8 Conclusions

This chapter has shown that sensitivity levels were starkly different between Patong, Phi Phi Don, and Khao Lak, and explains why place-based differences and context matter in determining differential levels of destination vulnerability and resilience. Place-based destination differences in seasonality and developmental histories, product type and clientele (listed in the DSF as tourism-specific sensitivities) present as fundamental determinants of a destination’s sensitivity to shocks. Exacerbating these industry sensitivities were (i) weaknesses in governance structures and processes, (ii) differences in access and entitlement to economic, human, and social resources needed to withstand and effectively respond to shocks, and (iii) the mismanagement of sensitive and finite biophysical resources that all three destinations depend upon for their appeal and longevity.

Patong was best able to withstand the shock of the tsunami compared to its neighbouring destinations of Khao Lak and Phi Phi Don. This outcome is attributable to differences in their developmental histories. Patong’s long developmental history left the destination in a strong financial position that facilitated a swift recovery. Profit levels and credit histories were
strong, sourced from multiple businesses (including other tourism businesses in alternate destinations and those in other industries) which enabled a large number of businesses to quickly access liquid assets and credit needed to rebuild. This solid financial base was fuelled by Patong’s broad market base that attracts tourists throughout the year, diminishing a financial reliance on peak season business (occurring between November and January) that was wiped out by the tsunami. Underpinning Patong’s financial success and prominent international branding is an active, powerful, and well-connected tourism association that simultaneously used its political and business connections at the local, provincial, and national levels to quickly access financial, marketing, and technical support needed to recover. However, one drawback found in Patong is that its social networks are generally weak due to high levels of immigration into the area. Family and social networks play a crucial supportive role in Thailand and are considered extremely important in reducing vulnerability levels. But this factor proved inconsequential in light of Patong’s strong financial and market position and powerful business networks, which in turn, shows that factors must be analysed within a broader context.

Khao Lak, as a new destination, lacked many of Patong’s defining strengths. Khao Lak’s newly founded businesses did not have a strong financial base; financial reserves were low as were insurance levels, and credit histories (where they existed) were not well established. After the tsunami, many businesses (particularly smaller establishments) experienced difficulties in accessing financial capital, which slowed the recovery process, stifled earning capacities, and deepened financial sensitivities. Khao Lak’s sensitivity to the tsunami disaster was further heightened by a high dependency on tourism as the primary livelihood option, high seasonality levels, a small and specialised client-base, and a reliance on the marketing strategies of international tour operators amongst bigger businesses. Khao Lak’s seasonality and its negative effect on vulnerability levels also highlights the important role time-specific weather patterns experienced both in Europe and Khao Lak - the lure of the European summer versus Khao Lak’s wet season - play in determining destination vulnerability. Yet the disaster also revealed Khao Lak’s strengths.

The destination’s recovery was aided by the loyalty of its large and loyal repeat-client base, who offered financial support through donations and the return of their business. Strong family networks also provided financial and moral support to those who had access to them. Those who did not, however, felt isolated, marginalised, and were more sensitive to the tsunami. The power and reach of the Phang Nga Tourism Association and Khao Lak’s newly formed SME Group cannot compare to the might of its Patong-based counterpart, however,
their decisive actions, led by resourceful leaders, helped source financial capital and marketing support from sympathetic and loyal international clients and long-term business relationships based predominantly in Europe.

Like its prosperous neighbour of Patong, Phi Phi Don too benefited from established and varied markets and profitable businesses that have grown over 20 years. This was particularly the case for the dominant five families who own most of the property on the island, and benefit from diversified livelihood portfolios. But this is where the similarities end. The concentration of land ownership and power in the hands of the five dominant landowner families has created a very different community structure in Phi Phi Don from its neighbouring destinations, which has lessened Phi Phi’s sensitivity to shocks and stressors. The combined wealth of the land-owning families, along with the strong family ties that underpin these family business networks, have created a highly effective and robust support system that guides island development, promotes business expansion, and improves infrastructural standards. The mobilisation of dominant family resources after the tsunami was instrumental in the rebuilding of not only hotels but some of the rented shop space, which lessened the financial burden on tenants. Yet the downside of such concentration of power and wealth is that advancement depends upon the discretion and agendas of the local business elite. Industry representative associations are weak on the island and their effectiveness limited due to low levels of interest and an unwillingness amongst community members to actively participate. Instead, decisions are left to the dominant family owners, whose actions are rarely contested openly for fear of reprisals.

The identification of these place-based differences among Patong, Phi Phi Don, and Khao Lak reemphasises the importance of context in determining destination vulnerability levels. Individual factors alone do not explain why some destinations are more resilient; it is the way in which these various factors combine in a given period of time and place that is most important in determining differential vulnerability and resilience levels within and across destinations. The importance of place dynamics in determining differential vulnerability reiterates the need to emphasise place and time in vulnerability frameworks. The DSF presented in this thesis meets this requirement.

Despite their differences, there were several common factors that heightened the sensitivity of all three destinations: limited access to credit amongst micro and smaller businesses, a lack of risk awareness, the fragility of their destination images to negative perceptions of risk and lingering images of devastation, staff shortages, social exclusion of minority groups, and
pre-existing weaknesses in governance structures at the local level. Governmental weaknesses and corruption at the local level have hindered the implementation and enforcement of developmental regulations, led to the unequal distribution of resources pre- and post-tsunami; and have left the communities with inadequate infrastructure and little localised support (particularly in Khao Lak and Phi Phi Don). Unchecked overdevelopment in the more established destinations of Patong and Phi Phi Don has led to environmental degradation that threatens to destroy the pristine environments that form the main attraction for Andaman Coast destinations. However, the identification of these causal factors that contribute to differential levels vulnerability and resilience experienced in Patong, Khao Lak, and Phi Phi Don still fail to tell the whole story. A closer look at actor agendas and those contextualised characteristics and processes that underpin the daily functionality of the three destination communities go to the heart of the problem, being the creation and perpetuation of vulnerability over time and space.

The importance of established multi-scaled networks and relationships in facilitating access to an array of capital needed to support strong destination communities and buffer them against shocks and stressors is very clear when comparing the experiences of Patong, Khao Lak, and Phi Phi. The most glaring examples are, of course, the influence of the Patong-based Phuket Tourism Association, the wealth, reach, and influence of the five dominant land-owner families on Phi Phi, and to a lesser extent, the cumulative efforts of the Khao Lak SME Group and the Phang Nga Tourism Association that is based in Khao Lak. Family structures and kin ties that form the backbone of Thai society also proved crucial sources for both financial and psychological support. However, the routine marginalisation of Burmese working in Thailand and those without close family ties also reaffirms the downside of social networks that centre around kinship. But there were also many individual examples of people using multiple avenues to assess markets and raise financial capital.

Khao Lak and Phi Phi Don business owners capitalised on their direct links to clients and marketing partners overseas to secure marketing support, donations and repeat visitation. One savvy German restaurant owner used the incessant media coverage of the tsunami disaster to highlight the need for a return of business and donations, resulting in more business than he could service. The successful actions of these individuals and organisations clearly demonstrates the power and tactical advantage of using strategic scaled actions to gain access to resources needed to fulfil their goals (Adams, 1996; Agnew, 1997; Leitner, 1997). Returning back to relational scale, social actors who recognise this and take advantage of all opportunities experience greater levels of success in accessing the
resources they need to fulfil their goals and agendas (Marston, 2000). This finding reinforces the need to focus on and understand the complexity of scale and scaled actions (that operate through these relational networks) when assessing and addressing vulnerability. The emphasis on the contextualised element of **scale** in the DSF achieves this.

Three other contextual factors also proved instrumental in influencing differential vulnerability levels within and across Patong, Khao Lak, and Phi Phi Don: **agency** and the **agendas** of social actors, **cultural norms**, and **power systems**, all of which feature in the **place** element of the DSF. The actions of these individuals also highlights the importance of **agency** and the **agendas** of individuals that drive action, be it for their own businesses and workplaces (in the case of the German restaurant owner) or for the greater good of a group or organisation. Disaster victims in Khao Lak, Patong, and Phi Phi Don were not passive victims; they were survivors and active agents in their recovery (Fordham, 1999; McLaughlin and Dietz, 2008). There were also other agendas that were working against the Khao Lak and Phi Phi Don communities; these were the interests and biases of the respective local government officials who chose for their own reasons to remain largely disengaged from the problems of those communities they were charged to represent. The decision of the national government to play down warnings of tsunami risks in the years leading up to the disaster for fear of loss of tourism business and valuable GDP also demonstrates how agendas of the central government directly influenced vulnerability levels at the local scale. A greater awareness of risk following the tsunami event did not significantly change peoples negative attitudes toward insurance as a risk-reduction strategy. Taking out insurance is not common in Thailand as people do not see the value in spending additional money on risks that may never eventuate. This also shows the importance of **time** and event-cycles (real or perceived) in shaping risk perception and subsequent action. That said, the actions of these multiple and often competing actors were taken within the context of cultural contingencies and existing constraining/enabling power structures (Bhaskar, 1986; Emirbayer and Mische, 1998; Jessop, 2005; McLaughlin and Dietz, 2008).

Weaknesses in formal governance structures may have greatly hampered the success of planning regulations in Patong, Phi Phi Don, and Khao Lak, but these were further exacerbated by deeper cultural issues related to informal power systems and processes that work in tandem with the more formal structures. The patron-client relationships that lie at the heart of Thai society and its power-base are arguably the most dominant force in shaping the functionality of social interactions across the three destinations. These relationships not only influenced the success or failure of planning regulations in Patong, Phi Phi, and Khao Lak,
but also create environments where governance intransparencies (including planning exceptions, nepotism, and corruption), intimidation, self-censorship, and inequality flourish. The dominance of kin-based patron-client relationships were most evident in Phi Phi (linked to landowner families) and Khao Lak where local elites benefited greatly from planning „exceptions” and threatened those who complained. The tolerance of the „Thai way” is very much influenced by Thailand’s collectivist culture where subservience to historically-embedded community leadership structures (Irwin, 1996) is expected and abided to, so as not to „lose face” and social standing, and out of fear of incrimination of going against this historically-embedded system.

The next chapter examines levels of system adaptiveness - the third dimension of vulnerability included in the DSF - across and within the destinations of Patong, Khao Lak, and Phi Phi Don. This includes short-term recovery responses designed to stabilise the tsunami-affected destinations, and those long-term strategies aimed at building back better, so as to overcome identified social system weaknesses and physical developmental mistakes.
Chapter 7

7 Response and System Adaptiveness

7.1 Introduction

The final dimension of the vulnerability - system adaptiveness - features both the immediate and short-term coping responses and longer-term adjustments, and traces their consequent system feedbacks, as highlighted in DSF presented in Figure 7.1. It also acknowledges that short-term and longer-term responses are influenced by pre-existing system conditions and the types of resources that were available when the trigger event (the tsunami) took place. In doing so, the third dimension of vulnerability encapsulates the dynamic and unfolding process of change. Disasters can be catalysts for change and their outcomes need not be solely negative (Oliver-Smith, 1996; Pelling and Dill, 2010). Disasters open up opportunities for new business investment and market expansion, political reorganisation, solidarity and activism, and the creation of new business relationships and social networks; all of which facilitate social transformation and have the propensity to increase resilience (Faulkner, 2001; Oliver-Smith, 1996; Pelling and Dill, 2010; Rigg et al., 2008; Scott et al., 2008).

The opportunity for transformation was embraced by Bill Clinton, the UN Special envoy for Tsunami Recovery, who called upon affected nations to „build back better“, a move that necessitated a re-evaluation of pre-tsunami development paths, reducing vulnerabilities, and empowering communities to increase their capacity to better withstand and effectively cope with future crises (Khasalamwa, 2009). Whilst the previous two chapters focussed largely on those pre-disaster conditions that heightened exposure and sensitivity levels in the destination communities of Khao Lak, Phi Phi, and Patong, this chapter examines those post-disaster responses and their effectiveness in fulfilling the „build back better“ mantra and bringing about positive change and transformation.
Figure 7.1: Factors influencing system adaptiveness in tourism destinations
The chapter begins by presenting the short-term impact and coping responses of the Royal Thai Government, the tourism business sector, and NGOs that were aimed at stabilising the socio-ecological system. These included emergency assistance for survivors, the distribution of emergency aid (including financial aid), and the provision of trauma support. An examination of these short-term responses draws attention to the vital role the tourism sector and grass-root actions headed by strong leaders played in the recovery of the badly-affected destinations of Phi Phi and Khao Lak, marking a fundamental shift in the politics of aid. The chapter then moves on to examine the longer-term adjustments and adaptation strategies that aimed at improving development paths, reducing vulnerabilities, and increasing resilience to future shocks. It details the two over-arching medium and long-term initiatives introduced by the central government - the Andaman Tourism Recovery Plan (ATRP) and the Andaman Sub-Regional Development Plan (SRDP) - before reviewing the collective efforts of NGOs and business groups in providing longer-term support to the recovery and building resilience.

Woven throughout the analysis of both the short-term reactive responses and the longer-term adjustment strategies are commentaries on the outcomes of these strategies, and their effectiveness in achieving their intended goals. Most importantly, these commentaries are accompanied by explanations into why some strategies failed, and the consequences (feedbacks) of these failings on future sensitivity and exposure levels. The answer lies with the inability to, and disinterest in, changing those historically-embedded and highly contextualised causes of vulnerability - power systems, cultural norms, and the agendas of the ruling elite in each destination. The review of post-tsunami actions reveals that these responses (including both action and inaction) and their outcomes were influenced greatly by a dynamic mix of the persistence of constraining governance structures and processes, contextualised cultural beliefs and practices, and human agency.

### 7.2 Immediate impact and short-term coping responses

As stated in Section 3.4.3.3, the first phase of change that directly follows the shock (and destabilising system tipping point) – encapsulated in the immediate impact and coping responses to shocks - is reactive in nature and draws upon all the resources that a population and its governing bodies have at hand in the very moment that the shock occurs. Their main purpose is to stabilise the system. As noted in Section 3.4.3.3, this important relationship between pre-existing system conditions and post-event responses in the adaptive cycle is represented in the DSF (Figure 7.1) by the white arrow that links the collective resources listed in the sensitivity dimension to the system adaptiveness dimension.
The following sections explore the intimate connection between the accumulation of resources (economic, human, social, and political) prior to the tsunami and the utilisation of these by the affected Thai destination communities and governing bodies in aiding the emergency and short-term phases of the post-tsunami recovery. It describes the immediate and short-term responses of the RTG, tourism business sector, and non-government organisations to help the affected communities cope and reorganise after the tsunami, and examines the outcomes and consequences of these actions. Through the analysis of the immediate and short-term responses, the contextualised influences of historically-embedded social norms and power systems, prejudices, and agendas (personal and institutional) in shaping responses to the tsunami and their outcomes powerfully come to the fore. These influences that infuse every aspect of daily life and, in turn vulnerability and resilience levels, are depicted in the place element of the DSF in Figure 7.1.

### 7.2.1 Emergency responses

The RTG led a well-planned post-disaster emergency response and short-term strategy (Scheper and Patel, 2006; UN, 2005). The RTG set up the National Tsunami Disaster Relief Committee to respond to the needs of the survivors, and a USD76.5 million fund was set up for tsunami recovery programmes (OPM, 2007). Nine sub-committees were appointed to coordinate the emergency response and recovery programs to address the following needs: immediate assistance for Thai and foreign survivors, financial aid for affected businesses and fishermen, assistance for the newly unemployed, provision of housing and restoration of public facilities, and support for affected children (TAT, 2007c). Immediate emergency measures included: a massive forensic operation; basic provisions for food, water, and medical attention; the construction of temporary and permanent housing; and the repatriation of foreign tourists (UN, 2005). The Thai military forces played a key role in the initial search and rescue efforts and assisted in the building of temporary and permanent housing in affected areas. The forensics operation was a collaborative effort involving the Thai and Australian Police, the Ministry of Health, the Department for Disaster Prevention and Mitigation (DDPM), and 500 Thai and international experts from 30 countries (Scheper and Patel, 2006). The office of the Phuket Provincial Governor also established the Andaman Tsunami Relief Centre (ATRC) to act as a central coordination point for tourist assistance and evacuation operations, medical care, donation coordination, public relations management, public infrastructure restoration, and the coordination of local administration actions (Singbun et al., 2008).
Assistance for foreign tourists was rapid. The Immigration Bureau helped repatriate approximately 5,000 foreigners and assisted thousands of tourists who had lost their belongings and passports (UN, 2005). Normal visa requirements were waived by the RTG whilst the TAT provided financial and logistical assistance to survivors that included return airfares, accommodation, food and transport. Approximately USD243 was given to every surviving tourist for basic provisions (UN, 2005). Tourist medical expenses were covered by the Ministry of Health, while the Immigration Bureau established centres at airport arrival halls to aid family friends who were arriving to check on the injured, the missing, and the dead (UN, 2005). International tour operators, such as Swedish Star Tours and Fritidsresor, provided immediate support by using their charter planes to evacuate people, and flew doctors and medical staff from Scandinavia to Thailand.

7.2.2 Short-term financial relief and distribution problems

On the completion of emergency rescue response phase, attention turned to providing immediate financial aid to the surviving populations. The Ministry of the Interior provided immediate emergency payments of THB 2,000 (USD49) for every victim (UN, 2005). All Thai registered businesses were entitled to an additional THB20,000 (USD487) payment to assist them with immediate recovery needs (UN, 2005). Unregistered businesses received no benefits. The Ministry of Labour also offered unemployment benefits equalling the minimum wage of THB175 (USD4) per day to employees who had lost their job for a period of 30 days (UN, 2005). Yet this benefit excluded those who were not directly affected by the tsunami (WTO, 2005). A further THB40,000 (USD1,000) was provided for the loss of family members and assets (Friedrich Ebert Stiftung, 2005). However, there were problems with the distribution of funds at the district and sub-district levels (Scheper and Patel, 2006) causing aid distribution anomalies and a heightened mistrust in local governing bodies, resulting in anger and frustration (Tan-Mullins et al., 2007). This is not uncommon. Faulkner observes that inadequate resource availability along with “bureaucratic structures and power relationships restrict the ability of organisations to respond promptly and effectively to emergency conditions (2001: 140)”. Pelling concurs, stating that the distribution of aid in developing countries can often be unequal and favours dominant social groups due to strong influences from the traditional leaders and elites who operate within the affected areas:
Following a disaster, it is common practice for international assistance and aid supplies to be handed over to government agencies for local distribution. These goods have exaggerated importance during the period of scarcity following a disaster, and it is likely that clientelistic relationships operating in the pre-disaster period are reinforced by the state’s monopoly in goods distribution during recovery (2003: 42).

The first problem with the distribution of financial aid was that there were insufficient funds to cover all eligible recipients, causing some to miss out\textsuperscript{140,145}. Community members were advised to wait for government notification regarding collection periods once individual damage reports were lodged. Some were never notified and were told that funds had run out when they followed up on their registered claim with government officials\textsuperscript{116,121,131}. Second, there was a lack of knowledge about procedure and who to approach\textsuperscript{36,37,40}. As argued in Section 6.4.2, a lack of knowledge pertaining to the risk of a tsunami event in the area robbed the communities of Patong, Khao Lak, and Phi Phi Don of the choice to better prepare for the eventual event. Post-tsunami, a lack of knowledge about where to get help curtailed peoples’ success in securing assistance. Together, these findings demonstrate the important role knowledge (listed under human and social capital in the DSF) plays in determining vulnerability levels. Procedural complexities were a particular problem for Phi Phi Don survivors. Only those that were registered as Thai Phi Phi Don residents at the time of the tsunami were eligible for emergency payouts for personal family or property losses\textsuperscript{204,220,227,236,243}. Those who had not changed their official residency from the mainland to Phi Phi Don or those who had lost their documentation in the disaster were not eligible\textsuperscript{237,251} (Tan-Mullins et al., 2007).

The third problem was that business losses were not factored into immediate aid distribution decisions, causing aid to be aimed primarily at those who sustained losses in property and assets. Accordingly, the businesses in each of the destinations that escaped physical damage but lost business revenue were given no emergency aid\textsuperscript{39,69,75,79,90,94} (Ichinosawa, 2006). Fourth, the misappropriation of funds at the local level of government (that which included village leaders) in all three destinations saw funds and emergency provisions being unevenly distributed among friends, family, and the local elite, leaving some eligible recipients with nothing\textsuperscript{26,29,31,32,37,43,112,116,121,158,243,244,245,258,267,7} (Scheper and Patel, 2006). There were also reports of a portion of the aid being routinely and illegally absorbed by those responsible for distributing the money (Tan-Mullins et al., 2007). Here pre-existing social inequalities and exclusion, legitimised by traditional norms and structures (outlined in Sections 6.6.2 and highlighted in the place element of the DSF in Figure 7.1) were automatically built into aid disbursements (Tan-Mullins et al., 2007).
The subsequent procedural breakdowns directed by the highly politicised preferences and agendas of the localised ruling elite not only slowed down the recovery, but also fortified historically-embedded architectures of power and the financial position of the ruling class, while compounding the sensitivity and vulnerability of others in the process (see Tan-Mullins et al., 2007). This finding reemphasises the importance of addressing pre-existing conditions that heighten vulnerability and the consequences of not doing so. Returning to the DSF presented in Figure 7.1, a lack of adaptation or adjustment (detailed in the red outlined box) spurred by the preferences and agendas of dominant members in the current power system (acknowledged as influential factors in the contextualised place element of the DSF) feeds back into the system (shown by red feedback arrows) and compounds the exposure and sensitivity of the already vulnerable.

Institutional biases against tourism entrepreneurs only exacerbated the problem of unequal aid distribution. While aid reached more traditional livelihood sectors like fishing, those dependent on tourism complained of being largely ignored by governmental institutions, causing anger, frustration, and disillusionment (Tan-Mullins et al., 2007; WTO, 2005). One Thai resort owner in Khao Lak explained:

Normal people [villagers and those with traditional livelihoods], the government give them about 200 baht for this, they give them a house [and] house equipment … many, many provisions and many people give them money. But not for [tourism] business ... For business no.

Tourism business owners and tourism workers in Phi Phi Don and Khao Lak felt that institutional biases against tourism business owners and communities within the local TAO authorities were to blame for this. This sentiment was replicated in Koh Lanta, another tourism destination in Krabi Province that was affected by the tsunami (Tan-Mullins et al., 2007).

In January 2005, Prime Minister Thaksin advised the affected communities to approach their TAO for assistance and aid. However, community members from both Phi Phi Don and Khao Lak reported that their requests for assistance were met with indifference and, at times, hostility. A medium-sized resort owner in Khao Lak declared that she, along with other tourism business owners, were treated like “slum dwellers” by the local TAO authorities, leaving them with little direct government support. A souvenir shop owner on Phi Phi Don relayed similar experiences, saying that the Phi Phi tsunami victims were treated as “beggars” by local TAO authorities. The Phi Phi Don community thought that
governmental biases (and subsequent lack of support) extended beyond the TAO to the national level (Tan-Mullins et al., 2007). Unlike Phang Nga Province and Phuket Province (held by the ruling Thai Rak Thai Party), Krabi Province was held by the opposition Democratic Party, and it was felt that national political rivalries had led to unequal aid distribution that was seen to favour Khao Lak and Phuket (Tan-Mullins et al., 2007).

As argued in Sections 6.6.1 and 6.6.2, there was no governmental monitoring mechanism to challenge institutional biases or deter the misappropriation of resources prior to the tsunami and this pre-existing weakness remained unchecked after the event. The negative feedback consequences of the lack of action (emphasised by red feedback arrows in DSF in Figure 7.1) was an increase of frustration and disillusionment in the local government’s agendas and willingness to support the Phi Phi community, which further weakened relations between the two parties and the effectiveness of already weakened governance structures (see Section 6.6.1). As argued in Sections 3.4.3.2, 6.6, and 6.6.1, governance plays a key role in determining access and entitlement to resources, the distribution pattern of those resources, and in turn, differential patterns of vulnerability and resilience. The weakening of governance structures in the Phi Phi Don context following the tsunami further erodes trust in formal governance structures and the continual corrosion of relational ties leaves the Phi Phi Don community with reduced support to draw upon in the event of future shocks and stressors.

There was also a marked difference between the immediate financial assistance provided to Thais and foreigners. In January 2005, the Minister for Natural Resources and Environment confirmed that all affected victims were entitled to aid assistance irrespective of whether if they were foreign or Thai nationals (ALTSEAN Burma, 2005; Inbaraj, 2005). However, at the local level, financial assistance was only provided for Thai nationals at the local level. Few Western foreigners received financial or logistical assistance from the local Thai authorities, and were treated with scorn when they followed government requests to report their losses. They were told by officials that as they were foreign, they were not eligible for aid and were redirected to their home governments for assistance. The frustration caused by this bias against foreigners prompted one Western business owner to angrily decry:

For vulnerability to be decreased, we as a community need to be treated equally, we were not treated equally. We should be treated equally, not based on if you were born here, local or a tourist business...Enough is enough! The government needs to have a list acknowledging that people deserve the same help.
The plight of the Burmese workers was much worse. Registered Burmese workers were entitled to humanitarian assistance from the Thai Government, but assistance was refused due to discrimination at the local level (ALTSEAN Burma, 2005; Oberoi, 2005; Scheper and Patel, 2006). Returning to observations made in Section 6.6.2, improving governance requires behaviour alterations in the already powerful to avoid the exacerbation of pre-existing vulnerabilities, but this is rarely achieved, as given that it is in the best interests of those who enjoy the benefits of power to retain the status quo (Cannon, 2008). In the absence of effective government aid, business owners and workers turned to their family and friends for immediate support (Handmer et al., 2007) (see Sections 6.3.2, 6.3.3, 6.5.1, and 6.5.2). As argued in Section 6.5, this use of established kin networks for support again highlights the important role social networks play in reducing vulnerability. However, this reliance on family and friends does deplete the collective financial resources of kin networks and potentially leaves them with less stockpiled resources to respond to the next shock or stressor.

7.2.3 Psychological support for those experiencing post-disaster trauma
The trauma of living through the tsunami resulted in psychosocial problems for those who witnessed and survived the tragedy (UN, 2005). Post-traumatic Stress Disorder (PTSD) presented as a personal hindrance in the recovery of Thailand’s affected communities (Sundram et al., 2008). A psychological assessment of 3,133 adults across all six affected provinces revealed that 33.6 percent of people experienced PTSD with a further 14.27 percent diagnosed as having depression (Thavichachart et al., 2009). In response to this debilitating problem, the Department of Mental Health, in cooperation with the Ministry of Social Affairs and Human Security, launched a sustained effort to support Thai nationals to deal with the trauma and stress of having lived through the disaster (see UN, 2005 for more detail). Sundram et al. (2008) report that psychosocial interventions were swift and comprehensive, yet evidence from Khao Lak suggests that this assistance may not have been uniformly adequate across all affected areas.

PTSD proved particularly challenging in Phang Nga (Thavichachart et al., 2009). The lingering effects of trauma and stress from the tsunami disaster surfaced again throughout the interview process and was flagged as an issue in the focus group discussions. Trauma support was available in Khao Lak for 18 months after the tsunami event but the effectiveness of the service was limited by the frequent absence of staff, inadequate counselling services, and limited knowledge about the service among some sectors of the community. My first-hand experiences with finding the local clinic closed in
January 2007 when services were needed for a distressed participant is further evidence of psychological service inadequacies despite the time-lapse of two years after the event (Section 4.10.6).

As outlined in Section 4.10.6, feelings of hope and determination expressed by the community in mid-2005 had been largely replaced by disillusionment, bitterness, apathy, and in some instances complete helplessness in the space of 18 months. The feelings of hopelessness that grew over time impaired the capacity of some to take the necessary steps to rebuild their lives\textsuperscript{28,31,32,35} which, in turn, increased and compounded their vulnerability to future stresses. Here the failure of psychological support strategies (represented in the \textit{adjustments and adaptation} box of the DSF in Figure 7.1) to support the traumatised populations for the period of time required increased their vulnerability and their capacity to cope on a daily basis. This observation highlights two an importance point: , the first of which is the major role that \textit{time} (portrayed in the DSF as a fluid constant) plays in influencing vulnerability levels, which then. This finding also reaffirms the importance of undertaking longitudinal studies to capture how vulnerability and resilience levels change over time and space (Birkmann, 2006; Kaspersion et al., 2005; Miller et al., forthcoming) as argued in Section 2.4.3.

Further highlighting the lack of psychological support, a steep rise in substance abuse amongst the youth on Phi Phi Don, and some instances of vandalism of property, was also flagged as a new and destructive problem that had surfaced directly after the tsunami, as a result of the trauma and stress caused by the disaster event\textsuperscript{240,247}. Increases in substance abuse and anti-social behaviour on Phi Phi Don mirror experiences recorded in Kobe Japan after the Hanshin Awaji earthquake in 1995, where some survivors turned to alcohol and avoided social contact (Sundram et al., 2008).

7.2.4 \textit{Short-term humanitarian assistance and the politics of aid}

Government emergency responses and short-term coping strategies were supported by 77 (NGOs, bilateral and United Nation (UN) organisations in the immediate aftermath of the disaster (Schepere and Patel, 2006). The size of the disaster and scope of the subsequent devastation spurred one of the largest mobilisations of humanitarian support ever seen (Silva, 2009; Tan-Mullins et al., 2007; UN, 2005). Donations from governments, international agencies, private groups and individuals totalled more than USD7 billion, the most raised for a single event in history (Tan-Mullins et al., 2007). Silva (2009) contends that this massive response was stimulated by instant and incessant reporting of the disaster through global
electronic media, which made the tsunami disaster the biggest global media event subsequent after to the September 11 terrorist attack on the US in 2001. International aid agencies, such as the International Federation of the Red Cross and Red Crescent Societies (IFRC), World Vision, and multiple UN agencies provided emergency assistance and technical support (see UN, 2005). The Princess Sirinton Foundation, along with the Thai and French Red Cross, played a vital role in coordinating the delivery and distribution of public donations, materials, personnel, and volunteers throughout the emergency relief operations (UN, 2005). Firemen from Japan and the UK helped with the clean-up and rebuilding process whilst British police divers helped retrieve bodies from the sea. These efforts were supplemented by generous contributions from the Thai public who donated blood, clothing, bottled water, and cooked meals to sustain the volunteers and crisis centre staff (ADPC, 2005).

This extraordinary outpouring of aid also marked a significant shift in the balance of aid, where traditional multi-lateral and bilateral aid efforts were rivalled by flows emanating from new multi-scalar aid linkages and networks, including emerging grassroots organisations, the business sector, and direct private donations (Tan-Mullins et al., 2007; Tjhin, 2005). Tan-Mullins et al. (2007) argue that these new patterns of aid positively reflect more participatory approaches as destination communities demonstrate their abilities in utilising trans-national networks to effectively raise aid and attract support and, in doing so, remapped the multi-scalar politics of aid. But in post-disaster settings the agendas, mandates, and preferences of the multi-lateral, bi-lateral, and more localised aid organisations add another layer of contextual influences (delineated in the place and scale elements of the DSF shown in Figure 7.1) that shape the capacity of affected populations, including tourist destinations, to cope with the immediate impacts of shocks, their rates of recuperation, and in the longer term their capacity to withstand compounding shocks (Silva, 2009; Tan-Mullins et al., 2007).

The main short-term reactive actions of the various aid actors listed above and their success in helping the tourism communities of Patong, Khao Lak, and Phi Phi Don cope, stabilise, and recover in the aftermath of the tsunami are examined in the next two sections.

7.2.4.1 The Phuket Action Plan: the tourism sector unites under one banner

The importance of tourism to the affected Indian Ocean Region, and the extent of the tsunami’s devastation, prompted a united industry response headed by the UN-World Tourism Organisation (UN-WTO). The UN-WTO launched a multinational and collaborative initiative called the Phuket Action Plan (PAP). The aims of the PAP were to (UN, 2005; WTO, 2005):
a. provide assistance and training for newly unemployed tourism workers;

b. aid the recovery of small and medium tourism-related businesses; and

c. restore consumer confidence and visitor flows; and introduce strategies that focus on disaster risk reduction and strengthening tourism sustainability.

Its reach extended to Indonesia, Sri Lanka, Thailand, and the Maldives. Pacific Asia Travel Association (PATA), Asia-Pacific Economic Cooperation (APEC), VISA, Netherlands Development Organisation (SNV), and private sector companies partnered in the formation and execution of the PAP. Measures aimed at stimulating a recovery along Thailand’s Andaman Coast are detailed in Box 7.1. However, some of the strategies proved ineffective as governments chose to implement their own measures with little regard for the PAP. Furthermore, the informal tourism sector were largely overlooked, whilst systematic monitoring was found wanting (Handmer et al., 2007; Rice, 2005).

Additional short-term training initiatives were organised through the Thailand Business Partnership and International Business Leaders Forum (IBLF). Under this umbrella initiative, Manpower Incorporated and KPMG International Cooperative offered skills training to the newly unemployed tourism workers in Khao Lak to help them develop new skills, open up new career paths, and promote livelihood diversification in the area (IBLF, 2006). Manpower Inc. offered career transitioning training to help the tourism industry’s newly unemployed move into alternate careers. Skills assessments were initially undertaken to assess the participants’ potential before new employment possibilities were explored. Former bell boys, cleaners, and gardeners were offered alternate careers training in golf course landscaping, tailoring, and massage (IBLF, 2006). KPMG International Cooperative conducted IT skills training based in a local school in the Khao Lak area. KPMG’s IT Program included the provision of computers, internet access, and teacher support to improve the participants’ IT and online skills (IBLF, 2006). The success of this pilot study saw the program extended to other tsunami hit areas (IBLF, 2006).

§§§§

The informal sector is defined here as non-registered micro and small business enterprises needs.
Box 7.1: Phuket Action Plan strategies for Thailand

**Marketing and communication strategies:**
The PAP aimed to boost consumer and travel trade confidence in Thailand’s affected destinations through:

- a) the establishment of a centralised recovery website providing accurate and live updates;
- b) hosting a series of familiarisation trips for the international press and the major tour operators from the major generating countries (U.K., Germany, France, Italy, Spain, Russia, China, Korea) to provide an accurate picture of the damage sustained and recovery progressions.

**Tourism Community relief:**
Two actions were taken under to PAP to aid the recovery of small and medium business enterprises (SMEs):

- a) An in-depth study was conducted to ascertain the recovery progress and outstanding financial needs of SMEs, and
- b) A workshop on post-disaster SME financing was held entitled *Enhancing Capacities for Rapid Recovery in Asia.*

**Professional skills training:**
Three types of training were offered to improve skill levels and employability:

- a) The UN-WTO and supporting partners offered training for new tourism employees, courses for the retraining of tourism employees while they waited for their old jobs back, and management training courses,
- b) The UN-WTO Education Council provided funds for three Thai officials to attend the 2005 UN-WTO Human Resource Development (WTO.HRD) Practicum and the UN-WTO Tourism Education Quality (WTO.TedQual) Practicum in Madrid, and
- c) A 5-day Swift Water safety course was conducted in Pitsanulok Province in northern Thailand.

**Risk and crisis management:**
To reduce risk in the tourism sector the PAP conducted two initiatives in conjunction with partners:

- a) *The Global Advanced Technology Emergency Information Network for the Tourism Sector* aims to fill existing gaps between communication and information exchange and the multiple actions undertaken by the tourism industry, governments, international organisations, NGOs and the media.
- b) *The Future Leaders of Andaman Sea Workshop* for 50 youth from Phang Nga and Krabi Provinces aimed at increasing disaster awareness and coping capacity and providing the Region’s youth with the skills needed to become future leaders in disaster risk reduction.

**Sustainable tourism redevelopment:**
To improve the socio-economic and physical environs of coastal tourism development the PAP recommended:

- a) The formulation of a Green Belt Development Plan for Phuket and outlying areas, and
- b) The introduction of a Regional Tourism Development Master Plan for southern Thailand


7.2.4.2 The role of grassroots organisations and private donors
Over-bureaucratic large multi- and bi-lateral aid agencies are sometimes criticised for overlooking the contextualised needs of local populations, and their inability in engaging meaningful local participation in aid and recovery efforts (Tan-Mullins et al., 2007). The emergence of newly formed grass-roots volunteer groups and community-based organisations (CBOs) that were borne out of the post-disaster localised context filled this void in the humanitarian aid landscape. The importance of newly formed grassroots volunteer groups, CBOs and private donations in providing immediate aid and short-term support was
glaringly evident in Phi Phi, Don and to a lesser extent in Khao Lak.

Following the initial evacuation of disaster victims, and the processing of the dead from Phi Phi Don, little direct assistance was forthcoming from the government. Access to the devastated island was actively discouraged by the government, which tried to stop people going to the island in the first few months by limiting ferry access. In the absence of formalised support from the government, much of the clean-up and initial recovery phase was spearheaded by three grassroots organisations: Help International Phi Phi (HI Phi Phi), Phi Ph Dive Camp, and Phi Phi Relève-Toi (Rigg et al., 2005).

The formation of the three organisations were the products of two complimentary forces: (i) the desire to help rebuild Phi Phi Don; and (ii) the need to coordinate the influx of thousands of volunteers who came to assist in the clean-up and rebuilding effort.

By October 2005, more than 2,000 volunteers from dozens of countries had passed through HI Phi Phi alone (Marshall, 2005). Sharpley (2005) suggests that the magnitude of the global response from individuals (donations as well as volunteer assistance) could be attributed to the fact that so many Western tourists were affected. For Sharpley (2005) the event became personalised with many millions of people having visited the affected destinations or known people who had died. The tsunami event was very personal for the founders of Phi Ph Dive Camp, and Phi Phi Relève-Toi. Both Phi Phi Dive Camp and Phi Phi Relève-Toi were founded by two resident Western expatriates that had made Phi Phi Don their home whilst HI Phi Phi’s Dutch founder, Emile Kok, used his aid background and knowledge of the area to launch Hi Phi Phi in partnership with other foreign tourists and expatriates.

Mirroring the actions and results of the Phuket Tourism Association (Section 6.6.3.1), the Phang Nga Tourism Association, and the Khao Lak SME Group (Section 6.6.3.2), the swift actions and leadership of the organisations’ founders and leadership in Phi Phi’s initial recovery again proves the important role personal agendas (acknowledged in the contextualised place element of the DSF in Figure 7.1) and decisive leadership plays in shaping destination vulnerability and resilience levels. The founder of Phi Phi Relève-Toi and French restaurateur, explained that the running of the organisation also became a coping mechanism for him:

I say we have to give you a shock and you must find a new way to make exit from the shock. So anyway, fly away and stay in your house and in your whatever, go out and do something. So I think the best thing is to cure yourself to help the other one so you don’t pay attention to you. You pay attention to other one and help you to cure.
HI Phi Phi and Phi Phi Reléve-Toi assisted with the land-based clean-up, the collecting and distribution of basic supplies, and in undertaking restoration activities ranging from basic repairs to the reconstruction of houses and commercial buildings, and tree planting\(^{195,215,233,237,249,253,267,273}\) (Marshall, 2005). It was a very organic process, with volunteers using any skill they had (demolition, carpentry, bricklayers) to help with the recovery\(^{237,240,262}\). Both organisations paid Phi Phi locals a daily wage from donations, a practice that created instant employment for community members, who needed both an income and a sense of normalcy in the extraordinary circumstances\(^{233,237,243,273}\). Long-tail boat operators gained business from transporting the volunteers around the island\(^{255}\), whilst bars and restaurants benefitted greatly in the evenings from volunteer patronage (Marshall, 2005). HI Phi Phi donations were also put towards acquiring construction equipment needed by volunteers and residents to rebuild\(^{237,277}\). The funding raised by Phi Phi Reléve-Toi was used to fund numerous projects including the purchase 30 longlong-tail boats (used for fishing and tourism activities), funding 60 pensions for elderly community members for a duration of seven months, providing rental assistance for people returning to Phi Phi Don for four months, and funding small microcredit loans\(^{273}\). Money that was not spent in the first year was used to buy equipment for the community, including fire equipment that the island lacked, and a beach grader that removes the glass and cigarettes out of the sand\(^{273}\).

The land-based efforts of HI Phi Phi and Phi Phi Reléve-Toi were complemented by the Phi Phi Dive Camp that, whic focussed its attention on cleaning up and restoring the beaches and underwater marine environment that surrounded the cluster of six islands in and around Phi Phi Don\(^{226}\). Dive Camp removed 350 tonnes of debris from the reefs, sandy substrates, beaches and rocky periphery that had the propensity to cause further damage to the coral reef, either by collision, light deprivation, or pollution (Hewitt, 2006). A total of 4,500 volunteers contributed to this effort, as did 25 local residents that were employed by Dive Camp to help (Hewitt, 2006). These immediate recovery phase strategies were followed by longer-term restoration and reef monitoring projects (see Section 7.3.3). Together, the collective efforts of these grassroots organisations strengthened the resolve of the remaining community members, created community cohesion, and, in doing so, increased their adaptive capacity. Returning to the DSF in Figure 7.1 and the *adaptation and adjustment* box, the actions of the new grassroot organisations created new social networks and fortified new ones, which in turn, promoted social learning and exchange. The positive outcomes from this *feed back* into the system (shown by the *green feedback arrows*) and decrease sensitivity levels to future shocks and stressors.
The positive difference HI Phi Phi, Phi Phi Reléve-Toi and the Phi Phi Dive Camp made to the short-term recovery of Phi Phi Don cannot be overstated. Resident sentiment on speaking about these organisations revealed that their contribution to Phi Phi Don went far beyond their physical contribution to the clean-up and recovery effort. Buoyed by the massive influx of international volunteers and financial support, these grassroots organisations boosted the resolve of the Phi Phi community through their own conviction in the worth and importance of Phi Phi’s survival as a community and a destination. One expatriate business owner expresses his view of the community feeling on the island in the few months after the tsunami:

Everything, clean up, rebuild, organise, take care of orphan children, many, many things. Collecting money and spread it out where people needed [it]. Beautiful. Everyone was working. An amazing time, you know. I was totally, I felt totally in harmony with the people, with love of nature. And this time changed my whole view on life. Before I was working on the future, career, lawyer, money, big house, whatever. Now I change to nature and love together. This feeling I am still holding.

Another important insight from both an empirical and theoretical perspective is how they achieved their goals. HI Phi Phi and Phi Phi Reléve-Toi set up websites (http://www.hiphiphi.com and http://www.phiphi-releve-toi.com) to highlight the plight of the island to an international audience, to collect funds, and to openly publicise what programs were being supported, the amount of money allocated, and the progression of each project. Funds donated to Phi Phi Reléve-Toi to assist with the recovery effort totalled approximately EUR60,000 (THB2.5 million). Like HI Phi Phi and Phi Phi Reléve-Toi, the Phi Phi Dive Camp used its website (http://www.phiphidivecamp.com) to attract more volunteers and to highlight the plight of the island. It also sought the support and influence of international diving networks. The Professional Association of Diving Instructors (PADI) publicised the camp’s dive operations on their online message boards, which brought in hundreds of divers from all over the world, including divers from the French police team (RAID), Emirates Diving Association, British Sub Aqua Club (BSAC), American-based National Association of Underwater Instructors (NAUI), and World Underwater Federation (CMAS) members (Hewitt, 2006). In the first six months, Dive Camp averaged 60 volunteers per day (Hewitt, 2006).

The coordination of international donations and volunteer support via websites, transnational networks, and on the ground, again (see Sections 6.6.3.1 and 6.6.3.2) demonstrates the power and effectiveness of using multi-scaled linkages and social networks (represented in the scale element of the DSF in Figure 7.1) in enhancing a destination community’s
capacity to effectively respond and recover in the face of shocks and stressors. It is through the simultaneous use of multi-scaled networks and relationships that the response capabilities of destination communities comes alive, and the causes of their differential vulnerability and resilience made apparent. This evidence further supports the need for replacing hierarchical interpretations of scale in current vulnerability and resilience frameworks with more grounded geographical theories of relational scale, to facilitate a deeper understanding of destination vulnerability and resilience in the ever-changing context of the social-ecological system. As argued in Section 3.4.5.2, seeing scale as relational breaks through „naturalised“, fixed, and hierarchical notions of scale and social process, to better represent the dynamic and fluid nature of interactions between multiple actors (who may be situated at one scale but operate across multiple scales) which, in turn, informs human-environment interactions across socially produced and ecologically relevant scales (Tan-Mullins et al., 2007).

Khao Lak also benefitted from the help of volunteer-based groups that had formed in response to the tsunami. The Tsunami Volunteers Centre (TVC) was the largest volunteer group in Khao Lak. The TVC was founded in January 2005 to help coordinate the efforts of volunteers who flooded into the area (international volunteers at the TVC, pers. comm. 14 July 2005). The TVC did helped some businesses to clear debris from the beachfront and their properties, however, the relationship between volunteers and business owners was not wholly supportive. Some volunteers refused to assist business owners and actively abused some, believing them to be opportunists and rich enough to help themselves. This caused TVC volunteers to focus their attention on fishing communities and sea gypsy minorities north of Khao Lak, and left the Khao Lak tourism community frustrated and upset. One business owner was denied assistance from the TVC and had property stolen from her because it was mistaken for TVC-funded supplies. This was a gross misconception centred around preconceived judgements on who deserved help.

Both existing and former TVC volunteers confirmed strong biases that favoured 'local communities' - those who derive their livelihoods from more traditional sources, such as fishing or subsistence farming - over those involved in tourism-related activities. This bias directly contravened the TVC's sole objective, which was to “assist in the restoration of tsunami-affected communities through empowerment” (TVC, 2005). The added irony was that the organisation physically based themselves in Khao Lak’s tourism community but largely withheld their support from this very community until 2007, when they became more involved in longer-term support strategies designed to assist the tourism sector.
The decision of the TVC to extend its support to Khao Lak in 2007 is a good example of institutional adaptation (acknowledged in the *adjustments and adaptation* box in the DSF in Figure 7.1), learning from the event and overcoming prejudices based around deservedness. It also demonstrates the importance of undertaking a longitudinal study that captures how decisions and their consequences evolve and change over time.

The perception of who 'needs' aid and assistance and who does not was perceived by Khao Lak community members to be a powerful driver of unequal aid distribution. The TVC was not alone in its biased views against tourism. There was a misconception among some aid workers, researchers, and government bodies that those who derived their livelihoods from tourism are were wealthy and privileged and, therefore, did not require outside assistance in the event of a shock\textsuperscript{16,22,25,28,33}. But as one Thai Khao Lak resort owner exclaimed, “but we are not rich! How are we to survive?”\textsuperscript{33} This misconception is compounded by two related beliefs. Tourism businesses are seen as ruining localised livelihoods, polluting the environment, and excluding locals from the financial benefits of tourism development\textsuperscript{16}. Compounding this is a more generalised belief regarding governmental favouritism in the provision of post-tsunami relief for tourism businesses that were not badly affected over 'the poor', an opinion that dominated Keys *et al.*’s (2006: 199) pro-poor analysis of the political economy of the tsunami disaster. This type of favouritism was not experienced in Phang Nga. Such governmental favouritism was also absent in Phi Phi Don and other less affected Thai tourism destinations like Ko Lanta (located in Krabi Province) (see Tan-Mullins *et al.*, 2007). The Khao Lak tourism community believed that these misconceptions were enough to deter assistance from some NGOs, including the TVC and government officials\textsuperscript{25,33,36,37,42,56,61}. These examples highlight the darker side of humanitarian aid; it is highly politicised and revolves closely around the *perceptions* (founded or unfounded on fact) and the *agendas* of aid organisations and their donors, which do not necessarily match or consider contextualised local needs (Silva, 2009; Tan-Mullins *et al.*, 2007). These oversights, culminating in both *inappropriate action* and *inaction* (acknowledged in the red-outlined box in the DSF in Figure 7.1) that *feed back* into the system (shown by the *red feedback arrows* in the DSF) and fortify the pre-existing power structures (Silva, 2009; Tan-Mullins *et al.*, 2007) that determine unequal resource distribution. In doing so, they compound differential vulnerability and resilience levels across communities over time and space.
7.3 Longer-term adjustments and adaptation responses

As argued in Section 3.4.3.3, once lifeline emergency needs are fulfilled and rapid short-term reorganisation responses are completed, the adaptive cycle moves into the next adaptive phase. That sees attention turn to longer-term adjustments and rebuilding efforts, the consequences of which continue to feed back into the system and begin to shape future exposure and sensitivity levels to shocks. Following the 2004 tsunami, the RTG’s longer-term rebuilding and adjustment strategies were largely incorporated into one central plan, known as the Andaman Tourism Recovery Plan (ATRP). Aimed at rebuilding a more resilient tourism sector and more robust destination host communities, the ATRP included marketing elements, longer-term financial aid, planning and development adjustments, and disaster preparedness strategies. The RTG’s commissioning of the Sub-regional Development Plan (SRDP) confirmed the government’s commitment to long-term and integrated development reform. NGO and business sector actions complemented these strategies. NGOs and the tourism industry utilised their established multi-scalar social and business networks to provide financial and marketing support and heighten disaster preparedness. But the bulk of the long-term assistance came in the form of skills training, to give those who are heavily dependent on tourism livelihoods a greater choice and flexibility in the event of future tourism flow downturns.

The findings from a report released by the U.S. Indian Ocean Tsunami Warning System Program, suggest that resilient coastal communities take deliberate action to reduce risk from coastal hazards and increase their adaptability through experience and applying lessons learned (US-IOTWS, 2007: 34). The RTG’s intentions to “build back better” were sound and their strategies proved robust on paper. However, the tsunami response did not live up to expectations, as many of the pre-existing contextualised and structural vulnerabilities were overlooked (Khasalamwa, 2009). The success of many of the government long-term initiatives was compromised across all three destinations by funding shortages and complex bureaucratic processes, the conflicting agendas and expectations of public and private actors, and the persistence of pre-existing weaknesses in governmental structures and processes that were routinely overlooked. Left unaddressed, these underlying causal factors and processes merely compounded the differential levels of vulnerability experienced within and across the affected destination communities of Patong, Phi Phi Don, and Khao Lak.
7.3.1 Andaman Tourism Recovery Plan

A product of multiple stakeholder input, the ATRP aimed at stimulating a rapid and sustainable tourism recovery in the ten tsunami-affected Andaman Coast sub-districts (spanning six provinces) through three key strategies (TAT, 2005b):

a. the facilitation of a strong private sector recovery by offering financial support;

b. the formulation and implementation of an integrated tourism development strategy; and

c. the launch of multiple marketing drives.

While the ATRP offers strong guidelines for the affected communities, elements of the ATRP - most notably the revised planning strategies - proved difficult to implement. The same structural and procedural governance short-falls that curtailed the success of pre-tsunami planning and development initiatives (Sections 6.6.1 and 6.6.2), and the post-tsunami emergency financial initiatives (Section 7.2.2), also contributed to the failure of new post-tsunami planning across all three destinations. Post-tsunami actions were simply mapped onto "old" and dysfunctional government structures (particularly those found at the local level of government) without any attempt to adjust those processes that had caused routine planning and policy failures in the past (Tan-Mullins et al., 2007). These include TAO budgetary constraints, a lack of capacity at the local levels of government, and the ineffectiveness of governance processes that propagate corruption. Reiterating sentiments expressed in Section 1.1 in Chapter 1, long-term resilience plans cannot be operationalised successfully without understanding and addressing the underlying socio-political processes and environmental linkages that form the foundations of vulnerability (Clark et al., 2000; Pelling, 2003; Thomalla et al., 2006; Turner et al., 2003).

Compounding these problems were the conflicting interests and agendas of public and private stakeholders. Tourism sector business owners and workers ignored some newly introduced planning regulations, whilst the Phi Phi community blocked one of the RTG’s post-tsunami plans for the island outright. Marketing assistance offered by the TAT was also skewed towards Patong, which left Khao Lak and Phi Phi Don community members frustrated. The following sections outline the strengths and weaknesses of the three key strategies of the ATRP outlined above and examine the feedback consequences on vulnerability and resilience levels within and across the destinations of Patong, Khao Lak, and Phi Phi Don.
7.3.1.1 Government-led financial assistance

The first strategy of the ATRP involved substantial government-led financial assistance to promote a strong recovery for Thai businesses of all sizes that were directly and indirectly affected by the tsunami. To achieve this, the ATRP created two programmes:

a. the Tsunami Recovery Fund supported by the Venture Capital Fund (VCF);

b. soft loans for smaller businesses underwritten by the Bank of Thailand (BOT).

Tax reliefs were also offered to affected businesses. While these measures did assist the recovery of many businesses, stringent conditions, application complexities, and bureaucratic obstacles hindered their effectiveness. Furthermore, increased access to credit also had a downside for newer businesses, many of which were in Khao Lak. The decrease of business financial reserves following the tsunami, coupled with increasing debt levels borne out of a need to take on new loans (some of which came on top of pre-existing loans used to start or expand businesses), merely compounded the financial instability of many newer businesses. Together, these factors feed back into the system and greatly increase financial vulnerability (shown in the DSF through the red feedback arrows in Figure 7.1) to a myriad of future stressor or shock possibilities, including future disasters, and economic downturns that may negatively affect tourist flows or changing consumer preferences. The impact of this was evident in the newer destination of Khao Lak, for example, where some businesses were forced to close due to financial ruin brought about by slow tourist flow recovery rates (see Section 6.2.4).

A. Tsunami Recovery Fund for larger businesses

The RTG used its Venture Capital Fund (created in 2003) to provide venture capital to medium-sized businesses through the provision of loans with a one percent interest rate for the first seven years, before reverting to the national Minimum Loan Rate (MLR)\(^\text{18}\) for the remaining lifetime of the loan. Offices were set up in Patong, Khao Lak, Ao Nang (located on the mainland of Krabi Province), and Ranong (Ranong Province) to enable rapid access to these funds\(^{60,156}\). Applications under this scheme were simple; businesses were only required to present a business plan\(^{18}\). This plan was very popular and proved an effective financial instrument for assisting medium-sized businesses\(^{18,79,117,137,203}\) (WTO, 2005), so much so that claims surpassed the capital made available in the first few months of its inception, leading to claim delays\(^{18}\). Ministry of Industry figures show that by the end of 2005, 61 percent (THB 2.8 billion or USD 72.7 million) of financial capital granted to small and medium businesses was sourced through this fund (WTO, 2005). By the end of 2005, medium-sized hotel projects (approximately half of which were located in Phuket) consumed 78 percent of the funding
B. Soft Loan provisions

With the endorsement of the RTG, the Bank of Thailand (BOT) extended a line of credit to both state and private banks at an annual interest rate of 0.01 percent to underwrite soft loans for businesses (WTO, 2005). These soft loan provisions were undertaken under the “Lending to Entrepreneurs Affected by the Tsunami in Six Provinces Programme”. The BOT financial outlay of THB4.8 billion (USD122.39 million) for the programme was supplemented by an additional THB1.2 billion (USD30.6 million) to make up a total credit line of THB6 billion (USD152.99 million (Bank of Thailand, 2005; Bank of Thailand, 2006). The main lending funds included: (i) the Tsunami SME Fund and the Thai French Joint Credit Project, catering for small business interests, and (ii) soft loans through the commercial banking system open to all. The funds were available for reconstruction, re-financing existing loans, re-stocking, and working capital (WTO, 2005). The main lending funds included: (i) the Tsunami SME Fund and the Thai French Joint Credit Project that catered for small business interests; and (ii) soft loans through the commercial banking system open to all.

Soft loans for Small and Medium Enterprises

The SME Bank’s Tsunami Small and Medium Enterprise Fund aimed at assisting the recovery of smaller businesses by offering short-term loans for up to THB1 million (USD25,497). Credit limits for new clients were THB500,000 (USD12,749) and the collateral needed was real estate deeds and a guarantor. An additional THB500,000 (USD12,748) was made available for existing clients with real estate collateral. Existing clients with no real estate collateral required the backing of a guarantor and were limited to credit allowances of THB500,000. All loan applicants also needed to show proof of a steady source of income. Lenders were to pay back the loan with two percent interest per annum within a maximum repayment period of three years. During this period, a SME Bank member sits on the board of the business and oversees decisions. Loan applications were accepted up until 28 February 2006.

The Government Savings Bank (GSB) made funds available for micro and small businesses under its Thai and French Joint Credit Project, run in collaboration with the French Government. A maximum of THB300,000 (USD7,649) was available for a lending period of three years at two percent interest per annum, before reverting to the national MLR for a further five-year period (Government Savings Bank, 2005; Government Savings Bank, 2006). An additional advantage was that repayments were postponed for the first year. Applications
were accepted up until June 2008. If real estate deeds were unavailable as collateral, a guarantor was required. The BOT provided the GSB with a total of THB410 million (USD10,453,850) to fund this project (Government Savings Bank, 2005; Government Savings Bank, 2006). However, the effectiveness of these schemes in assisting a recovery in Patong, Khao Lak, and Phi Phi Don was lessened by the following five factors:

1. Awareness of these lending options was low among micro businesses, thereby excluding them from a funding opportunity\(^\text{37,41,45,52,90,99}\).

2. The SME Fund loan application process was complicated, difficult to understand, and very slow, causing recovery time delays\(^\text{109,D}\). This not only resulted in applications being denied, but also prevented people (particularly micro businesses) from applying\(^\text{41,42,44,90,99,B,E,K,M}\). Complicating the application process further for some stakeholders were application anomalies and non-transparent processes\(^\text{52,59,71}\).

3. The loan conditions and short repayment schedule proved too strict, making this option both difficult and unpopular among SMEs\(^\text{28,47,71,76,243,245}\) (WTO, 2005). Many small businesses were unable to secure funding because they lacked the required documentation and collateral, i.e., business registration papers, proof of former assets, business plans and, most importantly, land deeds\(^\text{20,23,44,45,99,109,116,243,245,B,H}\).

Prior to the tsunami, small businesses were not required to register unless business earnings exceeded THB300,000 per annum\(^\text{20,28,56,116}\), so business registration papers for these never existed. The need for land deeds also prevented businesses with pre-existing loans with other banks, those who rent their premises (particularly on Phi Phi Don), and foreign business owners from securing loans\(^\text{17,26,31,45,65,243,245}\). The additional SME Fund condition of surrendering part control of their business strategies to the SME Bank was a strong deterrent for some\(^\text{28,55,56}\).

4. The credit limit was considered too low to make a real recovery contribution for some SME lenders\(^\text{21,76}\); and

5. As time passed, some small businesses experienced difficulties in servicing these debts\(^\text{A,C,D}\). Increased debt and the hardship of paying back pre-existing and new loans compounded the financial vulnerability of many small businesses.

**Favourable commercial loan conditions open to all**

Medium and larger Thai businesses in all three destinations with a credit history or a strong business history benefited greatly from the changes in commercial loan conditions initiated under the soft loan programme, whereby interest rates were set at two percent for a period of three years with additional payments suspended for two years\(^\text{23,55,56,78,96,117,137,203,211}\). This
money was used both to fund the rebuilding effort and to pay staff during the closure of the resorts. As noted in Section 6.3.2, these loans were supplemented with savings and profits from family business portfolios. Whilst having the financial support of kin networks is beneficial, a heavy reliance on these does have detrimental longer-term effects. As argued in Section 7.2.2, the depletion of collective financial resources of kin networks leaves the family network with less resources to respond effectively to the next shock or stressor, and in doing so, increases their financial vulnerability. Furthermore, some larger businesses in Khao Lak with pre-existing loans had difficulties in servicing the repayments of both the loans (pre-existing and new loans). Smaller businesses did report some success with the securing of loans, this was particularly the case for smaller businesses in Patong that were well-established and had built up strong credit histories over time. However, many faced the same challenges that limited access to SME and GSB bank loans; lack of a proven credit history, incomplete business records, no land deeds, and limited access to suitable guarantors (ILO, 2006).

As shown in Section 6.3.2.1, smaller businesses tended to expand their businesses using profits generated over time, which negated the need to apply for credit prior to the tsunami. Furthermore, soft loans were only available for a very short period of time only, thereby limiting their reach (ILO, 2006). The only other credit option was to seek credit under normal loan conditions charging eight percent interest, a rate that was too much for some small businesses. In Khao Lak, repayment conditions made it difficult for smaller businesses to save enough to cover the interest costs; in 2007 areas such Bang Niang Beach, still were still suffering from lower tourist numbers and therefore lower profits, which left them financially strained for an extended period of time.

7.3.1.2 Home government assistance to foreign business owners and workers

Western business owners were ineligible for the special loan schemes offered by the RTG, causing many to approach their home governments for assistance. The response was mixed. The Italian government provided financial support with favourable conditions. The German government provided loans through the Thai German Embassy to three German business owners for a two-year period. Two other German business owners had the option but refused due to the strict and short-term repayment conditions. The Dutch government offered no support, nor did the Swiss government. This left those nationalities with limited financial support from both native and Thai financial and governmental institutions. Consequently, these foreign business owners relied heavily on savings, donations from family, friends and old customers, and loans from family
and friends\textsuperscript{35,56,86,240} (refer back to Section 6.3.3). As argued in Sections 7.2.2 and 7.3.1.1, there is a downside to this reliance on kin networks for financial support; it reduces the financial resources available for responding to future shocks and stressors and increases financial vulnerability levels.

Those with insufficient financial capital returned to their home countries to work, returning months later to Thailand when sufficient funds had been saved\textsuperscript{28,35,50,59,158,243}. Others sold off assets in their home countries to help finance the recovery of their business in Thailand\textsuperscript{59}. One Danish business owner approached the local newspaper in his home town to help his raise funds to rebuild his restaurant and hotel on Phi Phi. The story about him in his home town newspaper persuaded 25 people in his home town to lend him money to enable him to rebuild his business and life on Phi Phi:

I went back and talked to the local newspaper in the area in Denmark where I'm from and came up with an idea... I think 25 local residents in the local area in the part of Denmark where I'm from to just come forward. Different amounts. Some just 1,000 Danish kroner, some up to the highest is 40,000 Danish kroner. A few of them I knew but most of them I never met before... That was, how I found my own house, you know when you try something you don't know whether just one person will come forward with 100 kroner and it won't work out but it did. I got 230,000 kroner\textsuperscript{248}.

The tactical advantage of \textit{utilising multiple scaled structures} – in this case home governments along with social mediums and business networks that stretch across local and international scales – to access the financial resources needed to recover and rebuild is very much evident in the actions of the western business owners and workers. As argued in Section 3.4.5.2, the social actors that recognise the advantages of utilising \textit{scaled relationships} (captured in the \textit{scale} element of the DSF in Figure 7.1) to better access capital experience greater levels of success in fulfilling their goals and agendas (Marston, 2000).

South Asian business owners and workers had fewer structural avenues open to them through which aid and assistance could be sought. Assistance to Burmese citizens was refused both by the Burmese junta and the Thailand Government (Robertson, 2007). Nepalese community members also received little help from their home country government. Accordingly, they turned to kin and social networks (refer back to Section 6.5.2) operating both abroad and in Thailand to help them survive. Burmese workers and business co-owners borrowed from friends to cover shop rents and taxes\textsuperscript{61,82}. Referring back to Sections 3.4.3.2 and 6.5, these examples again demonstrate the importance of social capital in increasing the resilience of households and businesses. One Nepalese tailor in Khao Lak benefited from
Chapter 7

subsidies provided by a sister tailor shop in Patong that received more business than the Khao Lak branch. As argued in Section 6.3.1, this last example reinforces the advantages of having diversified livelihood portfolios and the positive impact they have on boosting resilience levels.

Businesses run jointly by foreign-Thai couples had the additional advantage of having the option of raising capital through trans-national social networks (operating both in Thailand and abroad) and through loans either from Thailand or from banks in the foreigner’s home country. These additional options made them more financially resilient than those foreigners without a Thai partner.

7.3.1.3 Formulation of a new tourism planning strategy for the Andaman Coast

The physical destruction of coastal development caused by the tsunami presented the tourism industry and government with a unique opportunity to “build back better”, to reverse the developmental mistakes of the past (Cohen, 2008; Khasalamwa, 2009). Land use planning modifications and environmental control engineering are two of the most effective ways to reduce physical exposure to natural hazards (Ritchie, 2008; Smith, 1995). Embracing this opportunity, the RTG introduced a series of integrated development plans to guide the redevelopment of the affected Andaman Coast tourism destinations and planning budgets were quickly allocated to achieve this aim (UN-WTO, 2005a; Segschneider and Worakul, 2007). Five new plans were formulated by the RTG to facilitate the rebuilding of Khao Lak, Patong, and Phi Phi Don. A summary of these plans is given in Table 7.1. However, the following sub-sections show that implementation of the proposed plans proved difficult, resulting in the failure of most. The main reason for these failures lies with the perpetuation of ineffective governance and conflicting agendas of the public and private sector - some of the root causes of vulnerability - that, as argued in Section 6.6.1, had caused routine planning and policy failures prior to the tsunami.

As illustrated in the DSF in Figure 7.1, the failure of adaptation strategies (depicted in the red-outlined box) negatively feeds back into the system and increases both exposure and sensitivity levels to future shocks and stressors (demonstrated by the red feedback arrows). The governmental planning failures increased vulnerability levels in four ways. First, the failure to change development types and building standards, locations (not a feasible option), and improve infrastructure, leaves the coastal destination communities highly exposed to future coastal hazards (Chapter 5). Second, it also leaves the sensitive biophysical environments that support the tourism host communities high stressed and susceptible to
further degradation (Section 6.7.1). Third, by not addressing the pre-existing governance weaknesses, the RTG indirectly reduced the likelihood of the new plans success. Therefore, it effectively wasted resources on plans that were deemed to fail instead of using those resources to readdress the core problems\textsuperscript{18,59,B,F}. Fourth, these government failings compounded feelings of community mistrust in governmental action that existed prior to the tsunami (Section 6.7.1 and 6.7.2) and decreases the government’s effectiveness in servicing the communities that they are appointed to represent (ASIST-AP, 2004). Such discord exacerbates frayed public-private relations and discourages future cooperation, which in turn, decreases the community’s capacity to respond to future shocks and stressors\textsuperscript{18,25,28,59,202,203,211}.

A. Andaman Tourism Recovery Plan

The planning component of the ATRP aimed to build resilience against future shocks through the introduction of strict coastal zoning regulations and an integrated evacuation road system that facilitates a quick escape in the event of another tsunami. The new zoning laws and building codes include a 30-metre coastal development setback, multiple graded density zones, and building structural codes (see Appendix D for the detailed plan). These changes are applicable to any structures built after 1 May 2005, leaving pre-existing buildings exempt. Like the financial and marketing components of the ATRP, the planning strategy was to be applied to the ten tsunami-affected Andaman Coast sub-districts, which include Khao Lak, Patong, and Phi Phi Don. However, the implementation of the planning regulations proved challenging in each destination due to the persistence of unaddressed pre-existing weaknesses in governance structures and processes (listed under the governance sub-heading in the sensitivity dimension of the DSF in Figure 7.1) and the conflicting agendas of public and private actors (acknowledged in the place element of the DSF).

As of 2007, the revised zoning and building codes had been applied to some buildings in Khao Lak\textsuperscript{77,100}, but application to all developments was not consistent for two reasons. First, some regulations, such as the provision of an escape platform on the top of higher structures, were seen as aesthetically unsuitable for resort development and could affect the marketability of resorts, and was therefore ignored\textsuperscript{20,55}. This demonstrates that inaction (acknowledged in the red-outlined box in Figure 7.1) is shaped by more than an awareness of risk. As argued in Sections 2.3, 6.3.5, and 6.4.2, the way people interpret knowledge of risk and the weighted choices they make are informed by a combination of factors that derive from experiences, beliefs, values, resource access, and future expectations (Bird et al., 2010; Fischhoff et al., 2000; Johnston et al., 2005; Paton, 2007; Rippl, 2002). Second, the
government lacked the financial and human resources required to enforce these strategies at the local level, resulting in planning violations\textsuperscript{67,83,85,A} (Civil Engineer at Department of Public Works and Town and Country Planning Phuket, pers. comm. 12 July 2005). The successful implementation of these plans was further hampered by an overlap of department jurisdictions, corruption, and a change in government\textsuperscript{25,50}.

Referring back to Sections 6.6.1 and 6.6.2, these developmental challenges mirror those that hindered the success of pre-tsunami development. Here it is clear that post-tsunami actions were simply mapped onto „old“ and dysfunctional government structures without any reflection on or attention to the underlying failings of past developmental challenges; a massive oversight that unsurprisingly led to a repeat of past developmental failings (Tan-Mullins et al., 2007). The initial plan for an emergency road evacuation system was cancelled due to local opposition and bureaucratic complications. Local stakeholders opposed the new road plans fearing that changes to the beachfront would negatively alter Khao Lak’s beachfront appeal and lower tourist numbers. Furthermore, the central government were was unable to finance the repossession of prime development land needed for the widening of the road system\textsuperscript{17,18,28,76} (Khao Lak Tsunami Recovery Plan Project Manager, \textit{pers. comm.} 4 July 2005). Again these adaptation failures (depicted in the red box in the DSF in Figure 7.1) reaffirm that changing plans is not enough. For resilience-building strategies to have any chance of success, the underlying socio-political processes that form the foundations of vulnerability like dysfunctional and ineffective governance need to be addressed (Cannon, 2008; Clark et al., 2000; Goodwin, 1999; Pelling, 2003; Thomalla et al., 2006; Turner et al., 2003).
Table 7.1: Summary of post-tsunami planning and redevelopment initiatives

<table>
<thead>
<tr>
<th>PLAN</th>
<th>ORGANISATION(S)</th>
<th>SECTOR FOCUS</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERARCHING PLANS FOR PHANG NGA, PHUKET AND KRABI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andaman Tourism Recovery Plan (ATRP)</td>
<td>Royal Thai Government (RTG)</td>
<td>− Coastal destination zoning &amp; building regulations</td>
<td>− Sporadic success in Khao Lak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Disaster preparedness: emergency road evacuation system</td>
<td>− Failed in Patong and Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td></td>
<td>−</td>
<td></td>
</tr>
<tr>
<td>Sub-regional Development Plan (SRDP)</td>
<td>Royal Thai Government (RTG)</td>
<td>− Economic and tourism development targets</td>
<td>− To be determined but governance challenges already flagged as possible hindrances</td>
</tr>
<tr>
<td></td>
<td>Asian Development Bank</td>
<td>− Social and community development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Environmental management &amp; preservation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Infrastructure provisions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Risk management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>−</td>
<td></td>
</tr>
<tr>
<td>PATONG ONLY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patong Seaboard Redevelopment Plan</td>
<td>Tourism Authority of Thailand TAT (TAT)</td>
<td>− Beach redevelopment</td>
<td>− Limited success</td>
</tr>
<tr>
<td></td>
<td>Royal Thai Government (RTG)</td>
<td>− Infrastructural improvements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Disaster preparedness &amp; beach safety</td>
<td></td>
</tr>
<tr>
<td>PHI PHI DON ONLY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable Tourism Rehabilitation &amp; Development of Koh Phi Phi and Surrounding Island Plan</td>
<td>Designated Area for Sustainable Tourism Administration (DASTA)</td>
<td>− Natural resource and environmental management</td>
<td>− Failed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Destination repositioning with emphasis on high-quality tourism</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Infrastructural improvements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Land rezoning of private lowlands (relocation of existing illegal settlement to uplands), mangrove areas &amp; mountainous uplands</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Disaster preparedness emphasising emergency management plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>−</td>
<td></td>
</tr>
<tr>
<td>Phi Phi Don Rehabilitation Plan</td>
<td>Department of Public Works &amp; Town &amp; Country Planning (DPTCP)</td>
<td>− Environmental management to promote sustainable usage of natural resources</td>
<td>− Failed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Destination repositioning with emphasis on high-quality tourism</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Coastal destination rezoning and stringent building regulations for lowland settlement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>− Disaster preparedness: emergency road evacuation system</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>−</td>
<td></td>
</tr>
</tbody>
</table>

***** Organisations marked in **bold** are the leading organisation of each strategy, with those in non-bold indicate supporting partners.
A Khuk Khak TAO representative confirmed that post-tsunami development patterns and regulations have not changed greatly. Plans continue to follow the pre-tsunami 3-year plan model outlined in Section 6.6.1. Since the inception of the ATRP, the TAO and the Phang Nga Tourism Association have formulated a new 3-year tourism development plan that complies with the provincial tourism strategy. However, the implementation of this strategy has also failed due to insufficient staff capacities and a lack of expertise in tourism-associated affairs. No obvious steps have been taken to address these pre-existing governance issues (Khao Lak TRP Project Manager, pers. comm. 4 July 2005), resulting in wasted collective resources, the persistence of high exposure levels, and the marginalisation of community sustainability goals. Furthermore, the absence of active government engagement is negatively affecting post-tsunami development standards (Cohen, 2008), tourism investor confidence, and compounding the community's mistrust in governance processes (Section 6.6.1).

Returning back to Section 3.4.4 and the DSF presented in Figure 7.1, these multiple adaptation failings and their consequences demonstrate how a lack of adaptation, and adaptation strategies failings feed back into the system and increase future exposure and sensitivity levels. Wasted resources spent on designing plans without addressing system weaknesses deplete the resources-base needed to support the next shock or stressor. Failed structural plans aimed at addressing developmental mistakes of the past also leave the population exposed to future natural hazards (as shown in Chapter 5) and place more stress on sensitive biophysical systems that support tourism activity and daily life (see Section 6.7.1).

Whilst the implementation of the ATRP in Khao Lak was sporadic, the ATRP planning strategy failed completely in both Patong and Phi Phi, Don but for very different reasons. The ATRP planning component was not implemented in Patong and the tourism community members interviewed were unaware of its existence. The reasons are four-fold. First, structural damage was minimal along Patong's beachfront and the pre-existing structures that survived the brunt of the wave force were exempt from the new beach redevelopment stipulations. This left little room for substantial changes to beachside developmental patterns, set-back lines or significant structural changes. So although land use planning modifications may be one of the most effective ways to reduce physical exposure to natural hazards, they are not always possible in highly developed landscapes like Patong (Ritchie, 2008; Smith, 1995). Second, budgetary constraints and preferences for pre-existing
municipal plans caused the Patong Municipal Government to reject the centralised ATRP in favour of the 3-year Municipality Plan that was already covered in the Municipality fiscal budget for that year. Third, ongoing problems of corruption and limited capacity at the local levels of government continue to encumber the success of new initiatives. Fourth, compounding these governance deficiencies is the power of the private sector and their opposition to the new plans. As shown in Sections 6.6.2 and 6.7.2, the private sector has long dictated developmental advancements in Phuket and their opposition to significant changes left little chance for the ATRP’s planning success. The only plan to find some success in Patong was the Patong Seaboard Redevelopment Plan (see Sub-section C below). Phi Phi Don, on the other hand, was singled out for a total redevelopment under the „Sustainable Tourism Rehabilitation & Development of Koh Phi Phi and Surrounding Island Plan” and therefore became exempt from the initial ATRP (see Sub-section D below).

B. Sub-regional Development Plan
The Sub-regional Development Plan (SRDP) was designed by the Asian Development Bank (ADB) at the request of the Ministry of Finances to facilitate the long-term sustainability of the three tsunami-affected provinces of Phang Nga, Phuket, and Krabi. While the Andaman Tourism Recovery Plan focuses on localised redevelopment adjustments (coastal zoning and building code requirements) and preparedness strategies linked directly to a future tsunami event, the SRDP is more of a strategic blueprint aimed at maximising long-term sustainability in the Andaman region over the next 15 years. Specifically, the SRDP (Gilchriest et al., 2007b: 3):

a. Creates a common planning framework for shaping and directing the various recovery aid programmes and plans by government, international donors, and NGOs, towards common and mutually beneficial goals that avoid duplication and diseconomies of scale;

b. Introduces a common long-term vision for the Andaman Coast that encourages contributions and engagement from government, civil society, the community, and the private sector; and

c. Reduces risk among investors and other stakeholders by establishing a transparent, consistent, and practical planning system that identifies the most appropriate type, form, and distribution of development that matches needs with sustainable resource use.
The SRDP covers short- (to 2010), medium- (2011) and long-term (2016-2020) plans that incorporate six key elements that shape regional sustainability: economic and tourism development targets, social and community development, environmental management and preservation, robust infrastructure provisions, and risk management. Twenty-three projects were identified as priority action points. Thirteen of the recommended projects have the propensity to benefit Khao Lak, Patong, and Phi Phi Don either directly or indirectly. These are summarised in Table D1 in Appendix D. Khao Lak has the most to gain from this plan with additional help being planned for improvements to Khao Lak’s Town Centre, the introduction of a much needed centralised waste water system (Section 6.8.1), and the strengthening of community participation and multi-sector partnerships (Gilchriest et al., 2007a). But being in the proposal stages, there are no guarantees that the SRDP strategies can or will be adopted, prompting the authors to flag ongoing operationalisation challenges that have hindered plan implementation in the past (Sections 6.6.1 and 6.6.2). These include: lack of institutional support and coordination among agencies at the national, provincial, and local level; financial constraints; and a lack of local actor (including the private sector) and governmental engagement and long-term commitment (Gilchriest et al., 2007a).

C. Patong Seaboard Redevelopment Master Plan

The Patong Seaboard Redevelopment Master Plan was developed by the TAT and follows the main principles set out in the Andaman Tourism Recovery Plan. The main aim of the plan was to promote a safe beach environment and safe beach recreational activities. To achieve this, the plan focused on the development of a built and natural landscape that is: (i) appealing to tourists, (ii) sustainable in its usage of sensitive coastal and marine landscapes, and (iii) robust enough to withstand and cope with natural events (TAT, 2007c). The plan introduced five beach zones to guide the redesign of Patong Beach (including the installation of public early warning systems, evacuation routes, and information points) and the redevelopment of the beach-front (TAT, 2007c). These zones and the outcome of each initiative are outlined in Table 7.2.
Table 7.2: Patong Seaboard Master Plan zoning directives & outcomes

<table>
<thead>
<tr>
<th>ZONE</th>
<th>DIRECTIVE</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (sea)</td>
<td>Set up beach activity safety zones:</td>
<td>Success</td>
</tr>
<tr>
<td></td>
<td> for swimming</td>
<td></td>
</tr>
<tr>
<td></td>
<td> for water sports</td>
<td></td>
</tr>
<tr>
<td></td>
<td> sea-plane landings</td>
<td></td>
</tr>
<tr>
<td>2 (beach)</td>
<td>a. Exchange wooden umbrella chairs for plastic &amp; limit number</td>
<td>Success with new chairs limited to 2,000</td>
</tr>
<tr>
<td></td>
<td>b. Introduce 20 metre intervals between chairs for evacuation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Identify appropriate positioning for lifeguard towers</td>
<td></td>
</tr>
<tr>
<td>3 (green strip)</td>
<td>Introduce green strip along Patong Beach with walkways, public gardens &amp; recreational parks</td>
<td>Success but with limited community participation in process</td>
</tr>
<tr>
<td>4 (walkways)</td>
<td>a. Increase pavements widths to 3 metres along Taweewong Road &amp; Baramee Road</td>
<td>Failed</td>
</tr>
<tr>
<td></td>
<td>b. Introduce more frequent pedestrian crossings</td>
<td></td>
</tr>
<tr>
<td>5 (building regulations)</td>
<td>a. Introduce 15 metre set-backs from the beach</td>
<td>Failed</td>
</tr>
<tr>
<td></td>
<td>b. Limit beach-front building heights to 5 metres &amp; no less than 75 percent total open space area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. All beach-front signage must be attached to buildings and not exceed 2 metres in height</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from TAT (2007c)

The first three zoning initiatives were successful, but again the implementation of the new building regulations and set-back zones along the beachfront proved difficult to achieve and essentially failed for similar reasons to those that underpinned the ATRP planning strategy breakdowns. First, the built environment was too well established and developed to enable great changes to the beachfront, whilst delays in finalising the master plan made it obsolete for those who were able to rebuild quickly\textsuperscript{[106,109,146]}. The negative impact these delays had on the success of the planning component of the new strategy again highlights the importance of \textit{time} (represented in blue in the DSF in Figure 7.1) in influencing adaptation strategy outcomes and, in turn, vulnerability and resilience levels to future shocks and stressors. The timing of strategies and their implementation is just as important as the strategies themselves; as in this case, timing can greatly influence a strategy’s success or failure. Second, business interests in retaining pre-tsunami development patterns were too strong, with the financial gains from trade on the road and the beach being too valuable to persuade stakeholders to make substantial changes\textsuperscript{[187]}. Finally, corruption and bribes again enabled exceptions to be made\textsuperscript{[112]}. 
D. Sustainable Tourism Rehabilitation & Development of Koh Phi Phi and Surrounding Island Plan

The tsunami’s widespread destruction of Phi Phi Don opened up an opportunity to redevelop Phi Phi Don in such a way that not only lifted tourism development and living standards on the island, but also improved disaster preparedness, facilitated the sustainable usage of Phi Phi’s unique and sensitive ecosystem, and boosted community participation in the future design of the island. The fulfilment of such targets would move Phi Phi Don away from the unsustainable and ad-hoc development practices of the past (highlighted in Sections 6.6.1, 6.7.1 and 6.7.2) and help restore the island’s image as an island paradise (Cohen, 2008). All construction and building modification were prohibited on Phi Phi Don by the Krabi Provincial Governor and Ao Nang TAO until new plans were finalised or special permission was granted (National Human Rights Commission, 2006).

The Designated Area for Sustainable Tourist Administration (DASTA) (a national governmental body) was assigned to develop a new strategy for Phi Phi that included both short- and long-term tourism planning on Phi Phi and the neighbouring islands. The resultant Tourist Attraction Rehabilitation and Development Plan of Phi Phi Don Island and Neighbouring Islands focussed on the following key areas: the sustainable redevelopment and repositioning of tourism facilities and services, natural resource management, infrastructural improvements, disaster preparedness, and land rezoning (DASTA, 2006). The key components of DASTA’s development concept are detailed in Box D1 in Appendix D.

DASTA’s plan supported two momentous and controversial changes to Phi Phi Don. The plan proposed a complete change in the destination’s character from a popular diving and backpacker throng to a more exclusive destination (with rooms costing up to USD1,000-a-night) that would out-price and displace smaller business owners. The second major shift concerned the relocation of the existing settlement from the devastated isthmus to the steep forested mountains that overlook the twin bays. This included the resettlement of 5000 residents ranging from Muslim villagers, resort and pub owners, to operators of tour boats and diving shops (Pleumarom, 2007). Both propositions complied with the DPTCP’s Krabi City Planning Regulations and the Environmental Protection Areas Act by The Office of Natural Resource and Environmental Policy and Planning (ONEP) (DASTA, 2006).

Established in 2003, DASTA is a national body situated under the Ministry of Natural Resources and Environment. Its main directive is to oversee the development of tourism in designated areas with natural and cultural significance in a way that meets global tourism standards, complies with governmental policies, and enables Thailand to compete with other tourism destinations abroad.
Both propositions and DASTA’s entire plan were vehemently blocked by the community on three grounds. First, residents did not want to relocate to higher ground that is hard to access\textsuperscript{201}. Second, the community mistrusted DATSA’s environmental intentions, believing vacated land would eventually be sold off to wealthy investors for massive profits\textsuperscript{202,237,273,206,236}. Lastly, the simultaneous consideration of two all-inclusive new luxury resorts – one from Sofitel and the other from Intercontinental Hotels Group - throughout DASTA’s initial ban on further Phi Phi development reaffirmed community suspicions (Pleumarom, 2007). After sustained local opposition, DASTA’s Plan was abolished in February 2006 (Xinhua, 2006) and the DPTCP charged with formulating a new strategy\textsuperscript{274}. The blocking of this plan was possible through the collective mobilisation of the community that was spearheaded by the five main landowner families on the island. Capitalising on strong kin and community bonds (see Section 6.5.1), the community united to protest against and successfully block DASTA’s proposals. Returning back to the DSF in Figure 7.1 and relational scale theory (Section 3.4.3.2), this success demonstrates the power of utilising these social networks (acknowledged under human and social capital in the sensitivity dimension of the DSF) to support collective action.

E. Phi Phi Don Redevelopment Plan

The DASTA and DPTCP plans share a common purpose aims: of environmental conservation, infrastructural improvements, and disaster preparedness. The main difference lies with the relocation of the main tourism settlement. Unlike the DASTA Plan, the DPTCP allows development on the narrow sand isthmus that divides the twin bays, as long as it adheres to strict building regulations. Completed in 2006, the DPTCP Plan for Phi Phi Don is guided by the Krabi City Planning Plan, which adheres to Thailand’s overarching Building Control Act (1979). The National Park Act (1961) still protects all remaining natural areas that were not settled prior to 1983 when Phi Phi Don and Phi Phi Leh were incorporated into the Hat Nopparatthara-Mu Phi Phi National Park. The DPTCP Plan comprises of two distinct sub-plans (Modas Consultancy, 2006):

a. The Phi Phi Islands Land Use Policy and Management Interim Plan outlines regulations to guide land use and marine use around Phi Phi Don, including marine biodiversity conservation and tourism water activities, and infrastructural facilities and standards. It also details governmental responsibilities for implementing and monitoring the plan;

b. The Phi Phi Islands Community Specific Plan provides guidelines on building zones and codes, island infrastructure including transportation (boat and road ways),
terrestrial management and conservation, designation of public recreation spaces, and disaster preparedness strategies and evacuation routes.

Details of the development zones that fall under Phi Phi Islands Community Specific Plan Project and the corresponding building regulations for each of the three zones are outline in Box D2 in Appendix D.

As of 2007, the DPTCP plan had not been implemented due to budgetary constraints\textsuperscript{209,279}. The DPTCP received no funding to implement the plan despite the failure of the DASTA initiative\textsuperscript{209,279}. With no final plan in place, the Ministry of Interior gave permission for building to commence under the Building Control Act (1979) and Environmental Protected Area Declaration (2003), both of which were amended in 2007 (ASA, 2009). This decision overturned the building ban applied in 2005 and allowed land owners to rebuild within the following codes (ASA, 2009):

- a. buildings must adhere to a 30 metre set-back;
- b. buildings on Phi Phi cannot not exceed nine meters in height; and
- c. all buildings must have a minimum elevation of 0.8 metres from the ground.

However, no new hotels and resorts were allowed to be built, as these codes only applied to those structures that existed prior to the 26\textsuperscript{th} December 2004 (ASA, 2009). That said, those buildings that were rebuilt illegally during 2005 and 2007 still remain.

The lengthy delays in finalising the plans and the ongoing problems with the process had numerous negative repercussions. First, multiple planning meetings held with the community yielded few results, causing much community frustration, apathy, and a drop in participation\textsuperscript{217,247}. Frustrated with the process, one resort general manager remarked:

\begin{quote}
There are many plans but not...I think they have so many plans and so many thinking. Then so many problem. Yeah. For me, talk, talk, talk, talk. Many, many people in the government. This one OK, this one not OK. Like that. But I don’t know which because we don’t have time to call them\textsuperscript{233}.
\end{quote}

Second, planning indecision halted the timely provision of emergency aid and access to finances needed for rebuilding. The central government was reluctant to provide any assistance until a resolution had been reached, leaving the Krabi Provincial government in a difficult situation concerning the distribution of emergency supplies\textsuperscript{237}. Insurance payouts were delayed and the securing of loans made near impossible\textsuperscript{226} (Cohen, 2007). The
financial ramifications of the ensuing enforced recovery delays were great and affected most people on the island. Business for dive shops, for example, has not returned to pre-tsunami levels, due to. The reason for this is the post-tsunami drop in room capacity in Phi Phi Don; as of 2007, there were approximately 40 percent less rooms than pre-tsunami. This shortage of accommodation and increased demand resulted in high occupancy rates (creating the image of recovery) and higher accommodation prices (increasing approximately 30 percent). Prices may be up but the quality for money is down, causing affordability and average lengths of stay to drop. The need to restore livelihood incomes, however, coupled with a lack of faith in the planning process prompted many smaller enterprises and some larger ones to rebuild illegally before plans were settled. According to one resort owner, “If we wait for the government to review and give the [approval], you have to wait about five, six years and then”. Another bar owner explained that there were few incentives to observe planning rules: “There is no way to reward for a good business before tsunami as well as no way to go forward for rebuilding business since government makes trouble for us”. Those businesses that rebuilt illegally realised that there was a risk of them having to rebuild once the regulations were finished, but the additional cost of rebuilding for the smaller businesses was deemed minimal compared to the money that they were making while the planning decisions were finalised.

These negative ramifications of the lengthy delays in finalising the plans also highlights the important role time (represented in blue in Figure 7.1) and consequent slow recoveries (detailed in the red-outlined box in Figure 7.1) play in determining differential levels of vulnerability within destination communities. Those accommodation providers that had rebuilt (illegally) benefitted from additional demand in business, but many others businesses were disadvantaged by lower tourist numbers and having to endure financial losses while they waited to restore livelihoods. The mixed feedback consequences of the planning delays are simultaneously portrayed in the DSF. As shown in Figure 7.1, the positive financial outcomes for those that benefitted from the delays are captured by the green feedback arrows as financial stocks were replenished and their financial sensitivity decreased. The financial losses of others and the subsequent decrease in both their daily incomes and their future earning potential left them more financially sensitive to future shocks and stressors as shown by the red feedback arrows.
The delays and continued absence of a successful plan for Phi Phi Don also saw a return to ad-hoc development and subsequent infrastructural inadequacies (Cohen, 2008). Cheaply-built guesthouses, restaurants, and makeshift vendors' stalls are scattered all over the island. The continued neglect of proper building standards (Sections 2.3 and 6.6.1) has again led to the absence of appropriate waste management systems and deteriorating environmental conditions (Section 6.7.1), all of which could deter tourists in the future. This again demonstrates how the lack of adaptation - in this case with regard to building and infrastructural standards - feeds back into the system and exacerbates future exposure and sensitivity levels, both from a biophysical and tourism product perspective, as shown by the red feedback arrows in the DSF in Figure 7.1.

### 7.3.1.4 National tourism marketing strategies

The rebuilding of a destination's physical environment is futile if tourists do not return. As argued in Section 2.4.1, the place-specific nature of tourism and its sensitivity to negative images, economic downturns, and changing travel trends - all of which can negatively affect tourist flows to those place-based destinations - are core determinants of destination vulnerability (Cioccio and Michael, 2007; Richter and Waugh, 1986; Robinson and Jarvie, 2008; Sönmez, 1998). Accordingly, the final marketing component of the ATRP focussed on addressing one of the biggest challenges for the tsunami-affected destinations, namely restoring consumer confidence and tourism flows to pre-tsunami levels. The RTG allocated THB1.5 billion (USD38.25 million) to (i) help re-position affected destinations along the Andaman Coast, and (ii) fund a sustained TAT marketing and public relations campaign to restore the confidence of domestic and international travellers in Thailand and show that the Andaman Coast was open for business (OPM, 2007).

The TAT worked in close collaboration with the private sector to design and execute a combination of strategies to achieve these aims. The TAT hosted fieldtrips for international and domestic tour operators and travel agents to show the true patterns of damage and recovery in each area (TAT, 2005b). Media representatives were also invited to generate positive media attention and awareness. An aggressive promotional campaign was run to recapture the main international markets in Asia, Australia, the USA, and Europe. This included numerous road-shows hosted by TAT international offices in key target market countries such as Sweden. Discount and incentive packages were also offered to stimulate tourist flows (TAT, 2005b). The discount packages were particularly targeted at the domestic market to compensate for the reduction in foreign tourists, whilst the corporate
sector was encouraged to hold conferences in affected areas that had structurally recovered but still suffered from the persistence of negative post-disaster images\(^{102}\). Additionally, the TAT set up an online Crisis Communication Centre on its website to relay factual updates on recovery rates for all affected destinations, and minimise the negative effect of imprecise reporting in the media. However, these promotional activities did not represent or benefit the affected destinations equally.

These initiatives were targeted at restoring confidence and tourist flows to Thailand, with Phuket benefiting from much of the attention\(^{102}\). Promotional efforts also endeavoured to divert tourism flows to alternate Thai destinations that were not affected, including Koh Samui and Chiang Mai, to recapture much needed national tourism earnings (TAT representative, pers. comm. 7 July 2005)- a process Sönmez (1998) refers to as the „spill-over effect“. This is understandable from an economic perspective. As shown in Section 4.3.1, Phuket is the international face of Thailand’s tourism industry and generates the most revenue out of the affected provinces. It was also the first to recover from the tsunami, making it a natural choice for promotional efforts. But these governmental preferences only marginalised the badly affected destinations of Khao Lak and Phi Phi Don further.

A TAT representative interviewed in 2005 stated that Khao Lak was not considered a priority due to the belief that it could not recover from the sustained damage (pers. comm. 7 July 2005). This decision greatly angered the Khao Lak destination community\(^{18,20,25,35,56,59,83}\). Furthermore, the TAT have no direct presence in Phang Nga, where tourism market share is still small compared to Phuket and Krabi Provinces\(^{18}\). However, the TAT did eventually increase their marketing support of Khao Lak in 2007 by working in conjunction with local operators and hotels to help promote the area. This positive shift in support demonstrates an important adjustment of policy and action (shown in the green outlined adjustment and adaptation box in Figure 7.1) that increases Khao Lak’s ability to recover and, in doing so, decreases their vulnerability from a marketing perspective. This positive system feedback in the adaptive cycle is depicted by the green feedback arrows. It also demonstrates the importance of undertaking a longitudinal study that captures how decisions and their consequences evolve and change over time.

Like the Khao Lak community, Phi Phi community members were also greatly angered by the lack of support they received from the TAT following the tsunami\(^{229,232,244,250,\text{G.V.U}}\). On the first anniversary of the tsunami, the TAT organised a gala dinner for foreign media on Koh Lanta.
A Phi Phi resident and member of the Krabi Tourism Association that who was present at the meeting, said that the media were more interested in the Phi Phi Islands as it was the worst hit destination in Krabi\(^{244}\). But the TAT justified their choice, countering that the existing rubble on Phi Phi would convey a negative image of the island\(^{244}\). Receiving no governmental marketing support, selected tourism community members used their contacts with the Thai media to project the true plight and story of Phi Phi’s tourism community\(^{203,244}\). This action again proves the importance and effectiveness of using established multi-scaled social and business networks to petition for and gain access to resources needed to reorganise and adapt to social-environmental change (refer back to Sections 3.4.5.2, 6.5.1, 6.6.3.1, and 6.6.3.2).

As argued in Sections 3.4.5.1, 6.6.1, 6.6.2, and 7.2.4.2, this evidence also reaffirms that the vulnerability of destinations, like the creation of destinations as contested and dynamic places, is influenced by the agendas and consequent actions of multiple stakeholders that operate outside the destination. These contextualised influences and the scale at which they operate are acknowledged in Figure 7.1 in the place and scale elements of the DSF.

7.3.2 Strategies designed to improve knowledge of risk and disaster preparedness
As argued in the previous section, restoring tourist confidence and subsequent tourist flows through reactionary and aggressive marketing strategies was of paramount importance after the tsunami. But these measures do nothing to prepare for future shocks and stressors. As argued in the introduction of this chapter, disaster outcomes are not solely negative; they also create opportunities for reorganisation, solidarity, activism, and greater resilience as new knowledge about risk and the strengths, weaknesses, and capabilities of populations come to light (Oliver-Smith, 1996; Pelling and Dill, 2010).

One very organic and important outcome from the tsunami has been a greater awareness and knowledge of tsunamis and coastal hazards that pose a real threat to tourism flows and tourism-dependent livelihoods. This knowledge, gained through personal experience, has better prepared Andaman Coast tourism destinations to coastal hazards and increased their general resilience to future shocks. Resonating with the observations of Faulkner (2001), people now know what natural signs to look for pertaining in a future tsunami threat, and have an improved understanding of the procedures in accessing help when shocks and stressors occur in the future\(^{28,43,53,56,138,145,150,178}\). But the sheer size of the tsunami also highlighted the need for more comprehensive disaster preparedness strategies that improve
knowledge about future risks, and enable industry and households to better prepare themselves for these risks (see Larsen et al., 2009; Thomalla et al., 2009).

In response to this longer-term need, the RTG, in partnership with multiple international institutions and governments, installed the first Tsunami Early Warning System (EWS) for the Indian Ocean region. The RTG also established the National Tourism Intelligence Unit and Crisis Management Centre to better prepare and coordinate timely government and tourism sector responses to an wider array of future shocks and stressors that may negatively impact tourism flows. These initiatives are discussed below.

7.3.2.1 Introduction of a Tsunami Early Warning System and disaster preparedness training

The introduction of the Indian Ocean EWS in 2005 was heralded by both the government and tsunami-affected communities as a crucial tool for both increasing consumer confidence in the safety of the Andaman Coast, and community preparedness against future shocks\(^{17,20,21,23,71,90,272}\). As of 26 June 2006, a total of 79 warning towers were installed in the six affected Thai provinces, under the direction of the Department for Disaster Prevention and Mitigation (DDPM) and the Ministry of Interior. Twenty early warning towers line the coast of Phuket, Phang Nga has 18 towers, whilst Phi Phi Don has three (TAT, 2006a). The warnings are broadcast over the loudspeakers in five languages, with additional alerts being broadcast via, radio, television, and SMS (the latter being a free service people that can subscribe to)\(^{20,23,71}\). Under the Memorandum of Understanding signed by Thailand’s National Disaster Warning Centre (NDWC) and the US National Oceanic and Atmospheric Administration (NOAA), Washington assisted Thailand and other countries bordering the Indian Ocean with the installation of a Deep Ocean Assessment and Reporting of Tsunamis (DART) system, by providing the region with two deep ocean buoys (TAT, 2006a). In December 2006, Thailand’s tsunami detection buoy was installed.

The establishment of the National Disaster Warning Centre, and the provision of disaster preparedness training and instructions of evacuation procedures, complemented the EWS’s technical hardware. The National Disaster Warning Centre in Bangkok (opened on 31 May 2005) is responsible for monitoring the incoming data from the DART System, evaluating the intensity and severity of triggering natural events, and issuing public warnings (TAT, 2005d). The DDPM was charged with the designing of evacuation plans for every destination and providing disaster preparedness training and evacuation drills for communities (TAT, 2005d). Disaster preparedness training in risk reduction strategies and evacuation plan management
was also provided for governmental officials\textsuperscript{111,208}.

The presence of the EWS made community members feel safer initially\textsuperscript{17,20,21,23,71,90,270,272,275}. But there are concerns regarding the effectiveness of the system in all three destinations. First, the warning sirens and announcements cannot be heard in some areas, including the north end of Bang Niang Beach in Khao Lak\textsuperscript{50,A} (refer back to Figure 4.11 in Chapter 4) and towards the southern end of Tonsai Bay near the local school\textsuperscript{202,205,220,V} (see Figure 4.7 in Chapter 4). Second, key parts from some of the warning towers have been stolen, rendering them useless\textsuperscript{56,A,F}. Third, previous tests have not worked properly, causing some to lose faith and trust in its effectiveness\textsuperscript{20,29,36,40,100,101,158,205,220,266,272,T,U}. Fourth, warning procedure and disaster preparedness training for the communities has been limited, and training dates not widely publicised\textsuperscript{37,42,45,72,150,170,201,N,W}, evacuation signage is irregular, marked evacuation distances unclear, and evacuation roads are sometimes too narrow (in Phi Phi) or blocked by development and trees\textsuperscript{18,36,37,85,208,D,F,S}. The director of Phuket’s DDPM Office also highlighted problems with institutional participation in DDPM initiatives, with the TAT and Patong’s Tourist Police (among others) showing little sustained interest in disaster preparedness workshops and training\textsuperscript{111}. Furthermore, evacuation drills and disaster preparedness training are infrequent due to restricted localised budgets; – another institutional obstacle\textsuperscript{208}. Community frustration arising from these institutional obstacles and the misuse of resources is succinctly summed up by a business owner in Khao Lak who exclaimed “If they [EWS towers] don’t work, then what is the point of having the technology and wasting so much money?”\textsuperscript{F}.

Mistrust in the EWS was demonstrated on the evening of 12 September 2007 following an 8.5 magnitude earthquake that took place off the Sumatran Coast (USGS, 2009). News of the threat and the issuance of tsunami warnings in neighbouring countries came via international news channels, causing many locals in Khao Lak to run to high ground for safety (field diary, September 2007; Montague, 2007). No news or reassurance was issued from the NDWC, causing much uncertainty and fear (field diary, September 2007). Referring back to Section 2.3, this example clearly demonstrates the integral role the media play in amplifying risk perceptions (Kasperson et al., 2003).

Low levels of trust in the EWS stems, in part, from the low levels of trust that the communities have in the civic authorities\textsuperscript{C} (Paton, 2007). As noted in Sections 6.6.1 and 6.6.2, the erosion of this trust in the local authorities began prior to the tsunami, but was
accelerated after that tsunami due to the limited and largely unhelpful responses of the local authorities with regard to receiving emergency aid (7.2.1) and support for improved redevelopment (Sections 6.6.2, 6.7.1, and 7.3.1.3). Slovic (2000b) and Paul et al. (2009) concur, stressing that a lack of trust in risk management strategies and managers limits the effectiveness of risk-communication efforts. Without adequate public awareness, knowledge of disaster preparedness procedures, and trust in the system, early warning technology is ineffective. Furthermore, a reliance on a faulty EWS (including procedures) compounds vulnerability levels to future shocks. In the face of these technical and operational problems, the real warning system may still take the form of social network communication, now that the community is aware of the natural signs\textsuperscript{56}.

7.3.2.2 Disaster preparedness strategies tailored to the tourism industry

The tsunami dramatically highlighted the impact shocks, uncertainties and highly competitive trends can have on tourism flows. Recognising this, the Ministry of Tourism and Sports launched the Tourism Intelligence Unit and Crisis Management Centre in March 2007 to better monitor and respond to such events. This government initiative at the national level is a good example of adjustment and adaptation responses that improves industry preparedness and may prove instrumental to the long term resilience of destination communities to future shocks and stressors.

Placed under the direct jurisdiction of the TAT, the role of the National Tourism Intelligence Unit is to monitor emerging trends, including changes in the behaviour and lifestyles of travellers, and to conduct impact assessment studies to gauge the impact of such changes on the Thai tourism industry (TAT, 2007d). The Crisis Management Centre was established to enhance the collective ability of the TAT, and tourism agencies and organisations to respond to shocks and events that threaten tourism flows to Thailand. A centralised centre enables rapid and orchestrated responses to sensitive situations, with decisions based on accurate information. The centre will also interface with volunteer, emergency, and relief organisations that operate hotlines and are set up to receive, as well as broadcast, real-time on-site situation updates, announcements, and reports (TAT, 2007d).
Phuket also benefited from the creation of the Phuket Provincial Tourism Risk Management Strategy 2007-2012 (PTRMS). This strategy was a government-led initiative designed to:

a. make the Phuket tourism industry more united and resilient to threats (natural or man-made events) to normal business activities; and

b. build partnership and enhance knowledge on tourism risk management among government, business, tourism representatives and organisations, and tourism related stakeholders‡‡‡‡‡ (Partnership of Phuket Agencies, 2007).

Included in this strategy are evacuation preparedness plans and maps for several communities.

7.3.3 Long-term humanitarian support

The RTG’s efforts to restore tourism-dependant livelihoods were not undertaken in isolation; they were helped by forward-thinking NGOs, CBOs, and newly formed volunteer groups. On the completion of the immediate relief efforts and short-term restoration work most of those volunteers and aid organisations involved in immediate recovery operations left (Kongrut, 2007). The removal of aid after a short period is a common in the provision of humanitarian assistance, where the urgency of the next disaster sees funds and personnel redirected to stabilise the newly devastated population(s) (Silva, 2009). Limited funding and capacity also curtails longer-term humanitarian engagement. External institutions have limited funds to support and monitor long-term changes, whilst localised institutions may be limited by restricted budgets and human capacity to sustain this transformative role alone at the required scale (La Trobe and Venton, 2003; Mileti, 1999; Miller et al., 2005; Rice, 2005). However, some NGOs, CBOs, and volunteer groups did stay in Patong, Khao Lak, and Phi Phi Don to fulfil the dire need for long-term capacity building measures.

The types of longer-term initiatives undertaken in Patong, Khao Lak, and Phi Phi Don fell into five categories: financial and livelihood assistance, social support, skills development and training, disaster preparedness, and environmental rehabilitation. Patong benefited from skill development initiatives headed by the International Labour Organization (ILO), disaster preparedness training, environmental rehabilitation strategies, and some financial assistance. These are summarised in Table 7.3. But the balance of assistance was heavily skewed towards the severely devastated communities of Khao Lak and Phi Phi Don.

‡‡‡‡‡ Stakeholders included in the design of this initiative are: Phuket Provincial Governor’s Office, Phuket Provincial Administrative Office, Phuket Office of Tourism Sports and Recreation, Phuket Tourism Association, Phuket Chamber of Commerce and Industry, and Department of Disaster Prevention and Mitigation (DDPM-Phuket) with support from MoTs, AICST, AusAid, and ADPC.
<table>
<thead>
<tr>
<th>Focus</th>
<th>Organisation</th>
<th>Projects (P) and Goals (G)</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Training & education         | International Labour Organisation (ILO) UNDP Ministry of Labour (executed with local partner cooperation) | Umbrella Project: Post-tsunami Livelihood Recovery Project in the Tourism Sector in Phuket & Phang Nga  
G1: To increase employability of newly unemployed  
G2: Support organisations servicing their needs  
G3: Encourage employees to stay in destination sites to circumvent further staff shortages  
P1: Tourism product diversification, emergency & conflict training by the Employers Confederation of Thailand (ECOT)  
P2: Hospitality and tourism service training with the Phuket Tourism Association (PTA)  
P3: Safe sex awareness and support for sex workers from EMPOWER Foundation  
P4: Get Ahead Entrepreneurship Training Sessions headed by Phuket Chamber of Commerce | • Technical assistance to the growing informal economy  
• Technical assistance to help micro and small businesses get access to financial services and small loans  
• Offered emergency response training for beachfront and coastal businesses  
• Promoted home-stay development in Phuket to diversify tourism products  
• Provided conflict management and negotiation skills training for human resources managers, union leaders & worker representative groups  
• Provision of hospitality and tourism service training (including language lessons) to raise the skill base of retrenched workers and interested community members  
• Offered legal advice to entertainment and sex workers  
• Provided safe sex and emotional health education to workers with a heavy focus on HIV/AIDS prevention  
• Training of trainers programme aimed to create skilled leaders within government, community organisations, and among micro-entrepreneurs.  
• An information and training workshop held for 250 affected workers, providing occupational guidance and training, information on employee financial aid schemes, social security and workers compensation advice, and language training. |
| Financial & Livelihood Assistance | Laguna Resorts and Hotels Group [N/F]                                      | P: Phuket Tsunami Recovery Fund  
G: Assist local tsunami victims rebuild lives and livelihoods | • Provision of new boats and engines for fisherman/long-tail boat operators  
• Provision of emergency clothing, food & medical supplies  
• Provide funds to rebuild houses & repair boats  
• Created central point for accessing information on financial assistance & rebuilding livelihoods |
| Disaster Preparedness       | UNEP Swedish Rescue Service Agency (SRSA) International Hotel and Restaurant Association | P: Awareness and Preparedness for Emergencies at Local Level (APELL) for Patong Municipality  
G: To increase disaster preparedness through disaster preparedness and emergency education | • Conducted series of seminars & workshops with local authorities (e.g. DDPM, Patong Municipality, Phuket Provincial Governor) & tourism stakeholders (PTA, tourism businesses, residents)  
• Undertook assessment of local hazards |

The main NGO initiatives undertaken in Khao Lak are summarised in Table 7.4. Three organisations offered the bulk of financial aid and support to Khao Lak small businesses. The ILO, Raks Thai Foundation (RTF), and the 4Kali.org Foundation helped micro and small businesses access financial services and small loans\(^{32}\) (ILO, 2006). Projects ranged from mobile food carts, laundry businesses, local restaurants, barber shops and massage parlours. Further financial support came from local grassroots organisations and donations from long-standing clients and those collected via websites \(^{28,29,40,51,71,86}\). One drawback of some of the donation offers were the conditions attached; some Christian-based organisations were offering donations in exchange for participation in Christian events and pressure to convert to the Christian faith, which lessened their appeal\(^{29}\) (Calgaro, 2005). However, the bulk of NGO assistance focussed on increasing skill levels, community leadership, and increasing employment and livelihood opportunities.

Much of the training focussed on English language skills, but the Ecotourism Training Centre (ETC) offered a more complete livelihood training program aimed at enabling Khao Lak’s young adults to qualify as environmentally conscious scuba diving instructors with business skills\(^{22,64}\). Enabling Khao Lak’s youth to benefit from the higher salaries offered to scuba diving instructors, and training them to become future leaders and catalysts for change, were the main drivers behind the founding of the ETC by American Reid Ridgeway, who himself benefitted from a strong mentor as a teenager\(^{22,64}\). As argued in Sections 6.6.3.1, 6.6.3.2, and 7.2.4.2, the swift actions and leadership of organisation founders proves the important role personal agendas (acknowledged in the contextualised place element of the DSF in Figure 7.1) and decisive leadership plays in shaping destination vulnerability and resilience levels.

As noted in Section 6.2.3, the ETC founder capitalised on his own media background and used his media contacts to gain worldwide exposure ((BBC, the Discovery Channel, Yahoo and 80 print media outlets worldwide) and funding support to fund his Centre\(^{22}\). This strategic use of international media networks reemphasises the importance of mobilising multi-scaled networks (represented in the scale element of the DSF in Figure 7.1) to gain access to the resources needed to effectively respond, adapt, and recover from shocks and stressors.

These ventures were assisted by an influx of private donations in the first year\(^{17,28,71,97}\) but these have dwindled, leaving some organisations struggling to keep operating\(^{30,66}\). The TVC in Khao Lak, for example, closed in 2008 due to limited funding (Tsunami Volunteer Centre,
The provision of skills and leadership programmes benefited the community in four ways. First, it gave survivors something immediate and positive to focus on. Newly-formed centres, like Step Ahead and the Saori Weaving Centre, became refuges for people who had lost everything. Traumatic experiences were shared, spurring hope and the resolve to retrain and rebuild. Second, it gave the newly unemployed a reason to stay in the region, thereby circumventing further staff shortages. As noted in Section 6.4.1, the tsunami disaster left Khao Lak with a depleted skilled workforce. Many of the surviving workers left to escape the memories and pursued employment in alternate destinations. Third, the skills training in tourism and hospitality enabled greater local participation in and financial benefit from tourism business activity, while creating a skilled workforce for business owners. Finally, the programs helped to diversify livelihood options. The acquirement of new and transferable skills (in business planning and administration, money management, leadership, computing, and English) builds individual resilience by creating pathways to sustainable employment opportunities, facilitating localised leadership, and promoting self-organisation capabilities. Returning back to the Figure 7.1, these positive livelihood adaptation responses (detailed in the adjustments and adaptation box of the DSF’s system adaptiveness dimension) feed back into the social system (indicated by the green feedback arrows) and decrease the sensitivity of employers to future staff shortages and increase the resilience of employees to future dips in tourism employment demand.

As shown in Table 7.5, NGO and CBO assistance for Phi Phi Don was more varied than that conducted in Khao Lak. Like Khao Lak, Phi Phi Don benefited from training initiatives, but Phi Phi Don residents also received much needed infrastructural support, disaster preparedness training, environmental rehabilitation, and financial support for micro and small businesses. Financial support offered by the Swedish Micro-Credit Foundation’s (SMF) revolving interest-free loans to micro and small businesses was crucial in giving the largely Muslim population access to the credit needed to rebuild their businesses. The SMF was born out of the Thailand Island Foundation, that was set up by Swedish IT entrepreneur Johan Staël von Holstein to help Phi Phi Don survivors recover.
Table 7.4: Longer-term initiatives designed to aid business recovery and build resilience in Khao Lak

<table>
<thead>
<tr>
<th>Focus</th>
<th>Organisation</th>
<th>Projects (P) and Goals (G)</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training &amp; education</td>
<td>ILO UNDP Ministry of Labour (executed in partnership with local partners)</td>
<td>P1: Job assistance and skills training by Phuket Federation of Hotels and Labour Services (PFHLS)</td>
<td>Provided information to workers, assisted with job searches, &amp; offered skills training and marketing assistance to 300 retrenched Labour Club members.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P2: Hospitality and tourism service training by the Phang Nga Tourism Association (PNTA)</td>
<td>Provision of hospitality and tourism service training to raise the skill base of retrenched workers and interested community members.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P3: Product development assistance by ThaiCraft</td>
<td>Technical assistance with product design, skills development, &amp; marketing and product distribution for 3 post-tsunami community groups in Takuapa District: (i) The Saori Weaving Group that produces woven products (ii) The Tsunami Doll Group (iii) Tsunami survivors that produced crafts for the Tsunami Craft Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P4: Phang Nga Labour Bureau’s Get Ahead Entrepreneurship Training Sessions</td>
<td>Introduction of a new website promoting Khao Lak plus reservation service</td>
</tr>
<tr>
<td>Thailand Business Partnership and International Business Leaders Forum (IBLF)</td>
<td>P1: IT Skills Program to improve skill levels of newly unemployed by KPMG</td>
<td>Conducted student IT skills class in the Ban Sak School, Phang Nga Province and provided computers, internet access and teacher support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P2: Career Transitioning Training to promote livelihood diversification by Manpower Incorporated</td>
<td>English training offered for hotel staff</td>
<td></td>
</tr>
<tr>
<td>Trainee Volunteer Centre (TVC) [N/F]</td>
<td>P: English teaching</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4Kali.org Foundation [N/F]</td>
<td>P: Establishment of a community centre to help people help themselves</td>
<td>Training of trainers programme aimed to create skilled leaders within government, community organisations, and among micro-entrepreneurs.</td>
</tr>
<tr>
<td>Step Ahead</td>
<td>P: Micro-enterprise Development and Training Centre</td>
<td>The establishment of a community centre south of Khao Lak to teach diving, English and other livelihood skills needed to sustain future livelihoods</td>
<td></td>
</tr>
<tr>
<td>Ecotourism Training Centre (ETC) [N/F]</td>
<td>G1: To build local capacity by training young people to become leaders and catalysts for change in their communities</td>
<td>The 9-month intensive training includes diving, English, environmental awareness, business education &amp; computing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G2: To build local capacity by training young people to become leaders and catalysts for change in their communities</td>
<td>End PADI diving award enabling graduates to seek professional employment as certified PADI diving instructors and dive masters</td>
<td></td>
</tr>
<tr>
<td>Tsunami Craft Centre [N/F]</td>
<td>G: To create opportunities and post-tsunami stability through the development of small business networks</td>
<td>Technical assistance to the growing informal economy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G: To create opportunities and post-tsunami stability through the development of small business networks</td>
<td>Technical assistance to help micro and small businesses get access to financial services and small loans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G: To help weavers ease their minds and release any trauma and sorrow through craft</td>
<td>Provided technical assistance to help micro and small businesses gain access to financial services and small loans.</td>
<td></td>
</tr>
<tr>
<td>Saori Weaving Centre [N/F]</td>
<td>G: To help weavers ease their minds and release any trauma and sorrow through craft</td>
<td>Provided information sessions on the advantages of cooperative savings and aided the establishment of registered credit union savings groups.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G: To help weavers ease their minds and release any trauma and sorrow through craft</td>
<td>Provided information on employee financial aid schemes, social security and workers compensation advice, and language training</td>
<td></td>
</tr>
<tr>
<td>Kenan Institute Asia</td>
<td>P1: Tsunami Recovery Action Initiative Program (TRAIP)</td>
<td>The 11 producer groups arose from temporary housing camps and villages</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P2: Future collaborative projects</td>
<td>Technical assistance with product design, skills development, &amp; marketing and product distribution for 3 post-tsunami community groups in Takuapa District: (i) The Saori Weaving Group that produces woven products (ii) The Tsunami Doll Group (iii) Tsunami survivors that produced crafts for the Tsunami Craft Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Technical assistance with product design, skills development, &amp; marketing and product distribution for 3 post-tsunami community groups in Takuapa District: (i) The Saori Weaving Group that produces woven products (ii) The Tsunami Doll Group (iii) Tsunami survivors that produced crafts for the Tsunami Craft Centre</td>
</tr>
<tr>
<td>Buddhist Fellowship</td>
<td>P: English Teaching</td>
<td>The establishment of a community centre south of Khao Lak to teach diving, English and other livelihood skills needed to sustain future livelihoods</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Provided technical assistance to help micro and small businesses gain access to financial services and small loans.</td>
</tr>
<tr>
<td>Financial &amp; Livelihood Assistance</td>
<td>ILO UNDP Ministry of Labour</td>
<td>P5: Establishment of credit union savings groups under direction from Credit Union League of Thailand (CULT)</td>
<td>Provided technical assistance to help micro and small businesses gain access to financial services and small loans.</td>
</tr>
<tr>
<td></td>
<td>4Kali.org Foundation [N/F]</td>
<td>G: Livelihood recovery through provision of SME loans</td>
<td>Provided information sessions on the advantages of cooperative savings and aided the establishment of registered credit union savings groups.</td>
</tr>
<tr>
<td></td>
<td>Raks Thai Foundation [N/F]</td>
<td>G: Livelihood recovery through provision of SME loans</td>
<td>Awarded small grants &amp; micro-credit loans for those not entirely dependant on tourism (mobile food carts, laundry businesses, restaurants, barber shops, massage)</td>
</tr>
<tr>
<td></td>
<td>TVC [N/F]</td>
<td>G: Increase disaster preparedness in Khao Lak</td>
<td>SME loans awarded to small businesses to finance the rebuilding of their businesses</td>
</tr>
</tbody>
</table>


*Organisations marked in bold are the leading organisation of each strategy, with those in non-bold indicate supporting partners.

[N/F] denotes those newly formed community-based organisations that arose in reaction to the tsunami event.
Table 7.5: Longer-term initiatives designed to aid the recovery of Phi Phi Don

<table>
<thead>
<tr>
<th>Focus</th>
<th>Organisation</th>
<th>Projects (P) and Goals (G)</th>
<th>Actions and outcomes benefiting Phi Phi’s destination community</th>
</tr>
</thead>
</table>
| Training & Education                   | Children of the Phi Phi Islands [N/F]                                        | G: To assist Phi Phi’s youth by raising awareness and funds to help families and children recover. | ▪ The Phi Phi children were encouraged to express their grief and experiences, with the resultant pieces (writings and pictures) being presented in the form of 2 books  
▪ The proceeds of the books - entitled *The Children of Phi Phi Islands* and *The Heart of Phi Phi Children* - were used to fund: children’s general education; training families new skills, such as arts and crafts; teaching basic business skills; and teaching English. |
| Permanent Shelter & Infrastructure Support | Small Entrepreneurs, Labour, and Community/Credit Union Cooperative of Phi Phi Islands Berlinger Company Ltd. | G: To re-house Phi Phi tsunami victims & provide basic infrastructure                   | ▪ Houses for 30 unregistered Phi Phi residents were built – Phi Phi residents that had not registered Phi Phi as their place of residence with the RTG were ineligible for post-tsunami government housing  
▪ A new bridge was also built |
| Financial & Livelihood Assistance      | World Vision International                                                   | G: Provision of housing                                                                    | ▪ Funded and constructed the Tsunami Village consisting of 231 houses on privately donated land located on the mountain top above Laem Phaw (Cape Phaw) |
| Disaster Preparedness                  | Friends of Phi Phi Association                                               | G: To provide financial assistance for the rebuilding of basic infrastructure              | ▪ Raised funds for the rebuilding of the local school, hospital and sanitation facilities. |
|                                        | Phi Phi Relève-Toi [N/F]                                                     | G: To financially support the rebuilding of Phi Phi & distribute aid in a transparent way that benefits those in most need. | ▪ Bought 30 long-tailed boats for fishing and tourism activities  
▪ Funded the provision of 60 pensions for elderly community members for the duration of 7 months  
▪ Supplied rental assistance for people returning to Phi Phi for 4 months  
▪ Offered micro-credit schemes  
▪ Bought fire-fighting equipment for the community & a beach grader to remove glass and cigarettes from the sand. |
|                                        | Swedish Micro-Credit Foundation Thailand Islands Foundation                   | G: To assist the recovery of micro and small businesses through the provision of micro-credit as start-up capital. | ▪ Offered interest free loans to micro and small businesses (interest-free component enabled Phi Phi’s predominantly Muslim population access to credit) that were to be repaid when possible  
▪ As of March 2007, a total of 230 families have received loans ranging from Baht 10,000 to Baht 100,000 & close to 60% of the loans had been re-paid |
|                                        | Phi Phi Aid [N/F]                                                            | G: To aid those affected by the tsunami in Phi Phi to help themselves and rebuild their lives and livelihoods | ▪ Provided financial assistance and goods needed for the restoration of livelihoods recovery including boats, gas cookers for food stall owners, and lifejackets for taxi service boats |
|                                        | Phi Phi Maphrao Resort [N/F]                                                 | G: To aid the recovery of lives and livelihoods                                             | ▪ Purchased boat engines for fishermen  
▪ Helped distribute donations with the help of NGOs and foreign embassies |
|                                        | UNEP Swedish Rescue Service Agency (SRSA) Department of Coastal and Marine Resources (MONRE) | P: Awareness and Preparedness for Emergencies at Local Level (APELL) for Phi Phi          | ▪ Conducted series of training seminars & workshops with senior industry advisors, local government officials, and community members of Phi Phi (business owners, tourism workers, and representative group members) |
|                                        | Help International Phi Phi (HI Phi Phi) [N/F]                               | G: To increase disaster preparedness through disaster preparedness and emergency education | ▪ Produced an evacuation map for the community in the event of another tsunami threat that is now featured in most shops and hotel rooms. |
|                                        | Danish International Development Agency (DANIDA) Asian Institute of Technology (AIT) Department of Pollution Control (Wastewater Management Authority) | P: Re-establishment of wastewater management services (wastewater collection and treatment) on Phi Phi Don | ▪ A wastewater collection system for the main business and hotel area (covering 32 hectares) was established that included the introduction of a solar-powered pump station and a user-pay fee system  
▪ The existing wastewater treatment pond was converted into a 0.64 hectare constructed wetland system that included landscaping |
|                                        | HI Phi Phi [N/F]                                                            | P: Palm Tree Recovery & Replanting Project                                                 | ▪ The project focused on strengthening the underground palm tree root system and halting erosion  
▪ To achieve this, surviving coconut tree root systems were replanted and a further 300 new coconut trees planted  
▪ Phi Phi locals expect the roots to develop into fully grown trees within approximately 10 years |
|                                        | PHI PHI Dive Camp [N/F]                                                      | P: Restoration of the coral reefs                                                          | ▪ Debris was removed from the reefs, sandy substrates, beaches and rocky peripheries to negate further coral damage and help restore the beauty and attractiveness of Phi Phi’s coastlines  
▪ Long-term coral reef monitoring and restoration projects were established  
▪ A model education program aimed at educating travelers and the local community on how to help protect the Islands” natural resources and promote sustainable tourism was set up |


### Notes:

- Organizations marked in bold are the leading organization of each strategy, with those in non-bold indicate supporting partners.
- N/F denotes those newly formed community-based organisations that arose in reaction to the tsunami event.
There was a great need for this type of credit for two reasons. First, many micro and small businesses had no credit history. The SMF representative working on the island explained that:

Laundry ladies don’t have a lot of excess money, [they] don’t have any. They can’t go to the bank because they’re not creditable…they don’t have a credit history because they’ve not really used the bank before¹⁹³.

Second, as noted in Section 6.3.2.1, many of the islanders are Muslim and they do not believe in paying interest. The SMF loans are interest free but do incur a small fee. Between April 2005 and mid-March 2007, 230 families have received loans ranging from THB10,000 to THB100,000. As of March 2007, nearly 60 per cent of the loans had been paid back (Persson, 2007). The operations of the SMF in financially supporting the largely Muslim community clearly demonstrates the ability of smaller grassroots organisations to better gauge and adapt their strategies to localised and culturally sensitive contexts (acknowledged as cultural norms in the place element of the DSF shown in Figure 7.1) to ensure greater local applicability and success. As argued in Section 7.2.4.2, over-bureaucratic processes and mandates dictating the actions and capabilities of large multi- and bi-lateral aid agencies can curtail their flexibility and effectiveness on the ground, if local contexts and agency aid process are mismatched (see Tan-Mullins et al., 2007). The creation of this culturally tailored financial resource also illustrates the positive impact adapted organisational approaches (recognised in the adjustments and adaptation box in the system adaptiveness dimension of the DSF in Figure 7.1) have on household and business response capabilities. The only major drawback of the revolving credit scheme was credit availability delays, caused by slow loan repayments by initial recipients¹⁹³,²⁴⁰,²⁴³,²⁴⁸. Some community members also expressed reservations about borrowing from them, believing that the monthly repayments were too high²⁴⁰.

The implementation of Danish International Development Agency’s (DANIDA) much needed wastewater management initiative and World Vision’s housing project proved a lot more challenging. DANIDA’s wastewater management project was set up to increase infrastructural standards and rectify the subsequent problem of environmental degradation that was outlined in Section 6.7.1. DANIDA’s project was completed but there were problems with the scheme. First, the capacity of the natural treatment facility was too small for the needs of the destination village²⁰²,²¹⁷,²³⁸,T. The scheme only has the capacity to treat approximately one third of the village’s wastewater²⁰². The consequent untreated overflow is
polluting some areas of the village, resulting in unpleasant odours and the perpetuation of biophysical degradation that was taking place prior to the tsunami. Second, there was a real concern that the Ao Nang TAO did not have the capacity to expand or maintain the facility. As argued in Section 7.3.1.3, the ongoing problem of local government capacity and its perpetual negative effect on new post-tsunami initiatives, again emphasises the need to address the root causes of vulnerability before implementing new plans or strategies.

The provision of permanent housing on the island by World Vision proved contentious due in part to unresolved land ownership and land encroachment issues detailed in Section 6.7.2. Under the World Vision housing project, a new housing village containing 231 houses was built on the mountain above Laem Phaw (Cape Phaw) on privately donated land. However, the donated land is located well within the boundaries of the National Park, again raising questions of the legality of the private acquisition of a large tract (an estimated 150 Rai or 230 hectares) of publically-owned land (refer back to Section 6.7.2). The location was also unpopular with the island’s residents. The village was thought to be too far from the port and business centre and the access road is very steep. Consequently, daily access to work via foot or bicycle is harder and the routine transportation of goods from the ports below to the settlement via cart (there are very few cars on the island) is near impossible. There were also concerns that the annual monsoonal rains would degrade the road and hinder all access. Another housing project supported by the Small Entrepreneurs, Labour, and Community/Credit Union Cooperative of Phi Phi Islands faced similar land use issues, with the building of houses taking place within the National Park boundaries.

As argued in Section 6.5.2, Burmese minorities working in Khao Lak and Patong proved to be the most vulnerable sub-group within these affected destination populations. However, their rights and working conditions were improved by the influx of NGO and CBO assistance (TAG, 2005). Increased post-tsunami media attention highlighting the plight of Burmese workers, attracted significant NGO support, and gave both legal and illegal Burmese workers a much needed voice against routine discrimination and exploitation (Section 6.5.2) (TAG, 2005). Receiving limited support from the RTG, various NGOs and CBOs stepped up to aid the estimated 60,000 Burmese workers working on the Andaman Coast (Hakoda, 2005). The provision of basic emergency necessities, food, water, and medical assistance were supplied by numerous NGOs including: the Thai Red Cross, International Organisation for Migration
(IOM), Medicine Sans Frontiers, World Vision, Stella Marie, and the Tsunami Action Group for Migrants (TAG) (TAG, 2005; UN, 2005). The ILO also provided temporary financial relief to minorities through THB30,000 (USD764) cash handouts. The TAG - formed from local NGOs and led by Human Rights Education Institute of Burma (HREIB), Grassroots Human Rights Education, and Foundation for the Health and Knowledge of Ethnic Labour (MAP Foundation) - provided direct emergency relief to 4,792 migrants alone (TAG, 2005).

Once emergency needs were met, attention turned to longer-term financial, social, and livelihood needs. These included 81(Hakoda, 2005; TAG, 2005):

a. The replacement of migrant ID cards (Tor/Ror 38/1), work permits, and new-born birth certificates;

b. Providing temporary financial aid to construction employees waiting for the resumption of construction;

c. Assistance with reclaiming money from the police81;

d. Securing the legal rights and livelihoods of migrants (including salary rates and employment conditions) through constant advocacy with government authorities, UN bodies, and journalists;

e. Improving migrant access to information, education, health, and legal services; and

f. Strengthening migrant communities and their capacity to cope with trauma and exercise their rights as a group and self-organise.

The Federation of Trade Unions Burma (FTUB) offered two information and training sessions in Phang Nga, aimed at building capacity and facilitating cohesion among Burmese workers that were affected by the tsunami. The outcomes of the initiative were three-fold (ILO, 2005): (i) migrant workers gained a better understanding of the role of trade unions, workers' rights, and assistance services; (ii) trade union membership was increased; and (iii) collaboration between Thai and Burmese trade unions was enhanced. Together, these initiatives and support mechanisms not only provided Burmese minorities with greater access to much needed financial resources and legal rights (listed in the sensitivity dimension of the DSF), they connected the Burmese with wider multi-scaled support systems that they can rely on for future support and assistance. Returning to Figure 7.1, the DSF shows that access to and fortification of networks along with increased social exchange (listed under the adjustments and adaptation box) reduces social sensitivities to future shocks and stressors.
7.4 Conclusion

The enormity of the tsunami disaster prompted one of the largest disaster responses in history, with regional governments and aid providers uniting to support the recovery of the communities that border the Indian Ocean rim. This chapter has detailed the collective emergency, short-term and longer-term responses undertaken in southern Thailand, and the impact these responses have had on the destination communities of Khao Lak, Patong, and Phi Phi Don. The RTG were swift in their response, overseeing emergency assistance for survivors, distributing of emergency aid, and provisioning of psychological support for traumatised survivors. These efforts were supported by: (i) technical international teams that helped with forensic operation, (ii) 77 NGOs, bi-lateral and multilateral organisations that provided emergency and technical assistance, and helped disseminate donations and goods, and (iii) the business sector, including European tourism operators who aided in the evacuation of surviving tourists and carried medical staff from Europe to help. The Thai public also helped by contributing food, donating blood, and cooking meals to sustain the volunteers and crisis centre staff. This extraordinary outpouring of aid marked a significant shift in the balance of aid, where traditional multi-lateral and bilateral aid efforts were rivalled by flows emanating from new multi-scalar aid networks, including emerging grassroots organisations driven by strong leadership, the business sector, and direct private donations. Together, these actions helped stabilise the communities. Once this was achieved, attention turned to the implementation of medium- and longer-term adjustments and adaptation responses designed to improve tourism development standards, increase adaptive capacity at the local level, and build resilience to future shocks.

These longer-term responses fell under two overarching initiatives: the Andaman Tourism Recovery Plan (ATRP) and the Andaman Sub-Regional Development Plan (SRDP). Key strategies included: national marketing initiatives, the provision of credit to facilitate tourism business recovery, the redrafting of coastal tourism development plans, and the introduction of disaster preparedness strategies including Thailand’s EWS. These strategies were supplemented by industry-led actions and NGO activity that ranged from immediate emergency support and redressing human rights for migrant workers, to financial and marketing assistance, skills and leadership training, environmental rehabilitation, and disaster preparedness. NGO and community-based organisations support was greatest in Phi Phi Don and Khao Lak where damage levels were highest.
Despite Bill Clinton’s engaging mantra of „build back better”, the tsunami response in Thailand did not live up to expectations, as many of the pre-existing contextualised and structural vulnerabilities were ignored. Instead, post-tsunami actions were simply mapped onto „old” and dysfunctional governance structures (particularly those found at the local level of government), without any attempt to adjust the very processes that underpinned persistent inequalities and development failures of the past. The outcomes (or feedbacks) of the failed post-tsunami actions merely reinforced the same patterns of pre-disaster choices and behaviours that had done nothing to reduce levels of physical exposure and instead compounded social, political, economic, and environmental sensitivities.

The success of many of the government initiatives was compromised across all three destinations by funding shortages, governmental preferences, and the persistence of pre-existing weaknesses in governance structures and processes that were overlooked (detailed in Chapter 6). Emergency aid relief did not reach all eligible recipients. Funding was insufficient and available funds were often misappropriated due to corruption and nepotism operating at the local level. Whist post-tsunami business loan schemes did help medium and larger businesses finance their rebuilding efforts, the effectiveness of the loan schemes for smaller businesses was limited by complex credit application processes. The beliefs of Phi Phi Don’s predominantly Muslim population nullified this option for many Phi Phi Don operators whilst the lending conditions left foreigners unable to capitalise on the scheme. Yet the success in securing credit to rebuild did not necessarily eliminate the financial vulnerability of all businesses. Those businesses with existing loans (many of which were new enterprises in Khao Lak) were left with higher debt levels and an increased sensitivity to growing business competition, economic downturns, and future shocks. Shortfalls in local governmental finances, capacity levels, political will, and corruption also undermined the successful implementation of new planning and development strategies in all three destinations. These same problems were also flagged as possible blockages to wider regional plans and governance improvements outlined in the Sub-regional Development Plan. The introduction of the Early Warning System was supposed to make people safer but its functionality was limited in all three destinations by technical and procedural faults, causing technical malfunctions and heightening community mistrust. The post-tsunami actions also revealed the negative side of the politics of aid. Perceptions (founded or not) and agendas of aid organisations did not necessarily match or consider localised needs, leading to inappropriate responses and inaction, particularly in Khao Lak.
This chapter has also demonstrated that the outcomes of both short-term emergency responses and longer-term adjustments were influenced by contextualised factors embedded in time and space (represented by place) as shown in the DSF. These include historically-embedded social norms and power systems, along with personal and institutional belief systems that together determine differential vulnerability in a given destination - a constructed place - over time. The post-tsunami plans and changes were not necessarily wanted. Emergency financial aid was misappropriated at the local level of government, with the funds being unevenly distributed amongst family and friends of the ruling elite. The subsequent procedural breakdowns not only eroded trust in their local authorities, but also strengthened patron-client relationships that underpin localised power structures and perpetual inequality in Thailand’s social system. The reinforcement of these historically-embedded patronage relationships and networks, founded upon cultural norms, fortifies existing inequalities and compounds the sensitivity of those who fall outside these social networks. However, evidence from Phi Phi Don demonstrates that patron-client relationships can greatly strengthen a community; strong patron-client relationships that centre around the five landowner families on the island underpinned the community’s ability to resist a development plan that would have dispossessed many. As argued in Chapter 2, improving governance requires behaviour alterations in the existing power holders to avoid the exacerbation of pre-existing vulnerabilities, but this is hard to achieve as it is in the best interests of those who enjoy the benefits of power to retain the status quo.

The contextualised preferences and agendas of governmental bodies, aid organisations, and destination stakeholders added another layer of influences that shaped the capacity of Khao Lak, Patong, and Phi Phi Don to rebuild following the tsunami disaster. The outcomes of these often conflicting institutional and personal agendas and biases saw some benefit, but to the detriment of others. Patong greatly benefitted from the increased marketing exposure provided by the TAT, but this was of little consolation to the destination communities of Phi Phi Don and Khao Lak who were not included in the campaign. Foreign workers and business owners largely missed out on receiving emergency financial payments from local governmental authorities, despite them being eligible. Instead they were treated with scorn and contempt and advised to approach their home countries for support. Thai tourism business owners also reported ill-treatment by authorities and institutional biases, particularly those in Phi Phi Don who felt they were ignored due to political rivalries. But these tribulations paled in comparison to the widespread discrimination that the Burmese workers experienced at the hands of the media, police, and national government, resulting in
extortion and deportation. Unfounded prejudices against tourism operators caused some volunteer-based groups operating in the greater Khao Lak area to ignore pleas for assistance from Khao Lak tourism businesses, and direct their attention to helping those reliant on more traditional livelihoods like fishing. The consequences of all these actions had a significant negative knock-on effect on future sensitivity levels.

The persistence of non-transparent governmental processes and governmental preferences that resulted in the unequal distribution of governmental aid only compounded each community’s frustration and mistrust in their local authorities. This further erodes the very tenuous public-private governance relationships that existed prior to the tsunami, and has left the Khao Lak and Phi Phi Don communities feeling more isolated and disillusioned with the effectiveness of governance structures. The ill-treatment by some aid organisations experienced in Khao Lak compounded this feeling of isolation. The case of the Burmese is very different. The tsunami disaster exposed their routine discrimination and persecution by factions within the Thai government and police system, which in turn attracted external humanitarian support and provided them with much needed support networks to help them fight for greater rights and equality. Greater access to social capital has the potential to improve both their day-to-day living conditions and increase their resilience to future shocks and stressors.

Aid agencies and governmental officials were not the only ones influencing post-disaster rebuilding outcomes. This chapter demonstrates that destination stakeholders in Khao Lak, Phi Phi Don, and Patong were active agents in determining their recovery and shaping their exposure and sensitivity levels to future shocks and stressors. Patong business stakeholders actively opposed the large developmental changes to the beach foreshore, designed to reduce exposure levels to future coastal hazards, that were proposed under the ATRP. Business profits were deemed more important than future risks of another event as this was considered low. Khao Lak residents also blocked the ATRP plan for emergency roads and roof-to evacuation platforms due to worries that such a road system and extra roof-based infrastructure would detract from the attractiveness and therefore appeal of the destination to tourists. Phi Phi Don residents were successful in blocking the entire DASTA plan. These findings also demonstrate the role risk perceptions and weighted trade-offs play in the adoption of preparedness and resilience building strategies. These actions, driven by business preferences, feed back into the system and heighten exposure levels to future tsunami risks. These examples do not, however, detract from the positive influence that
personal agendas and decisive leadership had in heightening destination resilience levels. HI Phi Phi, Phi Phi Dive Camp, and Phi Phi Relève-Toi, the main organisations credited with Phi Phi’s short-term recovery, were founded and led by determined individuals wanting to help Phi Phi Don recover. This desire to help was very personal for the founders of Phi Phi Dive Camp and Phi Phi Relève-Toi, who were both Western expatriates residents on the island. The establishment of the Ecotourism Training Centre in Khao Lak was also personal for its founder, who was inspired to help train teenagers to become scuba dive masters and future community leaders by his own teenage experiences.

Another significant insight from the analysis of post-disaster actions is how these organisations and individuals achieved their goals, highlighting the relational workings of the system and the multiple and overlapping processes of change (or resistance to change) within that system. The simultaneous use of several multi-scaled actions by HI Phi Phi, Phi Phi Dive Camp, Phi Phi Relève-Toi, and the Ecotourism Training Centre to attract attention, support, and donations points again to the importance of scale in assessing destination vulnerability. Returning to theories of relational scale, those that understand and take full advantage of the scaled workings of social interaction are most successful in realising positive results. The success in using established and multi-scaled networks to achieve goals was also evident in the actions of industry organisations and business networks (seen in the formation the Phuket Action Plan and collective actions by the IBLF), the TAT, and individuals who called upon social and kin networks to aid their recovery. It is through the mapping of the use of multi-scaled networks and relationships that the working of the tourism system and the response capabilities of destination communities becomes apparent. The degree to which each destination community was able to mobilise these same networks also helps explain the differential levels of vulnerability and resilience found within and across the three destination communities.

Finally, the analysis of post-disaster actions presented in this chapter has proven the importance of the timing of post-disaster (in)actions and their outcomes in influencing destination vulnerability and resilience levels. Unfulfilled promises of help from government agencies, and misdirected attention by some NGOs in Khao Lak, led to growing feelings of hopelessness over time and impaired the capacity of some to take the necessary steps to rebuild their lives, which, in turn, increased their vulnerability to future stresses. Delays in finalising post-tsunami development plans led to exemptions for Khao Lak and Patong operators who had rebuilt prior to their introduction. But the negative impact of lengthy
planning delays was most marked in Phi Phi Don. Planning indecisions stalled access to emergency funds and halted the rebuilding process. Unable to rebuild their livelihoods, businesses were burdened further financially as they waited for governmental planning decisions. Those establishments that chose to rebuild illegally did so knowing that the cost of rebuilding again after planning regulations was finalised were less than those sustained from revenue that would be lost while waiting. Together, these conditions and processes shaped the context of human-environment interactions and created and perpetuated differential levels of vulnerability within and across the destination communities of Khao Lak, Patong, and Phi Phi Don over time and space.
8 Conclusions

8.1 Destination vulnerability - a growing concern

Vulnerability research aims to understand and redress real-world problems that arise from complex human-environment interactions. The problem under examination in this thesis was not the 2004 Indian Ocean tsunami itself - the deadliest in recorded history - but the issue it so dramatically highlighted. The impact of the tsunami on tourist destinations located along the Indian Ocean rim serves as a striking reminder of the vulnerability of tourism-dependent destination communities to shocks and stressors. This was very apparent in the three tsunami-affected Thai destinations of Khao Lak, Patong, and Phi Phi Don. As argued in Chapter 2, the problem of destination vulnerability is not new. But the theoretical approach used in this thesis to assess destination vulnerability and the in-depth knowledge gained from the comparative Destination Vulnerability Assessment (DVA) is.

This work has shown that the vulnerability of destination host communities to a myriad of compounding shocks and stressors is an ongoing and rising concern for researchers and industry stakeholders. However, a critical review of the literature on destination vulnerability presented in Chapter 2 reveals that the causal factors that contribute to destination vulnerability are under-researched. There are few holistic destination vulnerability assessments that comprehensively identify the contextualised mix of factors and dynamic interactive processes that create and perpetuate destination vulnerability in a given place over time. Taking this point one step further, there are no comparative DVAs that comprehensively explore how different place-based contexts affect differential destination vulnerability levels. The case studies of Patong, Khao Lak, and Phi Phi Don, with their different developmental histories and varied tsunami impact levels, were chosen specifically to examine the role context plays in determining destination vulnerability. This includes exploring the relationship between development levels, destination placement and popularity, tsunami damage, and vulnerability. As shown in Chapter 2, the lack of holistic vulnerability assessments is mirrored in wider vulnerability research. This thesis has also exposed a more fundamental problem with research on destination vulnerability. There are few rigorous frameworks and theoretical parameters for understanding and guiding the assessment of destination vulnerability and resilience to shocks and stressors.
In response to these short-comings, I have:

1. Developed a new and innovative theoretical framework for assessing the vulnerability and resilience of destination communities to shocks and stressors; and
2. Used this framework to guide a holistic and comparative DVA of the Thai destinations of Khao Lak, Patong, and Phi Phi Don to the 2004 Indian Ocean tsunami, to better understand the complexity of destination vulnerability and its evolution in different places and developmental contexts.

In doing so, I have fulfilled the main aims of this thesis outlined in Chapter 1, Section 1.2.

Having fulfilled the main aims of the thesis, the next set of questions that naturally follow from the above-stated aims are: (i) what has been learnt from the comparative DVA with regard to identifying the drivers of destination vulnerability, and (ii) was the Destination Sustainability Framework (DSF) useful in helping to understand the complexity of destination vulnerability and its evolution in different contexts? In this concluding chapter, I therefore revisit the objectives of this thesis, stated in Section 1.2, of Chapter 1 to ascertain whether I have fulfilled my incremental research goals. These goals were to:

a. Develop a conceptual vulnerability framework for assessing the vulnerability and resilience of tourism destination communities;
b. Use this framework to facilitate the identification and comparison of the social, political, economic, and environmental factors and processes that determine differential vulnerability levels within and across the tsunami affected Thai tourism destinations of Khao Lak, Patong, and Phi Phi Don;
c. Explore the evolutionary processes and contextualised discourses that shape destinations and their vulnerability over time and space; and
d. Use the empirical findings from the three case studies to evaluate the effectiveness of the new Destination Sustainability Framework (DSF) in assessing and understanding the vulnerability of tourism destination host communities to external shocks.

The first objective (a) was addressed by developing and presenting the DSF in Chapter 3. In the absence of a holistic theoretical approach to assessing destination vulnerability, I reviewed three systems approaches to inform the design of the new DSF: chaos-complexity theory, resilience, and vulnerability-based approaches. As outlined in Section 3.3, each of these systems approaches has been used to help understand the causal factors that contribute to destination vulnerability. My critical review of chaos-complexity theory, resilience, and vulnerability-based approaches, revealed that while each approach affords valuable contributions for understanding destination vulnerability, none presented a complete analytical approach for assessing it. Accordingly, the DSF presented in this thesis draws upon the strengths of vulnerability research, advances in sustainability science, innovations
from resilience thinking, and the specificity of tourism sector approaches. It also incorporates geographies of place, scale, and time to overcome hierarchical notions of scaled actions and processes that shape destinations, and to fully expose the contextualised root causes and processes that permeate every aspect of the social-ecological system and, in turn, its vulnerability and resilience over time and space.

The following two sections address the remaining three objectives. In the next section (Section 8.2), I revisit the objectives (b) and (c) that focus on the empirical findings of the thesis presented in Chapters 5 to 7. Here I review the key empirical findings from the comparative DVA, and relate these findings back to the DSF, which features the vulnerability causal factors identified from the tourism literature reviewed in Chapter 2 (summarised in Figure 2.1) and the wider vulnerability literature reviewed in Chapter 3. I also reflect on the significance of the findings in furthering our knowledge about the underlying causal factors and drivers of destination vulnerability that is place- and time-specific, and the practical implications of this advancement for researchers, practitioners, destination communities, and policy makers. In Section 8.3, attention then returns back to the DSF - the theoretical component of the thesis - to answer objective (d); to consider the usefulness of the new DSF in helping to better understand the complexities of destination vulnerability and the significance of its development for theory advancement in tourism research, plus the theoretical implications for wider vulnerability approaches.

8.2 The determinants of destination vulnerability

The comparative DVA of the tsunami-affected Thai tourism destination communities of Khao Lak, Patong, and Phi Phi Don has shown that destination vulnerability is created and perpetuated by a complex and dynamic mix of socio-political and environmental factors and processes that evolve over time and space. Findings from the comparative DVA presented in Chapters 5 to 7 show that destination vulnerability to shocks (in this case, the tsunami) is created, maintained by 13 factors, that are presented in Box 8.1. These factors correlate closely with the main causal factors listed under the three dimensions of vulnerability - exposure, sensitivity, and system adaptiveness - in the DSF, as seen in Figure 8.1. The subheadings used to order the types of vulnerability causal factors listed under each of the three dimensions of vulnerability in the DSF are also used in Box 8.1 to make the correlation easier to follow. The list of factors listed in Box 8.1, however, only tell part of the story. Working in tandem with these vulnerability causal factors in the coupled human-environment system are other common factors that heighten resilience levels within and across destination host communities. These are presented in Box 8.2. The factors listed in Boxes
Chapter 8

8.1 and 8.2 that correspond with those listed in the DSF are highlighted in italics.

Box 8.1: Factors that heighten destination vulnerability to coastal hazards

Physical characteristics and sensitivities of the natural and built environment
• The placement of tourism development in ecologically sensitive and hazardous areas
• Inappropriate building types and building standards that do not suit the location
• Inadequate infrastructure and misuse of resources that leads to environmental degradation

Tourism-specific sensitivities
• A strong reliance on highly seasonal tourism employment and business returns
• Heavy dependence on marketing strategies and preferences of national marketing support organisations and external tour operators
• The sensitivity of tourism destination images to shocks
• Short destination development histories (new destinations)

Access to economic capital
• High dependence on tourism as a livelihood source and limited livelihood alternatives
• Limited access to liquid (cash, savings, income) and fixed (property, alternate businesses, equipment) assets
• Restricted credit line options, poor credit histories, and debt
• Low or no insurance coverage

Access to human capital
• Limited transferable skill sets to draw upon in times of tourism flow disruptions
• Poor knowledge of risk and mistrust in disaster preparedness strategies

Access to social capital
• Limited access to or exclusion from social networks

Governance processes
• The curtailment of human rights
• The persistence of formal and informal governance weaknesses (including a lack of capacity along with financial constraints, limited political engagement, and corruption) that reinforce the uneven distribution and misuse of resources and power.
• The failure of adjustment and adaptation strategies (including policy and planning alterations, and new disaster preparedness strategies) due to the persistence of governance weaknesses
• Inflexible and self-serving governance systems that obstruct adjustments or adaptations that would benefit the greater population
Figure 8.1: Destination Sustainability Framework revisited
Box 8.2: Factors that heighten destination resilience to coastal hazards

Physical characteristics and sensitivities of the natural and built environment

- Appropriate building types and building standards that suit the location
- Adequate infrastructure and sustainable use of biophysical resources

Tourism-specific sensitivities

- Low seasonality levels
- Longer destination histories (established destinations)
- Strong destination market identity, positioning and branding
- Varied tourist market-base and tourist products
- A resilient and loyal repeat client base

Access to economic capital

- Diversified livelihood portfolios including multiple tourism businesses in various destinations and alternate industries
- Possession of and access to liquid and fixed financial assets
- Established credit histories and minimal debt
- Access and entitlement to benefits and social security

Access to human capital

- Knowledge about risk
- Knowledge about access and entitlement to benefits and social security
- Resourceful business owners and community leaders that transform adversity into new opportunities

Access to social capital

- Strong family and social networks

Governance structures and processes

- Strong and well-connected (politically and socially) tourism business organisations and networks and community leaders that stimulate positive action, facilitate greater access to resources through multiple scaled avenues and initiatives, and help build community cohesion
- Broad stakeholder participation in community-based and industry representative groups, which creates a platform for social learning and collective action
- The fortification of social and business networks following a disruptive event (an indicator of incremental adjustments and social learning)
- Open and responsive governmental and tourism business organisations and networks that respond quickly to industry needs
- The existence of established public-private linkages and engagement, particularly those linked to higher scales of governance
The findings from this research, however, go beyond the identification of factors to show that context matters. Whilst the identification of the above factors is vital in our understanding of destination vulnerability, the comparative DVA has demonstrated that it is how the factors combine in a particular place-based setting that matters the most in determining destination vulnerability levels. The comparative DVA has revealed that the most influential set of factors that determine vulnerability levels in one destination may be different to those found in another destination. This finding supports the observations of Ragin (1987) and Steinmetz (1998) (Section 3.2); similar events or outcomes may be produced by a different combination of factors (mechanisms) in another context or setting. To illustrate this key finding of the PhD, I will use some examples from the empirical findings to back up my claim.

From the factors detailed in Box 8.1 and Box 8.2, it is clear that place-based destination differences in seasonality (low versus high), developmental histories (old versus new), product type and clientele base (mass appeal versus niche markets) present as fundamental determinants of differential destination vulnerability across all three destinations. Referring back to the DSF presented in Figure 8.1, these are categorised as tourism-specific sensitivities. Out of these factors developmental histories could be ranked as the most influential factor (number one) in determining destination vulnerability and resilience levels. As shown in Chapter 6 (Section 6.2.4), a destination’s developmental history influences the strength of a destination’s brand, market position, and its consequent capacity to attract a broad range of markets, along with business stability, and access to economic resources. Access to economic resources was found to be the single-most important factor in influencing the capacity of households, businesses, employers, and employees in restoring livelihoods and coping financially whilst businesses were being rebuilt.

When applying each of these factors back to Patong, Phi Phi Don, and Khao Lak, it first appears that these common factors listed in the DSF largely explain why Patong and Phi Phi Don proved more resilient to the tsunami than Khao Lak. Patong and Phi Phi Don had longer developmental histories, were more stable financially, had larger market appeal, and lower seasonality levels. It seems like a clear-cut case of ticking off factors against a list. It is also possible to rank these factors in importance to help decide what response actions are most needed at a regional or national level. But this clarity quickly disappears when looking at the different impact social capital and governance structures had on influencing vulnerability levels across the three destinations.
Social networks based around kin relationships were strongest in Phi Phi Don and Khao Lak. These proved instrumental in providing financial and emotional support, and in Phi Phi Don’s case also created a feeling of unity and social cohesion amongst most community members. Although social capital was weakest in Patong, this was counterbalanced by the financial strength of most businesses and the political might of the supporting industry business networks. This turns our attention to the influence tourism industry representative bodies had on vulnerability levels. Tourism industry bodies were strongest in Patong and to a lesser extent in Khao Lak, but their impact is practically non-existent in Phi Phi Don. This absence of industry representative support is regrettable in Phi Phi Don but was not detrimental on the whole, because the dominant landowner families on the island stepped in to stabilise the population, and helped unite the community against DASTA’s post-tsunami plans. Planning delays also had different impacts on Khao Lak and Phi Phi Don. Heightened demand for accommodation throughout Phi Phi Don’s recovery period only disadvantages some sub-sectors of the tourism community, whilst in Khao Lak the delays and the subsequent „incomplete landscape” deterred tourists from returning and staying. Together, these examples reaffirm that context and way in which the factors combine in a given place matters most in determining destination vulnerability levels.

This thesis has demonstrated that destination vulnerability cannot be fully understood without appreciating how a society functions within the coupled human-environment system, and the impact contextualised factors and processes have on influencing tourism operations daily life. The context within which destination vulnerability exists is shaped by place-based characteristics along with wider cultural attributes and governance processes that permeate the fabric of society and capturing the functionality of daily life. Engaging with and understanding the context of daily life is where the puzzle of destination vulnerability and resilience is truly answered. Placed-based characteristics that influence destination vulnerability over time and space include:

a. physical attributes, such as the nature and layout of the biophysical environment, and the types of buildings favoured by tourism stakeholders and tourists (acknowledged in the exposure dimension of the DSF shown in Figure 8.1); and

b. social attributes, including destination development histories, and scaled social and business relationships and networks that guide daily interactions, and regulate resource access and response capabilities (as shown in the sensitivity dimension of the DSF shown in Figure 8.1).

Influencing these place-based human-environment interactions are the competing agendas of multiple stakeholders operating at multiple scales, and risk perceptions and cultural
interpretations of those risks, along with wider cultural norms and ideologies, religious doctrines, power systems, and formal and informal governance structures and processes that are expressions of the dominant power systems operating within the host society. These contextual influences are represented in the contextualised place and scale elements of the DSF presented in Figure 8.1.

The identification of both the causal factors and processes of destination vulnerability and the contextual discourses that shape it are empirically significant on three accounts. First, the findings from the DVA afford a more complete understanding of the contextualised factors and dynamic processes that create and perpetuate destination vulnerability over time and space. In doing so, it moves our focus beyond descriptive accounts of impacts and the identification of a sub-set of factors and to captures how vulnerability is created and maintained in a given place. This fills a substantial gap in both the tourism and wider vulnerability literature identified in Chapter 2. As argued in Section 2.4.3, the focus of the tourism literature is too narrow. The onus of climate change research presented in the tourism literature remains on the identification of factors that heighten physical exposure to predicted climate change impacts, while the crisis management literature is often highly descriptive and concentrates on one or two aspects of the tourism system, instead of the social-ecological system as a whole.

Second, the identification of common drivers of vulnerability as well as significant place-specific differences across three destination communities enables broader conclusions to be made regarding the drivers that underlie the vulnerability of tourism communities. The comparative assessment of three destinations clearly demonstrated that the uniqueness of place and personal circumstances plays a great role in influencing destination vulnerability. It also demonstrated a definite relationship between development levels, destination placement and popularity, damage levels sustained, and vulnerability.

Third, the monitoring of destination vulnerability over a four year period captured how destination vulnerability evolves over time. In doing this, this work helps to redress the current shortage of longitudinal vulnerability assessments (see Larsen et al., 2009; Oliver-Smith, 1996). The longitudinal research presented in this thesis identified those contextualised factors and pre-conditions that increased destination vulnerability levels prior to the tsunami event (presented in Chapters 5 and 6), and charted the long-term consequences of (in)action and failed responses (feedback mechanisms) on future exposure and sensitivity levels (detailed in Chapter 7). Its also highlighted why some actions (including
inaction) were taken over others following the tsunami, and documents the underlying choices, reasonings, and actions that have determined the success or failure of post-tsunami resilience building strategies in each destination. The findings presented in this longitudinal study demonstrate that the introduction of resilience building strategies alone will not guarantee desired outcomes. As argued in Sections 6.6.1, 6.6.2, 7.3.1.3, and 7.3.2.2, their success requires capacity, political will and the alignment of multiple stakeholder agendas, and a commitment to ongoing evaluation and adjustments. Referring back to Section 2.3, the redistribution of resources, power, and decision-making often required to facilitate real change are hard to achieve because it is not in the best interests of the ruling elite (Adger, 2003; Pelling, 2003; Wisner et al., 2004). As shown in Sections 6.6.2, 7.2.2, and 7.3.1.3, the required changes to the non-transparent governance processes that legitimise deep-rooted patron-client relationships and corruption, hinder the implementation of development plans, and perpetuate unequal access to resources and vulnerability, remained unchallenged. These collective findings from this DVA again prove that long-term resilience plans aimed at securing future sustainable livelihoods cannot be operationalised successfully without redressing the root causes of vulnerability (Clark et al., 2000; Pelling, 2003; Thomalla et al., 2006; Turner et al., 2003). The monitoring and evaluation of actions, why they are taken (or not), and the longer-term consequences of these actions reveals the true nature of the system and its propensity to adapt and change.

These collective findings not only facilitate a greater academic understanding of destination vulnerability, they also offer important practical lessons for other tourism destinations. These valuable insights create a solid grounding for the development of appropriate resilience building strategies and more sustainable futures for tourism dependent communities. Pinpointing and explaining the strengths and weaknesses of the social-ecological systems and the scales at which they occur opens up opportunities for action, change, and transformation. Knowing where the strengths and weaknesses in the system are gives destination communities, governance bodies, and policy makers the opportunity to adjust current practices and formulate and apply new strategies where they are most effective, based on trade-offs among different interests in society. However, as noted in the previous paragraph, there is no guarantee that action will be taken, as the trade-offs needed may be considered too great. This was also the case when looking at why the RTG did not issue earlier warnings of a possible tsunami threat; the possible loss of tourism confidence was deemed more detrimental than the risk of a tsunami (Section 6.4.2). The onset of the tsunami proved this not to be the case.
8.3 The role of the DSF in understanding and assessing destination vulnerability

In line with objective (b) of this thesis, the comprehensive identification of the causal factors and processes that underpin destination vulnerability to the destabilising shock of the tsunami was facilitated through the use and application of the DSF. The DSF served as a constant conceptual and structural guide throughout each phase of the research process. It informed the type of data needed to complete the comparative DVA, including the questions used in the interviews, case histories, and focus group discussions. But its most powerful function was its effectiveness in guiding the analysis of the data collected and the clear presentation of data in this thesis. For critical realists like myself, the most fundamental question to be answered by social theory is: *does this theory help to identify the underlying generative structures and causal mechanisms (factors) that exist in reality and explain how these combine to produce a phenomena in a given space and time?* Being true to my critical realist leanings expressed in Chapter 3, social theories of a chosen phenomena must be grounded by our experiences in the real world (Bhaskar, 1986). As argued in Section 1.2, it is through this constant cyclical process of theory creation, real-world application, and theoretical reflection that problem-oriented theory is advanced, and its relevance to practise ensured. The importance of this elementary question to theory advancement in critical realism and problem-orientated research, like vulnerability and sustainability science, warranted its inclusion in my research objectives detailed in Chapter 1. And the answer to the question is unequivocally “Yes”!

The stories of Khao Lak, Patong, and Phi Phi Don presented in this thesis, the complexities of their vulnerability to the tsunami, and their evolution over time and space was conscientiously related through the theoretical lens of the DSF. The DSF presented in Chapter 3 (and revisited in Figure 8.1) recognises that tourism destinations are vulnerable to multiple and often compounding shocks and stressors that act as trigger events in destabilising the existing system (illustrated by the *multiple shocks and stressors* element show in Figure 8.1 that pierces the system), and in doing so, reveal the system”s strengths and weaknesses. It acknowledges that destination vulnerability is a multi-dimensional characteristic of a given place, and identifies a range of common factors that influence exposure, sensitivity, and levels of system adaptiveness. The DSF also clearly shows that a population or exposure unit’s vulnerability and resilience is greatly determined by the political economy of resource distribution and usage. The main types of capital needed to withstand, cope, and adapt to shocks and stressors are listed in the *sensitivity dimension* of the DSF in Figure 8.1. The empirical findings of the comparative DVA categorically prove this; the more
access and control a household or group has to social, human, economic, political, and physical capital, the lower their vulnerability to shocks (Moser, 1998). But the DSF also acknowledges the deep complexities of context that include: the role structure (power systems and distribution, coordination, economy, and decision-making processes), culture (norms, dominant traditions and relationships, ideologies, and value systems), and human agency (influenced by expectations, agendas, and experiences) have on risk perceptions, chosen development paths, the use of finite resources (based on weighted trade-offs), response choices, and strategy outcomes. These are acknowledged in the place and scale elements of the DSF shown in Figure 8.1.

Significantly, the DSF depicts the cyclical nature of change, beginning with the importance of pre-event conditions in determining destination vulnerability i.e. the intertwined and dynamic linkages between pre-event conditions, the impact the shock or stressor has on a chosen population, and the influential role anticipatory preparedness actions (including resource stockpiling and insurance) have on immediate and short-term response capabilities. These pre-conditions are represented in the exposure and sensitivity dimensions of the DSF (Figure 8.1). The DSF then moves on to clearly demonstrate the role post-event actions, inaction, and failed actions simultaneously play in determining rates of regeneration over time and space (portrayed in the system adaptiveness dimension of the DSF in Figure 8.1), and new levels of exposure and sensitivity to future shocks and stressors. The empirical data from the comparative DVA has reinforced the DSF’s acknowledgement that the combination of action, inaction, and failed actions produce both positive (green feedback arrows in Figure 8.1) and negative outcomes (red feedback arrows) for different actors, which results in differential vulnerability and resilience levels within and across populations.

Most importantly, from a theoretical perspective, the DSF has emphasised the importance of place, scale and time in conceptualising and understanding the dynamics of destination vulnerability. Together, these characteristics form the spatial and temporal context within which daily life plays out, and vulnerability and resilience evolves. These intertwined contextual components are therefore portrayed in the DSF as three interlinked (pink, green, and blue) and fluid that encircle and infuse all other elements. Returning to Section 3.3.5, the spatial elements include the places where vulnerability and resilience are experienced, and scales of social organisation, through which multiple stakeholder actions, reactions, and consequences play out. The element of time captures how these interactions, along with the occurrence of multiple shocks, unfold, recognising that these can occur simultaneously but at different temporal speeds. As argued in Section 3.3.5, time, space, and scale are
acknowledged in numerous systems approach frameworks and theoretical conceptualisations to capture the dynamism of vulnerability and resilience, but their role in shaping vulnerability and change is underexplored and under theorised. The DSF redresses these shortcomings through the inclusion of the human geography theories of place, relational scale, and time in the DSF.

The DSF re-emphasises the importance of place in determining destination vulnerability. The deconstruction of Patong, Khao Lak, and Phi Phi Don as destinations using place theory demonstrates that places are not static. They are constructed and contested landscapes that are shaped by the desires of tourists and the interpretations of those desires by both international tour operators and host destination communities. But this fickle connection is susceptible to changing perceptions of the constructed destination image, and a corresponding experience that can be triggered by a disastrous event like the tsunami. The impact of the tsunami on tourist flows to Khao Lak, Patong, and Phi Phi Don demonstrates how detrimental such changes can be on the economic survival of businesses and the availability of job opportunities for workers. Combating these capricious influences, however, are the resourceful and enterprising actions of some destination stakeholders, who capitalise on the new situation and turn adversity into opportunity. Also, as noted in Section 8.2, developmental histories and the positioning of a destination within the very competitive international market also influence the capacity of destination communities to respond to destabilisation and change. This place-based characteristic of tourism and the delivery of the experience leaves destination communities very vulnerable to destabilising events like the tsunami that often lie outside their control.

Whilst vulnerability is experienced in the destination, it is shaped by dynamic actions and processes that evolve over time and space. These processes and their impact on the evolution of destination vulnerability are captured and explored through the theoretical lenses of relational scale and geographies of time. The deconstruction of „naturalised“ social scales used to order our lives reveals that these „structures“ are merely formal representations of the myriad of networks, relationships, and interactions that facilitate or constrain access and entitlement to resources the stakeholders desire. These multidimensional and contested social processes and facilitating networks not only shape the social-ecological system and its vulnerability and resilience to shocks and stressors, but underpin the very functioning of human society. The most desired and advantageous resource to have is power, or quick access to it. Relational scale powerfully reveals the subjectivity of social relations and enables a thorough exploration of how social actors
simultaneously use multi-scaled social processes and supporting structures, to either reinforce the differential access to power and resources within a given society or create new landscapes of power, recognition, and opportunity. Those social actors that recognise this and take full tactical advantage of all scaled opportunities experience greater levels of success in achieving their goals (Marston, 2000). This was explicitly demonstrated by the actions of tourism industry representative bodies operating in Khao Lak and Patong, where some individual business owners that used the incessant international media coverage to their advantage, and newly formed community groups and grass-root organisations who effectively used the media, the internet, and direct appeals to attract support for their recovery. The negative post-tsunami responses that many of Khao Lak foreign-owned SMEs received from their local government representatives when requesting help also reveals that appeals aimed at the wrong scale result in negative outcomes.

The influence of time on destination vulnerability is arguably the most under theorised aspect of this social-ecological phenomenon (see Section 3.4.5.3). This thesis has shown how overlapping and divergent temporalities of tourist flows, social-ecological changes and adjustments, and response times to those changes and adjustments greatly influence destination vulnerability. Seasonality (listed under the sensitivity dimension of the DSF) is a natural rhythm but the desirability of particular seasons both in the destination and at home in the tourist supply countries greatly shape tourist travel time preferences. Working rhythms of potential tourists in supply countries also influence travel preferences. These travel time preferences leave highly seasonal destinations like Khao Lak very vulnerable to shocks that may interrupt peak tourist flows. The timing of the tsunami in the Andaman Coast’s peak-season dramatically illustrates this point.

The comparative DVA also shows that the evolution of destinations (their development histories as shown in the sensitivity dimension of the DSF), as well as the duration of a destination’s recovery (acknowledged in the system adaptiveness dimension of the DSF) after a shock, greatly influences vulnerability levels. Slow rebuilding processes hinder the reconstruction of the ideal and manicured image. This deters tourists from returning and leaves business owners out of pocket and more economically vulnerable to future stressors or shocks. Finally, the timing of event-cycles (real or perceived) shape both risk perceptions and subsequent preparedness choices. When faced with a pressing choice of how best to use finite resources, do tourism stakeholders spend finite resources reducing their vulnerability to an event that may or may not happen for 10, 15, or 20 years time, or do they concentrate on addressing immediate needs like business growth? The comparative DVA
reveals that the latter choice almost invariably wins. But the choice is made by weighing up the possible cost of no action on disaster preparedness against estimated gain, all of which depends on the perception of risk and its timing. Two examples from the comparative DVA illustrate this. First, the choice of the RTG not to issue warnings of a possible tsunami threat due to fears that consumer confidence would drop and with that tourist flows and income (Section 6.4.2). Second, most businesses interviewed had chosen not to take out increased insurance after the tsunami (Section 6.3.5). Time often escapes critical attention in vulnerability assessments, however, a critical appraisal of place-based destination characteristics of Khao Lak, Patong, and Phi Phi Don, along with their redevelopment paths following the onset of the tsunami, demonstrates that time is one aspect of destination vulnerability that cannot be ignored.

The development of the DSF and its application to assessing the vulnerability and resilience of the destination host communities of Khao Lak, Patong, and Phi Phi Don is theoretically significant for tourism research on four accounts. First and foremost, it presents a new and innovative theoretical framework for understanding and guiding the assessment of destination vulnerability and resilience to shocks and stressors. This is a first for tourism research. Second, the creation of a theoretical framework that incorporates the depth of current systems approaches – chaos-complexity theory, vulnerability approaches, sustainability science, and resilience thinking – brings tourism sustainability research in line with wider and inclusive debates on achieving sustainability within the dynamic coupled human-environment system of which tourism is a part. A complete contextualised picture of destination vulnerability can only come from holistic theoretical approaches that incorporate all the causal factors, processes, and interactions between the two that together contribute to destination vulnerability and resilience over space and time. Third, the substantive findings from the comparative DVA provides a solid foundation for informing theory on destination vulnerability and its perpetuation over time and space. Finally, this work ensures the theoretical relevance of the DSF, by applying the framework to the real-world problem of the tsunami event and its impact on the Thai destinations of Khao Lak, Patong, and Phi Phi Don, and by reflecting upon its usefulness in helping us understand the complex social phenomenon of destination vulnerability. By undertaking this necessary retroductive step, this thesis bridges a noticeable gap between vulnerability conceptual frameworks and grounded real-world evidence, something that is rarely achieved in vulnerability research (as argued in Section 2.4.3).
The development of a new and innovative theoretical framework for understanding destination vulnerability is in itself a significant contribution to current research on destination vulnerability and tourism sustainability, given the absence of theorisation on the creation and perpetuation of destination vulnerability. But this thesis has gone further than this. It has pushed the boundaries to advance theories of vulnerability by: (i) re-emphasising the importance of place and contextualised influences in vulnerability creation and perpetuation, and (ii) reconceptualising the scaling and temporality of vulnerability and resilience using human geography theories of place, relational scale, and temporality. In doing so, this work again places geography at the forefront of theoretical and empirical advancement of vulnerability approaches and sustainability science.

The fulfilling of aims and objectives, however, is only one part of the PhD research process. As discussed in Section 4.10 in Chapter 4, the other component encompasses the lessons learnt during the process of doing research. Accordingly, in the final two sections of this chapter and thesis, I take a step back to reflect upon the research process, the challenges in undertaking the research, and identify future research needs.

8.4 Limitations and challenges

Undertaking research involves more than fulfilling the research aims. Knowledge creation is not a means to an end, but rather a journey. And it is while on this journey of doing research that much comprehension is gained. As outlined in Section 4.9 in Chapter 4, common limitations dictated by time and finances were the first concerns that arose during the planning and execution of the research project. The next set of challenges included: the complexity of the topic, the scope of the study, and managing and analysing such a large data set. Despite the difficulties in doing justice to the amount of data collected, the ambitious scope of the study was necessary to confidently assess and comment on commonalities and differences within and across the three destination communities. However, the management, selection, and presentation of the data was determined through the application of the DSF. The framework was used throughout the data collecting, analysis (using Nvivo as outlined in Section 4.9), and write-up phases, to help order and frame the comparative DVA. From this large data set, broader conclusions about the causal factors and processes of destination vulnerability were possible. This holistic scope of the comparative DVA did, however, hinder a more in-depth analysis of some of the more complicated factors that are detailed in the DSF. Some examples that come to mind are:
a. the full complexity of the political economy of resource access which demands a deeper exploration of the destination communities' positions within the wider tourism economy, and the consequences of this on terms of trade i.e. the uneven distribution of costs, benefits, and economic risk;

b. the politics of aid distribution and disaster recovery;

c. risk perceptions and experiences of the tsunami disaster and consequent responses by destination community stakeholders and tourists;

d. the vulnerability and resilience of sub-groups within the communities of Khao Lak, Patong, and Phi Phi Don, including the informal tourism sector, women, and Burmese minorities; and

e. the psychological capacity of the tsunami-affected populations to effectively respond and recover.

Not surprisingly, these more complex issues pertaining to the tsunami event listed above have been explored elsewhere (see Carlsen and Hughes, 2008; Fulu, 2007; Handmer et al., 2007; Handmer and Choong, 2006; Kelman et al., 2008; Paton et al., 2008; Rittichainuwat, 2008; Smith and Henderson, 2008; and Tan-Mullins et al., 2007). But I must stress here that this study did not intend to concentrate on one or two factors. The aims of the thesis restated in Section 8.1 show that this thesis has a holistic focus so as to understand the complexity of the coupled human-environment system and the creation and perpetuation of vulnerability within the system.

Another major challenge was the context within which the research was undertaken. Undertaking research in a post-disaster tourism setting was the most emotionally challenging aspect of the research process. The deep impact of this experience upon me as an early career researcher is reflected in my very personal need to candidly "debrief" after my post-field experiences in Chapter 4. Yet I also gained much from these field experiences. First, my own grappling with the worth of this work in helping to reduce vulnerability forced me to acknowledge and own my ideological positionality and agenda for undertaking this work. Second, I gained much resolve and personal satisfaction through the experience of being a listener, a shared experience that helped to alleviate the pain and trauma of the tsunami for some of the participants who just wanted to talk, vent, and heal. Finally, my experiences in undertaking research in the post-disaster context greatly enriched my understanding of destination vulnerability and, most importantly, peoples' remarkable resilience to shocks.
8.5 Recommendations for future work

So the final question is: where to now in terms of future research possibilities? More case studies are needed to test the application of the framework to different contexts - geographical (different scales), cultural, and destination types - and to different shocks and stressors. Only then can more certain conclusions be drawn about the DSF's usefulness in conceptualising destination vulnerability to a myriad of shocks and stressors. Furthermore, the framework can be applied to understanding some of the more complex factors that are included in the DSF. As discussed in the previous section, the full complexity of the political economy of resource access and entitlement, and differences in vulnerability levels between population sub-groups, were beyond the scope of this study. But their importance in determining differential vulnerability cannot be denied.

One way to better understand the full complexity of the political economy of resource access and distribution is to include both ethnographic methods and social surveys in the research design. Supporting immersion in the place-based context, ethnographic methods would allow the researcher to understand the subtle workings of social and cultural factors that influence choice mechanisms. Ethnographic methods would also enable a deep understanding of the personal values, expectations, and perceptions (of both risk and gain) that shape the decisions and subsequent actions of tourism destination actors regarding livelihood choices and day-to-day responses to multiple events and how these factors are influenced by wider socio-cultural attributes. The inclusion of social surveys, on the other hand, would provide greater detail on resource distributional patterns across different sub-groups that operate within the tourism destination landscape, enabling more concrete conclusions on the vulnerability and resilience of the informal tourism sector, women, and Burmese minorities to name but a few. Pairing these two methods together in one study or linking them in some way would greatly enrich our contextualised understanding of vulnerability and, more importantly, response mechanisms that have the propensity to either hinder or hasten change and social transformation.

Ethnographic methods along with the conducting of a series of social surveys over an extended period of time will also allow for more detailed investigations into the temporality of change and how different temporal patterns of multiple events, reactions to these events, and their outcomes, many of which co-exist in one timeframe, influence decisions-making patterns amongst different destination stakeholder groups and destination community sub-sectors. Recognising differences in the rates of multiple changes that occur within the social-
ecological system and the timing of those changes (including the existence of overlapping shocks and stressors) and charting the perceptions, actions, reactions, and outcomes for different actors within the system, creates a grounded knowledge around which appropriate risk reduction and resilience building actions for specific social groups can be created and successfully implemented.

Another area for future research is to use the DSF as a more general theoretical tool for examining vulnerability and resilience levels of populations who are not reliant on tourism as a livelihood source. This would be possible by removing the tourism-specific components that are particular to the tourism context and replacing them with other context-specific factors that are appropriate to the chosen industry or population. This thesis has clearly demonstrated how important it is to include factors that are context specific - to an industry and/or place - in assessing and understanding vulnerability. Knowledge gained from undertaking vulnerability assessments in a myriad of contexts will form a solid foundation for developing appropriate strategies designed to reduce vulnerability levels, and brings populations closer to achieving more resilient futures in a world full of uncertainty.
References


ASA (2009) Improvement of the Ministerial Regulation to rebuild within Phi Phi Island Architecture Siam Associate (ASA), Available from: <http://www.asa.or.th/?q=node/94606>, [05 November 2009].


References


References


References


COROBOV, R. (2007) Climate change and Moldova’s tourism: some indirect consequences. IN AMELUNG, B., BLAJEJCZYK, K. & MATZARAKIS, A. (Eds.) *Climate change and tourism: Assessment and coping strategies*. Maastricht, Warsaw, and Freiburg, Maastricht University, Polish Academy of Sciences, University of Warsaw, and University of Freiburg, pp. 173-188.


References


HAMILTON, J. M. (2007) Climate and the destination choice of German tourists. IN AMELUNG, B., BLAŻEJCZYK, K. & MATZARAKIS, A. (Eds.) *Climate change and tourism: Assessment and coping strategies*. Maastricht, Warsaw, and Freiburg, Maastricht University, Polish Academy of Sciences, University of Warsaw, and University of Freiburg, pp. 55-68.


KITZINGER, J. (1994) The methodology of focus groups: the importance of interaction between research participants. Sociology of Health, 16 (1), 103-121.
References


References


References


References

pp. 111-121.


SIDWAY, J. D. (1992) In other worlds: On the politics of research by 'First World' geographers in the 'Third World'. *Area*, 24 (4), 403-408.


SIMPSON, M. C. (2007) Tourism, livelihoods, biodiversity, conservation and the climate change factor in developing countries. IN AMELUNG, B., BLAZEJCYZK, K. & MATZARAKIS, A. (Eds.) *Climate change and tourism: Assessment and coping strategies*. Maastricht, Warsaw, and Freiburg, Maastricht University, Polish Academy of Sciences, University of Warsaw, and University of Freiburg, pp. 189-207.


References


TAT (2005c) Fact Sheet - Impact of Tsunami on Thai Tourism. Bangkok, Tourism Authority of Thailand.


340


UNISDR (2006) The Indian Ocean Tsunami, One Year Later. IN UNISDR (Ed.) UNISDR Informs: Disaster Reduction in Asia Pacific. Bangkok, UNISDR.


References


Appendix A  Open-ended interviews

1. Overview and rationale of use
Open-ended interviews were chosen as the main method of data collection because they enable the researcher to quickly gain insights into the complexities of social phenomena through the subjective eyes of social actors that form part of the social tapestry (Valentine, 1997; Winchester, 2005). Valuing the subjectivity of data collection, interviews reveal how individuals make sense of their social world and act within it (May, 2001). The particular advantages of using open-ended interviews to explore destination vulnerability in multiple communities are twofold. First, they promote a two-way dialogue between the researcher and participant, whereby information is exchanged, reflected upon and preconceptions on both sides verified and/or challenged (Dunn, 2005). Second, open-ended interviews create opportunities for participants to voice what is most relevant and important to them (Dunn, 2005), while providing a structure for comparability (May, 2001) between stakeholder groups and across destination sites.

2. Objectives
The main objectives of the open-ended interviews were to:
   a. Establish a developmental process of tourism in each destination pre-tsunami and document post-tsunami changes;
   b. Ascertain institutional responses to the tsunami in each destination;
   c. Identify the pre- and post-tsunami conditions that influence vulnerability levels in each destination; and
   d. Investigate the interconnected nature of identified socio-political and environmental factors and the way they are constructed across a range of scales.

3. Sampling design and deployment
The sampling strategy reflected the need to produce a degree of replication between groups in each destination and across multiple sites (Punch, 2005). The participants interviewed reflect the spectrum of stakeholders that influence and contribute to tourism development in the three case study sites, as well as those playing a role in the recovery. The groups represented in the sample are listed in Table A1 for Khao Lak, Table A2 for Patong Beach, and Table A3 for Phi Phi Don. A minimum of three from the identified groups was set based on expected reasonable coverage of experiences within and across the destination sites.
The desire to get a rounded representative sample across all major stakeholder groups listed in Tables A1, A2, and A3 took the required target of interview to close to 300, a feat we achieved. Participants were chosen using:

a. Hotel listings provided by the TAT and the Phang Nga Tourism Association that indicate the size of hotels in terms of rooms and the contact details.

b. Tourism stakeholder listings provided by NGOs that had undertaken tsunami-related work in the destination areas.

c. Snowballing techniques, including personal referrals and introductions. These were very effective in securing new stakeholder interviews in each community and creating a rapport. This sampling technique allowed the team to remain flexible in the “field” and follow unexpected avenues of enquiry (Brockington and Sullivan, 2003).

d. Random sampling, based on tourism maps and street observations. This was the most common sourcing method. This technique limited the problem of focusing on homogeneous groups and shared opinions possibly held among friends and colleagues (May, 2001).

A total of 279 interviews were conducted over a period of 3.5 months (January to early April 2007) by a three member research team comprised of:

1. myself,
2. Kannapa Pongponrat at SEI, and
3. Sopon Naruchaikusol from SEI.

The number of interviews was determined by time and budgetary constraints. Stakeholders were contacted via phone, email or in person. Each interview was carried out in a location suggested by the interviewee and lasted between 45 to 90 minutes. The familiarity of the interviewee’s surroundings both added to their comfort levels and awarded them some control over the interview process.

In compliance with university ethics regulations, permission to use the data collected from the interviews was formally secured through the participant’s completion of an information and consent form. The information and consent forms were written in English and Thai (shown on the following pages) and outlined the following:

a. the purpose of the study;
b. a description of the partner institutes involved;,
c. a brief introduction to the lead researchers;
d. the expected duration of each interview and recording methods;
e. an outline of the rights of the participant i.e. to withdraw at any time, to have their identities protected and confidentiality assured;
f. access and usage of the data; and
g. information on how the results would be presented.

However, the use of these forms proved problematic at times, particularly among Thai micro- and small business owners and workers. On some occasions, the forms heightened...
Appendix A

suspicion in the agenda of the work and caused discomfort and worry regarding perceived „official” ramifications of participation. Scheyvens et al. (2003) attribute such misunderstandings to a mismatch of meanings and intent particularly in countries with a history of military regimes where suspicion of „official” documents and their usage is high. Confronted with this problem, we as researchers eased distress by explaining our backgrounds and the research role in more detail and giving participants the option to grant consent orally.

Interviews were taped unless participants expressed discomfort with recordings. In these instances, responses were written. The taping of the interviews facilitated a more natural flow to the conversation and captured detail. Due to the sensitive nature of some of the disclosed information, the identities of the participants were kept confidential using pseudonyms.

The interview design remained dynamic throughout the research process. Questions derived from the literature and document analysis were reviewed and reworded throughout the fieldwork process as new information came to light making some pre-determined questions obsolete. All the questions and issues raised with the various types of stakeholders interviewed are detailed in List 1. Stakeholder grouping also changed in the field to reflect the make-up of businesses in each case study site. Two summary documents were kept and updated throughout the research process, providing an overview of what information had been gathered and what information needs remained outstanding:

a. A list of the participant groups in each destination site, target numbers and actual numbers obtained was created to keep an ongoing tally that was updated throughout the duration of the fieldwork (Table A 1 for Khao Lak, Table A 2 for Patong, and Table A 3 for Phi Phi Don).

b. A summary of all interview participants was also kept, creating a centralised record of who was interviewed, when and the main issues raised (revised version shown in Table A 4).
INFORMATION CONSENT FORM - English version

A vulnerability assessment of coastal tourism operating along the Andaman Coast, Thailand.

You are invited to participate in a study comparing the vulnerability of three tourism communities (Khao Lak, Phuket and Krabi) in the wake of the 2004 Indian Ocean Tsunami. The purpose of the study is to (a) identify the social-political and environmental factors and processes that contribute to the vulnerability of the communities of Khao Lak, Phuket and Krabi, and (b) develop a conceptual framework and methodology that will assist tourism communities understand and decrease their vulnerability against future hazards or shocks.

The study is being conducted to meet the requirements of a PhD research degree under the supervision of Dr. Kate Lloyd in the Department of Human Geography, Macquarie University, Australia (ph: +61 2 9850 8405; fax: +61 2 9850 6052; klloyd@els.mq.edu.au) and Dr Fiona Miller at the Stockholm Environment Institute in Sweden (+46 8 412 1405; fax: 46 8 643 3148; fiona.miller@sei.se). My contact details are: Emma Calgaro, Department of Human Geography, Macquarie University (mobile ph: +46 70 990 8868; ecalgaro@els.mq.edu.au).

Part (a) of this study is being undertaken in co-operation with Stockholm Environmental Institute (SEI). SEI is undertaking a parallel project entitled “Sustainable Recovery and Resilience Building in the Tsunami Affected Region: Sustainable Recovery and Resilience Building Strategies in the Tourism Industry”. The project aims to support the sustainable recovery of the tourism industry through a study of the factors underlying the vulnerability of those affected by the tsunami and how these factors are inhibiting their sustained recovery. The project also aims to enhance informed decision making in coastal zone management.

SEI is providing logistical support from their Bangkok office and will be the local contact for the projects: SEI-Asia, 9B, 9th Floor, Park Place Building, 231 Sarasin Road, Lumpini, Pathumwan, Bangkok, 10330, (Ph: +66 (0) 2 254 2260-5, Fax: +66 (0) 2 253 2234). The final results of this study along with any publications produced will be available to SEI.

If you agree, you will be asked to participate in an interview and/or focus group discussion. The interview will be approximately 1 – 1½ hour’s in duration and will take place in a location of your choice. Focus group discussions will take no more than 2 hours. With your permission, the discussions will be recorded using audiotapes.

Any information or personal details gathered in the course of the study will be treated with strict confidentiality. No individual will be identified in any publication of the results. The information you provide in interviews and focus group discussions (including direct quotations where appropriate) will be used in the PhD thesis and related professional publications, including publications of SEI. Photographic evidence will only be used for research purposes.
When using information from the interviews and discussions, I will refer to you as:

Professional position:

Other:

If you decide to participate, you are free to withdraw from further participation in the research at any time without having to give a reason and without consequence. Furthermore, if at any point during the interview, you feel distressed or uncomfortable, the interview will be halted to give you an opportunity to recover before continuing. If you suffer from post-traumatic stress during any stage of the discussions, the interview will be stopped and you will be referred to local counselling or mutual support group services for assistance. If you decide not to continue with the interview, your personal wishes will be respected.

Please feel free to contact me at any point to obtain feedback regarding the results of the research. A summary of the key findings will be made available to interested parties once the research is completed. The detailed reports and publications produced for SEI and the PhD will be available on request.

I________________________________, have read/have had read to me and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant’s Name:

Participant’s Signature: ___________________________ Date:

Investigator’s Name:

Investigator’s Signature: ___________________________ Date:

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research). If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact SEI Asia (contact details listed above) who, as the local contact, will pass the information on to the Macquarie University Ethics Committee. Alternatively, you may contact the Macquarie University Ethics Committee directly (telephone +61 2 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.
(INFORMATION AND CONSENT FORM – THAI VERSION)

3
2547

: +61 2 9850 8405;
: +61 2 9850 6052; killoyd@els.mq.edu.au)
(+46 8 412 1405; : 46 8 643 3148;
fiona.miller@sei.se) : +46 70 990 8868;
ecalgaro@els.mq.edu.au.

(SEI)
Appendix A

1- 1½

2
Appendix A

9850 7854; email ethics@mq.edu.au.)
### Table A 1: Khao Lak interview stakeholder groups

<table>
<thead>
<tr>
<th>Stakeholder Type</th>
<th>Specifics</th>
<th>Khao Lak (BN &amp; NT)</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodations (Resort / Hotel / Guesthouse / Bungalow)</td>
<td>Small (T)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Small (F)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Medium° / Large° (F)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medium / Large (T)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Hotel / accommodation Staff</td>
<td>Diving</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Travel agent / operators</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Guides</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td>Souvenir and gift shops</td>
<td>Incl. Grocery, drug store, photo.</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>General Shop</td>
<td>Spa and Massage</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Tailors</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Book stores</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Beach Services: - Umbrellas, kayaks, beach vendors- Tourist Boats</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Other (internet, laundry, taxis)</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Restaurants, Cafés and bars</td>
<td>Owners (T)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Owners (F)</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Staff</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td>Support Organisations</td>
<td>Khao Lak SME Group</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Phang Nga Tourism Association</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>SME Bank</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Step Ahead Foundation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4Kali.org</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tsunami Volunteer Centre</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tsunami Craft Centre</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ecotourism Education Centre</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>UN-WTO</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kenan Institute Asia</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Buddhist Fellowship</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>North Andaman Tsunami Relief</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Researchers in the field</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>freelance English trainer</td>
<td>-</td>
</tr>
<tr>
<td>Government departments and representatives</td>
<td>TAO Khuk Khak</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TAO Bang Muang</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TAO Bang Nam Khem and Community Leader</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Assistant Headman of Nang Thing Village</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Khao Lak National Park</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Department of Marine and Coastal Resources</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Department of Disaster Prevention and Mitigation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Department of Public Works and Town and Country Planning</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Strategic Planning Division</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Phang Nga Provincial Office</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Plan and Budget Division</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Provincial Administration Organisation</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
### Appendix A

| Department of Disaster Prevention and Mitigation | 1 | 1 |
| Phang Nga Office of Tourism and Sport | 1 | 1 |
| Chamber of Commerce | N/A | - |
| Department of Labour | 1 | 1 |
| Department of Skill Development Centre Dept. of Labour | 1 | 1 |

*a* Bang Niang  
*b* Nang Thong  
*c* Small hotels and bungalows were defined as those with less than 25 rooms.  
*d* Medium hotels and resorts were defined as those with 25-100 rooms.  
*e* Large hotels were defined as those with more than 100 rooms.  
*f* There are few large foreign resorts operating in Khao Lak.  
*g* Community members advised that few guides had remained in Khao Lak. Those still working as guides also ran travel agents/operator businesses, thereby undertaking a joint role.  
*h* There were no independent book stores in Khao Lak  
*i* The Phang Nga Tourism Association does not allow Beach Vendors to operate on the beach stating that this type of service is not what the Khao Lak market is looking for.  
*j* Most of the restaurants, cafés and bar are smaller ventures run and staffed by families.
### Table A 2: Patong interview stakeholder groups

<table>
<thead>
<tr>
<th>Type</th>
<th>Specifics</th>
<th>Patong</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Resort/Hotel/Guesthouse/Bungalow)</td>
<td>Small (T)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Small (F)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Med/Large (F)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Med/Large (T)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Hotel/Accommodation Staff</td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Tour operation</td>
<td>Diving</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Travel Agent</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Guides</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Souvenir &amp; gift shops</td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Service</td>
<td>Spa &amp; Massage</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Tailors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Owners</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>- Staff</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Beach Services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Umbrellas, Jetskis &amp; Beach Vendors</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>- Boat operators</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Car &amp; motorbike hire</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Taxis</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Other (internet, laundry, tourist police)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Restaurants &amp; bars</td>
<td>Owners (T)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Owners (F)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Staff</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Support Organisations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAT - Southern Region</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Tourist Association</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Professional Guides Association</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Ecotourism Association</td>
<td>1</td>
</tr>
<tr>
<td>Tsunami Recovery Centre</td>
<td>1</td>
</tr>
<tr>
<td>Umbrella Group</td>
<td>1</td>
</tr>
<tr>
<td>Beach Massage Group</td>
<td>1</td>
</tr>
<tr>
<td>Shop Massage Group</td>
<td>1</td>
</tr>
<tr>
<td>Patong Beach Long-tail Boat Group</td>
<td>1</td>
</tr>
<tr>
<td>Beach Vendor Group</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Government departments and representatives

<table>
<thead>
<tr>
<th>Organization</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism Rescue Centre (Navy)</td>
<td>1</td>
</tr>
<tr>
<td>Tourism Development Office, Phuket Municipality</td>
<td>1</td>
</tr>
<tr>
<td>Department of Marine and Coastal Resources</td>
<td>1</td>
</tr>
<tr>
<td>Department of Disaster Prevention and Mitigation</td>
<td>1</td>
</tr>
<tr>
<td>Regional Environmental Office, Phuket</td>
<td>1</td>
</tr>
<tr>
<td>Provincial Natural Resource &amp; Environment Office, Phuket</td>
<td>1</td>
</tr>
<tr>
<td>Mangrove Resources Development Office, Phuket</td>
<td>1</td>
</tr>
<tr>
<td>Department of Public Works and Town and Country Planning</td>
<td>1</td>
</tr>
<tr>
<td>Phuket City Hall (Office of Provincial Governor)</td>
<td>1</td>
</tr>
<tr>
<td>Kathu District Office</td>
<td>1</td>
</tr>
<tr>
<td>Provincial Centre of Tourism and Sport</td>
<td>1</td>
</tr>
<tr>
<td>Chamber of Commerce</td>
<td>1</td>
</tr>
<tr>
<td>Department of Labour, Phuket Office</td>
<td>1</td>
</tr>
<tr>
<td>Labour Skill Development Centre (under Dept of Labour)</td>
<td>1</td>
</tr>
<tr>
<td>SME Bank</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Social Development Office</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Community Development Office</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Phuket Provincial Administration Organisation (Planning &amp; Policy)</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Provincial Disaster Prevention and Mitigation Office</td>
<td>1</td>
</tr>
<tr>
<td>Phuket Tourism, Sport &amp; Recreation Centre</td>
<td>1</td>
</tr>
</tbody>
</table>
## Table A 3: Phi Phi Don interview stakeholder groups

<table>
<thead>
<tr>
<th>Type</th>
<th>Specifics</th>
<th>Phi Phi</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Resort/Hotel/Guesthouse/Bungalow)</td>
<td>Small (T)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Small (F)</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Med/Large (F)</td>
<td>3</td>
<td>1&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Med/Large (T)</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Hotel/Accommodation Staff</td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tour operators</td>
<td>Diving</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Travel Agent</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Guides</td>
<td>3</td>
<td>1&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Souvenir &amp; gift shops</td>
<td>Incl. Grocery, drug store, photo.</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>General Shop</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Service</td>
<td>Spa &amp; Massage</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Tailors</td>
<td>3</td>
<td>1&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Book stores</td>
<td>3</td>
<td>2&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Beach Services:</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>- Umbrellas, kayaks, beach vendors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Tourist Boats</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Other (internet, laundry)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Restaurants &amp; bars</td>
<td>Owners (T)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Owners (F)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Staff</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>Electricity Generator Operator</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Support Organisations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phi Phi SME Hotels Group</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Phi Phi Tourism Club</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Krabi Tourist Association</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Swedish Microcredit Foundation</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Phi Phi Dive Camp</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ko Phi Phi Marine Resource Conservation Group</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Phi Phi Speed Boat Cooperative</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Phi Phi Water Sport Group</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Phi Phi Islamic Leader</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Government departments and representatives</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ao Nang Headman</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ao Nang TAO</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Muang District Officer Phi Phi</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Provincial Administration Office</td>
<td></td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Phi Phi Island National Park</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Department of Marine and Coastal Resources</td>
<td></td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td>Provincial Natural Resources and Environment Office, Krabi</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Department of Disaster Prevention and Mitigation</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Provincial Planning Strategy Office, Krabi</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Department of Public Works &amp; Town &amp; Country Planning</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Provincial Centre of Tourism and Sport, Krabi</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Labour Bureau</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Labour Skill Development Centre (under Dept of Labour)</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SME Bank</td>
<td></td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td>Provincial Public Health Office</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Social Development Office</td>
<td></td>
<td>N/A</td>
<td>-</td>
</tr>
</tbody>
</table>
Appendix A

a There are few foreign resorts (small/medium/large) on Phi Phi Don.
b There are few tour guides on the Island. The long-tailed boat operators often take on duel roles as guides when escorting tourists on boat rides around Phi Phi Don and over to Phi Phi Leh.
c There is only one tailor on the Island.
d There are two book stores on Phi Phi Don.
Appendix A

List 1: Open-ended interview questions and issues

Exposure of Khao Lak / Patong / Phi Phi to natural hazards:

 Target stakeholders: Regional government authorities responsible for the management of the coastal zone, for example, Department of Coastal and Marine Resources, Department of Town and Country Planning, and NGOs.

(a) Which area sustained the most damage along the Andaman coast—can you show me on a map?
(b) What in your opinion led to the massive destruction of the tsunami on the built environment (force of the wave, lack of mangrove forests, lack of vegetation, inappropriate buildings)?
(c) From an environmental perspective, what physical factors left the destinations so vulnerable?
(d) What damage was sustained by the natural coastal zone and how long-lasting are the effects?
(e) Were there any coastal defence mechanisms in place (natural or man-made) to stop the force of the tsunami or even storm surges?
(f) Are any defence mechanisms such as seas walls or the regeneration of mangroves and natural vegetation planned to help protect this area from storm surges or other natural hazards for the future? If so, what are they? If not, what not?
(g) What was the condition of the natural environment before tourism development started in the area (nature of coastal natural defence systems, namely mangrove forests, reefs, sand dunes)?
(h) Was this altered by tourism development?
   ▪ If so, in what way (removal of vegetation, reshaping of the natural landscape to make it suitable for building)?
(i) What policies are in place to protect the coastal environment in Khao Lak/Patong/Phi Phi?
(j) I read that Thailand has key conservation legislation in place: In 1992, the Thai government adopted a Coral Reef Strategy in order to improve the management of coral reefs bordering Thai coastline; and the Constitution of 1997 that enshrines the rights of local communities in conserving natural resources.
   ▪ Are you aware of this strategy?
   ▪ If so, who is responsible for implementing and managing this policy?
   ▪ Do regional co operations with ASEAN for example assist in the protection of coastal resources in Phang Nga/Patong/Phi Phi (supra-national)?
   ▪ If so, do these policies affect tourism development?
(k) Are there any obstacles to the successful implementation and management of existing coastal management policy?
   ▪ If so, what are they (lack of knowledge, manpower/capacity at local/regional level)?
   ▪ What is being done to rectify these weaknesses?
(l) How are these policies managed and which governmental departments are responsible for managing the coastal zone areas?
(m) Have these policies changed post-tsunami?
   ▪ If so, how have they changed?
(n) Who is responsible for enforcing these policies pre and post-tsunami?
   ▪ Are they enforced effectively?
   ▪ Are there any barriers to the enforcement of these policies?
   ▪ If so, what are they?
Appendix A

(o) What are the benefits from these new rezoning laws (safety, coastal protection, etc.) from an environmental perspective?

(p) Have any businesses violated the set-back lines or other environmental or building standards pre-and post-tsunami?
   - If so, in what ways?
   - Have any steps been taken to rectify the violation of these building regulations including the set-backs?
   - If not, why not?

Destination characteristics:

Target stakeholders: TAT, key tourism community stakeholders, tourism representative bodies.

(a) How large is the tourism community in each destination site?
   - What %age of the local population is involved in this industry?

(b) How are each of the destinations defined in terms of:
   - Geographical space/area
   - Destination image and main attractions

(c) When and how did tourism start in Khao Lak/Patong/Phi Phi?

(d) Who are the main markets (high/low season) for each destination and why?
   - Country: International vs. domestic?
   - Independent travel (tour operators vs. individuals), group travel?
   - Have these markets changed post-tsunami and why?

(e) How are the main markets sourced?
   - Guide books, travel websites, tour operators (domestic vs. large international)
   - Who controls access to these sources?
   - Has this changed post-tsunami?
   - Did these market sources hinder or help access to key markets post-tsunami?

(f) What type of tourism development is most prevalent in Khao Lak/Patong/Phi Phi) and why (skill bases, access to financial resources, training possibilities, development approval)?
   - How many small/medium/large resorts and businesses are there?
   - Formal vs. informal workers and businesses and why?
   - What constitutes an informal business vs. formal (registration with government, size)?
   - Are most tourism-related businesses foreign-owned or local enterprises (directly linked to type of development)?
   - What types of support businesses exist in Khao Lak/Patong/Phi Phi?
   - Are most tourism-related businesses foreign-owned or local enterprises (directly linked to type of development)?

(g) Has the composition of ownership and workforce changed post-tsunami?
   - Were there problems with staffing resorts/tourism support facilities post-tsunami?
   - Did staff leave the resorts and why?
   - How did businesses overcome this problem?
Appendix A

Main actors in shaping destination development: Private sector

Target stakeholders: National and local tourism representative bodies, key local stakeholders.

(a) Who are the main actors in shaping tourism development in each destination site? (associations, key business investors)
   ▪ Why?
(b) Are there any tourism representative bodies operating in Khao Lak/Patong/Phi Phi?
   ▪ Tourism associations, tourism support groups, unions?
   ▪ What are their roles?
   ▪ Who do they represent?
   ▪ Are all groups (including, the informal sector and Burmese minorities) represented?
   ▪ Across what scales do they operate (local/provincial/central)?
(c) Have these groups influenced development and job conditions in each destination pre-tsunami?
   ▪ If so, how have their actions impacted the community?
(d) Have these representative groups helped the tourism recovery (rebuilding of businesses and restoration of jobs) in Khao Lak/Patong/Phi Phi?
   ▪ If so, what types of actions have been taken?
   ▪ Did these groups act alone or did they work in collaboration with other partners (who)?
   ▪ What were the main aims of the actions/strategies?
   ▪ And who was involved in the implementation of these strategies?
   ▪ How were these measures carried out?
   ▪ At what scale(s) were they carried out / who were the main target groups/departments and why?
(e) Have tourism groups formed any other collaboration to help push their agenda post-tsunami?
(f) Have the destination communities changed their business/working habits in order prepare themselves for future shocks?
   → Development type and patterns, strengthening local networks or international/domestic marketing links, more savings, insurance?
(g) Have they used local networks to rebuild their livelihoods?
   ▪ If so, how have these networks helped?
(h) Are there any local elite/influence groups in Khao Lak/Patong/Phi Phi?
   ▪ If so, who are they and how did they gain power in the community?
   ▪ How to they influence tourism development and operations in each destination?

Development process of tourism destinations:

Target stakeholders: Tourism community stakeholders, local tourism representative bodies, and some for local TAOs.

Livelihood profiles and diversification

(a) What type of business do you have (owners) or work in (workers)?
   ▪ For owners: Do you have another business or is this the only one? If so, what other businesses do you have? How do you divide your time between each of your businesses (high/low season, day/night)? Which business provides you with
your main income source? If not, why have you chosen to focus on tourism for your income?
  ▪ For workers: Do you have another job in addition to this job? If so, what is it and how is your time divided between these jobs (high/low season, day/night)? If not, does your tourism job provide you with enough income for the whole year?

(b) Why do you work/have you invested in tourism?
  ▪ Lucrative business venture, easy to start?

(c) Do the earnings from tourism stay in the destination community or do they benefit outside interests?

(d) Are there any negative impacts from tourism development in each destination area?
  ▪ If so, what are they? (environmental, social, natural resource access)

(e) Is livelihood diversification a viable option for destination community members?
  ▪ If so, what are the alternate options?
  ▪ If not, why not (limited personal skills, limited access to fertile land, financial limitations, time)?

Legal regulations:

(a) Is it easy to set up a tourism-related business?

(b) Do businesses have to register their business interest?
  ▪ If so, who must register?
  ▪ Are there any reasons for businesses not to register (taxes, size)?
  ▪ Is this enforced?
  ▪ If not, why?

(c) Have the regulations to set up a business changed post-tsunami, and if so how?

Economic resources:

(a) Where did you get the finances to begin your business pre-tsunami?
  ▪ Savings, family assistance, micro-credit, bank loans (commercial banks or other)?

(b) Did you have savings or assets to use, live off and rebuild with following the tsunami?

(c) Did you have insurance?
  ▪ If so, have the companies paid up following the tsunami?

(d) Have more businesses invested in insurance post-tsunami?
  ▪ If yes why do you think that is?
  ▪ If not why not?

(e) What were the main funding sources for rebuilding your business post-tsunami?
  ▪ Savings?
  ▪ Commercial bank loans?
  ▪ Did funds from second businesses help to fund the rebuilding of tourism businesses?
  ▪ Family and friends (social networks)?

(f) Are you saving more of your income now after the tsunami or have your savings levels remained the same?

(g) What other types of financial services are available to the tourism businesses and workers and what services do they provide?
  ▪ Have new micro-credit schemes been created post-tsunami to help the recovery?

(h) To help businesses recover after the tsunami, as part of the Andaman Recovery plan, the national government offered support in the form of tax relief measures, and the establishment of special funds for the restoration of tourism businesses: The SME Fund and the Tsunami Recovery Fund.
  ▪ Are you aware of this?
  ▪ If yes, what do you understand of the special funds?
  ▪ Did you benefit from either the SME Bank loans or the Tsunami Recovery Fund?
Appendix A

(i) Did you benefit from commercial bank soft loans (with low interest rates) after the tsunami?
(j) Are employees and employers entitled to social security payments if they lose their income?
   ▪ If so, what are the conditions of the payments?
   ▪ Who controls their distribution and how often are they distributed?

Physical/natural resources:
(a) Do you own the land and/or building where your business is located?
   ▪ If you own the land and/building, did you buy it of was it owned by the family?
   ▪ If you rent, do you have a contract and how long is the contract for?
(b) Are there any land ownership disputes over the coastal zone?
   ▪ If so, what actions have been taken (social, political, environmental) to alleviate these problems and at what level (national, regional, local)?
(c) Are any groups excluded from accessing land?
   ▪ If so, who are they and why?

Skills base:
(a) What skills and training/education opportunities are available for the locals to draw upon to set up tourism-related businesses?
   ▪ Is access to education and skills and resources equal among community members? If not, what determines/block access?
   ▪ Are there any training programs to enhance the skill base of tourism workers post-tsunami?
   ▪ (ILO) Phang Nga Tourism Business Association held training for retrenched workers to provide more skilled labour post-tsunami.
   ▪ (IBLF) Manpower retrained former KL tourism staff (bell boys, cleaners, gardeners) in landscaping golf courses, tailoring and massage.
   ▪ Who has access to these programs and have these programs create new localised opportunities for livelihood diversification?

Effect of tsunami on people's livelihoods:

| Target stakeholders: Local government representatives, local stakeholders, local tourism representative bodies, tourism stakeholders. |

(a) How much have the communities lost in terms of business revenue (numbers or %age)?
(b) How much damage in terms of money and/or infrastructure was done to your business/workplace?
   ▪ For employers: How long did it take for you to reopen your business? What were business levels like in 2005, 2006 and now in 2007?
   ▪ For employees: Were you working for your current employer at the time of the tsunami?
     – If you did, did you keep your job following the tsunami? If you did, did your receive your full salary during the rebuilding and 2005 low season? If you didn’t, what did you do for employment or income? Did you have any support from family, friends or other social networks? Were you covered by staff insurance at the time of the tsunami and did you receive your payments? If not, why not? When did you return to work? If you are a new employee, where were you working before the tsunami and why did you
change jobs?
- Who were the most vulnerable community members to losing everything and why?
- Employers, employees, casual workers, Burmese workers many of which were working in Khao Lak/Patong/Phi Phi illegally.

(c) How long did it take to restore basics infrastructure (roads, sanitation, water supplies, communication systems, housing, and energy supplies)?
- Were there any changes in quality and amount of infrastructure post-tsunami?
- Were the changes appropriate? Why or why not?

Other shocks
1. Have other events such as political unrest in southern provinces, military coup, travel trends, SARS, terrorist attacks in other countries or economic down-turns affected tourism flows to Khao Lak/Patong/Phi Phi?
   - If so, what were the effects in terms of tourist flows, loss of business revenue/loss of jobs?
2. Now after the tsunami, do you think that risks from events or natural hazards have increased or do you still feel the same about risk levels to your business?
   - If so, what precautions are you taking to safeguard your business/job?
     - Savings, insurance, diversifying your livelihood options?
   - What did you (business owners/workers) do to survive financially when numbers are down (social security, family support)?

Tourism governance structures: Policy, planning and implementation:

Policy and planning: National and regional level

| Target stakeholders: National tourism government departments, regional and local government authorities where applicable, national and local tourism representative bodies. |

(a) Are you aware of the Tourism Development Plan (TDP) 2007-2009?
- If so, can you tell me what the main development goals of the latest Tourism Development Plan 2007-2009 are?
- Are there any differences between pre and post-tsunami TDP?
- If so, what are the differences and why did it change (b/c of tsunami event or another reason)?

(b) Are Khao Lak/Patong/Phi Phi included in the Tourism Development Plan 2007-2009?

(c) Who is involved in the formulation of the TDP?
- What level (national, regional, and local) are these goals decided upon?
- Do any stakeholders dominate the plan formulation process?

(d) Were there any (other) planning and development strategies for Khao Lak/Patong/Phi Phi pre-tsunami?
- If so, what were the plans/strategies?

(e) Were local representatives involved in the planning and decision-making process pre-tsunami?
- If so, who participated and how did they participate?
- Do these chosen representatives represent the whole community or just a specific interest group—and who are they?
- If not, why not?

(f) Has local representative involvement in planning and decision-making changed post-tsunami?
Appendix A

- If so, how?
  
  (g) Has the formulation process changed pre-and post-tsunami?
  - If so, what are the differences?
  - If not, why not?
  
  (h) The former TAT Governor mentioned in an article published in „The Nation“ newspaper in 2005 that there have been problems with the decentralisation process: the skills/knowledge from the TAT was not transferred over to the Ministry, nor to the CEO Provincial Governors.
  - In your opinion, have there been any problems with the transfer of responsibility from the TAT to the Ministry?
  - If so, what is being done to help the situation?

Implementation and enforcement: National, regional and local level

| Target stakeholders: National tourism government departments, regional and local government authorities where applicable, national and local tourism representative bodies. |

(a) In reality, how does the TDP shape tourism development in Khao Lak/Patong/Phi Phi?
  - Is it effective and how is the success monitored?
  - If not, who/what are the main blockages to successful implementation (lack of coordination, lack of capacity, skills and budget)?
  - What measures are being taken to solve these problems and at what are the scale(s) of response?
(b) Who is responsible for implementing the development strategies pre-tsunami (for tourism) in Khao Lak/Patong/Phi Phi?
  - How are the policies and plans implemented?
  - And at what scale does this happen (national → regional → local)?
(c) Have implementation responsibilities changed post-tsunami?
  - Why or why not?
(d) Are there any problems with enforcing the plans?
  - If so, what are the blockages and at what scale to they occur?
  - What actions have been taken to solve these problems?
(e) What are the implications for stakeholders who ignore development regulations?
(f) Do lower levels of government (Provincial/District/Tambon) receive adequate support (skills/knowledge/supervision/monitoring power) from the central government in order to successfully implement and monitor plans?
  - Has support for local authorities increased/improved since the tsunami?
  - If so, why or why not?

Policy and planning: Post-tsunami

(a) Has the composition of business ownership and types of workers changed post-tsunami – can you show me on a map?
(b) Have development patterns changed post-tsunami?
  - If so, how and which strategies have influenced these changes? (Compliance with set-backs, structure changes in building)?
(c) Are you aware of the Andaman Recovery Plan (if not, explain it to them – many times they don’t know the name but know of the changes)?
(d) Has the Andaman Recovery Plan been fully implemented in Khao Lak/Patong/Phi Phi?
  - If so, which parts have been successful and why?
  - If not, what are the barriers to the implementation of this plan (other plans, lack of
political will, no leadership, recommendations do not match community goals or needs)?

- What steps have been taken to overcome these barriers?
- If there are other plans, what are these plans and how are they different from pre-tsunami plans?
  - for Phi Phi this will include DASTA Plans - ask the participants if they aware of this plan
- Is the implementation of these new plans successful?
- If not, what are the barriers to the implementation of this plan (lack of political will, no leadership, recommendations do not match community goals or needs)?

(e) What are the implications on the rights of the hoteliers etc who already have dwellings in the set-back zones?

(f) Are there any other measures (environmental plans, coastal buffer zones, tourism development strategies) being undertaken to build resilience in Khao Lak/Patong/Phi Phi, both in terms of strengthening the natural and built environment?

**Patong specific: For TAT and government officials**

(a) The government has announced that Patong and other areas are to be rebuilt in line with strict principles of sustainable development and will be used as a model for future development in Thai coastal tourism. TAT has been entrusted with overseeing the development of the Patong Seaboard Redevelopment Master Plan which is designed to bring “system and order” to the Patong beachfront. The model city planned for Patong will have a bicycle lane, good public transportation, sufficient parking areas and all other necessary tourist amenities. Everything would be properly zoned.

- Why was Patong beach chosen for the first site? Was it heavily destroyed by the tsunami? Or did the tsunami provide an opportunity for redeveloping a badly developed/unsustainable/environmentally degraded tourism attraction?
- Has this master plan for Patong Beach been started?
- Who will be responsible for choosing future sites earmarked for redevelopment under the plan? And who will be responsible for implementing and enforcing the plan?
- How does the Patong Master Plan fit in with the wider Andaman Recovery Plan?

**Development and marketing of Khao Lak/Patong/Phi Phi post-tsunami**

**Target stakeholders:** TAT, local tourism representative groups, and local tourism community stakeholders, where applicable.

(a) How many of the resorts have been rebuilt in each destination, %ages and numbers of businesses?
(b) Have tourism flows been affected by the terrorist attacks in southern Thailand or the military coup? If so how
(c) What collaborations have the Thai government made to strengthen tourism development in the region pre-tsunami?
(d) What links have the TAT made with other tourism bodies to strengthen the marketing campaign to get people back to this area?
  - And what has been the outcome of this marketing campaign for each destination Khao Lak/Patong/Phi Phi?
(e) Has the TAT linked up with PATA to entice people back to the region?
(f) What measures were taken by industry representative groups to get people back (promotions-through what means and conducted at what level, national government
Appendix A

... campaigns or sourcing from regional markets instead of international)?
  - Who has the power/the role and reach to get people back?

Recovery plans and initiatives:

**Target stakeholders:** NGOs, Private Sector Groups.

(a) What are the main aims and objectives of the recovery strategy/program?
(b) Was the community given an opportunity to help design the program?
(c) Who are the main partners?
(d) How were these partners chosen?
(e) What is/was the time frame for the project and why?
  - Monetary constraints, interest, new disaster (short-term vs long term goals)?
(f) Is project designed for disaster relief/immediate coping strategies/long-term resilience building strategies?
(g) Who is funding the project?
(h) Which group/area does it target?
(i) What is the organisation’s history with their chosen area?
(j) Why did they choose this area or community (agenda behind initiative)?
(k) How has the destinations characteristics changed pre → post-tsunami?
(l) How were the needs of the target community/area assessed?
(m) How does this project aid capacity building in the community/area?
(n) At what scale(s) is the project implemented and what is the process of implementation?
  - Is the community involved with the implementation of the program?
  - If so, how do they participate?
(o) How is the success of the project monitored and who is responsible for this?
(p) Are there any blockages to implementation procedures?
  - If so, what are these and at what scales do they occur?
  - What measures have been undertaken to overcome these blockages and at what scale?
  - If none have been taken, why not?
(q) Is this project interlinked with other projects?
  - Sub Regional Development Plan for Andaman Region, Andaman Recovery Plan?
  - If so, how is this interlinkage managed?
  - How do organisations relate/communicate with each other/avoid duplication?
(r) Can the tourism communities rely on ongoing assistance once the project finishes?
  - What provisions have been made for long-term capacity building and support?
  - Who will take over the responsibility of the programs implementation on completion?
  - Who are the chosen parties and why were they chosen?
  - Have/will these chosen parties be trained?
  - How will the success of the program be monitored and by who?
  - If no provisions have been made, what will the ramifications be for the community?
Table A 4: Open-ended interview participants in Khao Lak, Patong, and Phi Phi Don

<table>
<thead>
<tr>
<th>Interview</th>
<th>Date of interview</th>
<th>Institution/Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BANGKOK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>10.01.07 (E &amp; S)</td>
<td>Chumchon Thai Foundation (CTF)</td>
</tr>
<tr>
<td>2</td>
<td>10.01.07 (E &amp; S)</td>
<td>Thai Fund Foundation (TFF)</td>
</tr>
<tr>
<td>3</td>
<td>11.01.07 (E, S, K)</td>
<td>RECOFTC Capacity Building Coordinator Kasesart University</td>
</tr>
<tr>
<td>4</td>
<td>11.01.07 (E, S, K)</td>
<td>RECOFTC Thailand Collaborative Country Support Program Director Kasesart University</td>
</tr>
<tr>
<td>5</td>
<td>11.01.07 (E &amp; K)</td>
<td>ACTPPR Research Centre</td>
</tr>
<tr>
<td>6</td>
<td>12.01.07 (E, S, K)</td>
<td>Senior Researcher Thailand Institute of Scientific &amp; Technological Research (TISTR)</td>
</tr>
<tr>
<td>7</td>
<td>15.01.07 (E, S, K)</td>
<td>Thai Professor Institute of Environmental Research Chulalongkorn University</td>
</tr>
<tr>
<td>8</td>
<td>15.01.07 (E, S, K)</td>
<td>IUCN Asia Regional Office, Bangkok Projects Coordinator Thailand Programme IUCNThailand Programme Manager</td>
</tr>
<tr>
<td>9</td>
<td>15.01.07 (E)</td>
<td>WWF Thailand</td>
</tr>
<tr>
<td>10</td>
<td>16.01.07 (E, S, K)</td>
<td>International Labour Organisation (ILO) Senior Specialist Employers Activities for East Asia ILO Tsunami Response Coordinator</td>
</tr>
<tr>
<td>11</td>
<td>17.01.07 (E, S, K)</td>
<td>ADPC</td>
</tr>
<tr>
<td>12</td>
<td>18.01.07 (E, S, K)</td>
<td>Thailand Environmental Institute (TEI)</td>
</tr>
<tr>
<td>13</td>
<td>18.01.07 (K)</td>
<td>National Economic and Social Development Broad (NESDB) Plan and Policy Analyst 7</td>
</tr>
<tr>
<td>14</td>
<td>18.01.07 (S)</td>
<td>The Office of Natural Resource and Environmental Plan (ONEP) Plan and Policy Analyst</td>
</tr>
<tr>
<td>15</td>
<td>19.01.07 (E &amp; S)</td>
<td>UNESCO Project Assistant Education for Sustainable Development Project Officer Office of the Regional Advisor for Culture in Asia and the Pacific</td>
</tr>
<tr>
<td><strong>KHAO LAK, PHANG NGA PROVINCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>20.01.07 (E)</td>
<td>Project Researcher Department of Geography Faculty of Arts and Social Sciences National University of Singapore</td>
</tr>
<tr>
<td>17</td>
<td>21.01.07 (E)</td>
<td>Foreign Local Tour Operator Local Guide Nang Thong (builds upon pilot study interview 12.07.05)</td>
</tr>
<tr>
<td>18</td>
<td>22.01.07</td>
<td>General Manager &amp; Owner</td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Name</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>19</td>
<td>22.01.07</td>
<td>Thai restaurant Owner</td>
</tr>
<tr>
<td>20</td>
<td>22.01.07</td>
<td>Front Desk Manager</td>
</tr>
<tr>
<td>21</td>
<td>23.01.07</td>
<td>Thai Small Guesthouse Owner</td>
</tr>
<tr>
<td>22</td>
<td>23.01.07</td>
<td>Project Coordinator</td>
</tr>
<tr>
<td>23</td>
<td>23.01.07</td>
<td>Director/General Manager</td>
</tr>
<tr>
<td>24</td>
<td>23.01.07</td>
<td>Project Coordinator</td>
</tr>
<tr>
<td>25</td>
<td>24.01.07</td>
<td>Managing Director &amp; Owner</td>
</tr>
<tr>
<td>26</td>
<td>24.01.07</td>
<td>Thai Café Owner</td>
</tr>
<tr>
<td>27</td>
<td>24.01.07</td>
<td>Manager – Phang Nga Site</td>
</tr>
<tr>
<td>28</td>
<td>21.01.07 &amp; 25.01.07</td>
<td>Foreign Bungalow Owner</td>
</tr>
<tr>
<td>29</td>
<td>25.01.07(K)</td>
<td>Thai Restaurant Owner</td>
</tr>
<tr>
<td>30</td>
<td>25.01.07</td>
<td>Programme Coordinator</td>
</tr>
<tr>
<td>31</td>
<td>25.01.07</td>
<td>Thai Noodle Restaurant Owner</td>
</tr>
<tr>
<td>32</td>
<td>25.01.07</td>
<td>Thai ex-owner of restaurant</td>
</tr>
<tr>
<td>33</td>
<td>25.01.07</td>
<td>Thai Medium Resort Co-owner</td>
</tr>
<tr>
<td>34</td>
<td>26.01.07</td>
<td>TAO Representative</td>
</tr>
<tr>
<td>35</td>
<td>26.01.07</td>
<td>Foreign Bungalow &amp; Café Owner</td>
</tr>
<tr>
<td>36</td>
<td>26.01.07</td>
<td>Thai Medium Bungalows Owner</td>
</tr>
<tr>
<td>37</td>
<td>26.01.07</td>
<td>Thai Tour Agency</td>
</tr>
<tr>
<td></td>
<td>Date</td>
<td>Name and Position</td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>38</td>
<td>26.02.07</td>
<td>Khao Lak National Park Representative</td>
</tr>
<tr>
<td>39</td>
<td>26.01.07</td>
<td>Thai Travel Agent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nang Thong</td>
</tr>
<tr>
<td>40</td>
<td>26.01.07</td>
<td>Three Massage Workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nang Thong Beach</td>
</tr>
<tr>
<td>41</td>
<td>26.01.07</td>
<td>Thai Travel Agent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nang Thong Beach</td>
</tr>
<tr>
<td>42</td>
<td>27.01.07</td>
<td>Thai Owned Bungalow &amp; Internet Service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>43</td>
<td>27.01.07</td>
<td>Thai Tourist Boat Operators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>44</td>
<td>28.01.07</td>
<td>Laundry Service Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>45</td>
<td>28.01.07</td>
<td>Grocery Store Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>46</td>
<td>28.01.07</td>
<td>Thai Restaurant Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>47</td>
<td>28.01.07</td>
<td>Thai Tour Operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nang Thong</td>
</tr>
<tr>
<td>48</td>
<td>28.01.07</td>
<td>Program and Project Coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Buddhist Fellowship</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Singapore</td>
</tr>
<tr>
<td>49</td>
<td>29.01.07</td>
<td>Phang Nga Tourism Association Representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&amp; 20.04.08 (S)</td>
</tr>
<tr>
<td>50</td>
<td>29.01.07</td>
<td>Foreign/Thai Small Guesthouse Owners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>51</td>
<td>29.01.07</td>
<td>Tourist Information and Tour Booking Service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang Beach</td>
</tr>
<tr>
<td>52</td>
<td>29.01.07</td>
<td>Photo Shop Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>53</td>
<td>29.01.07</td>
<td>TAO Representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Muang TAO</td>
</tr>
<tr>
<td>54</td>
<td>29.01.07</td>
<td>TAO Representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TAO and Nam Khem Community Leader</td>
</tr>
<tr>
<td>55</td>
<td>30.01.07</td>
<td>Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large Thai Resort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nang Thong</td>
</tr>
<tr>
<td>56</td>
<td>30.01.07</td>
<td>Foreign Small Resort Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>57</td>
<td>30.01.07</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Andaman Tsunami Relief</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training Resource &amp; Education Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kuraburi Phang Nga</td>
</tr>
<tr>
<td>58</td>
<td>30.01.07</td>
<td>Head of Mangrove Station 17, Kuraburi (DMCR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of Mangrove Station 19, Thai Muang (DMCR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lam Ken sub-district, Tai Muang district,</td>
</tr>
<tr>
<td>59</td>
<td>31.01.07</td>
<td>Foreign/Thai Small Resort Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bang Niang</td>
</tr>
<tr>
<td>60</td>
<td>31.01.07</td>
<td>Phang Nga Business Centre Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SME Bank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muang district, Phang Nga</td>
</tr>
<tr>
<td>61</td>
<td>31.01.07</td>
<td>Head of Strategic Planning Division</td>
</tr>
</tbody>
</table>
Table of Interviews:

<table>
<thead>
<tr>
<th>Date</th>
<th>Position/Role</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.01.07</td>
<td>Plan and Budget Division Representative (K)</td>
<td>Phang Nga Provincial Office</td>
</tr>
<tr>
<td>31.01.07</td>
<td>Head of Disaster Relief Division (K)</td>
<td>Department of Disaster Prevention and Mitigation Phang Nga Province</td>
</tr>
<tr>
<td>01.02.07</td>
<td>Managing Director (E)</td>
<td>Ecotourism Training Centre Bang Niang</td>
</tr>
<tr>
<td>01.02.07</td>
<td>Foreign Restaurant Owner (E)</td>
<td>Bang Niang</td>
</tr>
<tr>
<td>01.02.07</td>
<td>Tsunami Craft Centre Manager (E)</td>
<td>Bang Niang</td>
</tr>
<tr>
<td>01.02.07</td>
<td>Thai Co-owner of Small Resort (K)</td>
<td>Bang Niang Beach</td>
</tr>
<tr>
<td>01.02.07</td>
<td>Director (E&amp;K)</td>
<td>Environment &amp; Sustainable Development Division Baan Khao Lak, Lam Kaem, Thaimuang</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Thai Restaurant &amp; Small Bungalow Owner (E)</td>
<td>Nang Thong</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Manager (E)</td>
<td>Diving Operator Nang Thong Village</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Tourist Representative (E)</td>
<td>Thai Travel Agency Nang Thong Village</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Souvenir Shop Owner (K)</td>
<td>Nang Thong</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Souvenir Shop Owner (K)</td>
<td>Nang Thong</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Thai Massage Parlour Owner (K)</td>
<td>Bang Niang</td>
</tr>
<tr>
<td>02.02.07</td>
<td>Tour information-taxi service-laundry (K)</td>
<td>Nang Thong Beach</td>
</tr>
<tr>
<td>04.02.07</td>
<td>Thai Restaurant &amp; Small Guesthouse Owner (E)</td>
<td>Nang Thong (builds upon pilot study interview 13.07.05)</td>
</tr>
<tr>
<td>04.02.07</td>
<td>Thai Medium Resort Owner (E&amp;K)</td>
<td>Nang Thong Beach</td>
</tr>
<tr>
<td>05.02.07</td>
<td>Executive Assistant Manager (E)</td>
<td>Thai Medium Resort Khao Lak Beach</td>
</tr>
<tr>
<td>05.02.07</td>
<td>Tailor (E)</td>
<td>Nang Thong</td>
</tr>
<tr>
<td>06.02.07</td>
<td>General Manager (E)</td>
<td>Thai Medium Resort Nang Thong Beach</td>
</tr>
<tr>
<td>06.02.07</td>
<td>Tailor (E)</td>
<td>Nang Thong Village</td>
</tr>
<tr>
<td>06.02.07</td>
<td>Tailor (E)</td>
<td>Nang Thong</td>
</tr>
<tr>
<td>06.02.07</td>
<td>Foreign Travel Agent (E)</td>
<td>Bang Niang (builds upon pilot study interview 10.07.05)</td>
</tr>
<tr>
<td>06.02.07</td>
<td>Urban Planning Department (K)</td>
<td>Phang Nga Province</td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>85</td>
<td>07.02.07</td>
<td>Tsunami Volunteer Centre Representative</td>
</tr>
<tr>
<td>86</td>
<td>07.02.07</td>
<td>Foreign Diving Operator Manager</td>
</tr>
<tr>
<td>87</td>
<td>07.02.07</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>07.02.07</td>
<td>Representative for Department of Skill Development</td>
</tr>
<tr>
<td>89</td>
<td>07.02.07</td>
<td>Thai Restaurant Owner</td>
</tr>
<tr>
<td>90</td>
<td>07.02.07</td>
<td>Thai Massage Parlour Owner</td>
</tr>
<tr>
<td>91</td>
<td>08.02.07</td>
<td>Foreign Café Owner</td>
</tr>
<tr>
<td>92</td>
<td>08.02.07</td>
<td>Assistant to Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>08.02.07</td>
<td>Step Ahead Representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>08.02.07</td>
<td>Thai Tour Agency</td>
</tr>
<tr>
<td>95</td>
<td>08.02.07</td>
<td>Thai Souvenirs and Décor Shop Owner</td>
</tr>
<tr>
<td>96</td>
<td>08.02.07</td>
<td>Village Headman &amp; Thai Medium Resort Owner</td>
</tr>
<tr>
<td>97</td>
<td>09.02.07</td>
<td>English Trainer</td>
</tr>
<tr>
<td>98</td>
<td>09.02.07</td>
<td>Assist. Director. Of Office of Tourism and Sport Centre</td>
</tr>
<tr>
<td>99</td>
<td>09.02.07</td>
<td>Laundry Owner</td>
</tr>
<tr>
<td>100</td>
<td>09.02.07</td>
<td>Small Thai Resort Owner</td>
</tr>
<tr>
<td>101</td>
<td>10.02.07</td>
<td>Assistant Headman &amp; Taxi Driver</td>
</tr>
</tbody>
</table>

**PATONG BEACH, PHUKET PROVINCE**

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>12.02.07</td>
<td>Assistant Director</td>
<td>Tat Southern Office – Region 4</td>
</tr>
<tr>
<td>103</td>
<td>12.02.07</td>
<td>Labour Academics Staff</td>
<td>Department Of Labour – Phuket Office</td>
</tr>
<tr>
<td>104</td>
<td>12.02.07</td>
<td>Head Of Phuket Strategic Plan, Phuket City Hall</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>12.02.07</td>
<td>City Planner 7</td>
<td>Department of Public Works And Town And Country Planning – Phuket Office</td>
</tr>
<tr>
<td>106</td>
<td>13.02.07</td>
<td>Executive Assistant General Manager</td>
<td>Large Thai Hotel &amp; Vice President Phuket Tourist Association (PTA)</td>
</tr>
<tr>
<td>107</td>
<td>13.02.07</td>
<td>Provincial Community Development Officer</td>
<td>Phuket Community Development Office</td>
</tr>
<tr>
<td>108</td>
<td>13.02.07</td>
<td>Social Development 8</td>
<td>Phuket Social Development Office</td>
</tr>
<tr>
<td>109</td>
<td>14.02.07</td>
<td>Managing Director</td>
<td>Travel Agency</td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Position/Role</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>14.02.07</td>
<td>Plan and Policy Analyst, Phuket Provincial Administrative Organisation</td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>14.02.07</td>
<td>Chief of Phuket Provincial Disaster Prevention and Mitigation Office, Phuket, Provincial Disaster Prevention And Mitigation Office</td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>15.02.07</td>
<td>General Manager, Medium Foreign Report</td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>15.02.07</td>
<td>Manager, Medium Foreign Resort</td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>15.02.07</td>
<td>Director, Phuket Tourism Sport And Recreation Centre</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>16.02.07</td>
<td>Tailor Employees, Tailor Shop</td>
<td></td>
</tr>
<tr>
<td>116</td>
<td>16.02.07</td>
<td>Travel Agent, Rooms, Travel Agent and Car Rental</td>
<td></td>
</tr>
<tr>
<td>117</td>
<td>16.02.07</td>
<td>Front Desk Manager, Medium Thai Resort</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>16.02.07</td>
<td>Labour Analyst Staff, Labour Skill Development Centre</td>
<td></td>
</tr>
<tr>
<td>119</td>
<td>16.02.07</td>
<td>Head of Environmental Planning, Regional Environmental Office 15</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>16.02.07</td>
<td>Head of Marine Biology, Ecology, and Coastal Resource Division, Phuket Marine Biological Centre (DMCR)</td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>17.02.07</td>
<td>Tailor Shop Owner, Tailor Shop</td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>19.02.07</td>
<td>Assistant F/O Manager &amp; General Manager, Medium Thai Hotel</td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>19.02.07</td>
<td>General Manager, Tsunami Recovery Centre Representative, Large Thai Hotel</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>19.02.07</td>
<td>Assistant Association Manager, Tourism Association</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>19.02.07</td>
<td>Phuket Chamber of Commerce Board Representative, Phuket Chamber of Commerce</td>
<td></td>
</tr>
<tr>
<td>126</td>
<td>20.02.07</td>
<td>Manager, Foreign-Owned Dive Shop</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>20.02.07</td>
<td>General Manager, Foreign-Owned Dive Shop</td>
<td></td>
</tr>
<tr>
<td>128</td>
<td>20.02.07</td>
<td>Account Manager, Dive Shop</td>
<td></td>
</tr>
<tr>
<td>129</td>
<td>20.02.07</td>
<td>Chief of Mangrove Resources Development Station 23, Mangrove Resources Development Station 23</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>20.02.07</td>
<td>Head of Community Forest Management Division, Provincial Natural Resource And Environmental Office Phuket</td>
<td></td>
</tr>
<tr>
<td>131</td>
<td>21.02.07</td>
<td>Tailor, Tailors Shop</td>
<td></td>
</tr>
<tr>
<td>132</td>
<td>21.02.07</td>
<td>Director, Phuket Professional Guide Association</td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>21.02.07</td>
<td>Travel Agent, Travel Agency</td>
<td></td>
</tr>
<tr>
<td>134</td>
<td>21.02.07</td>
<td>Owner, Souvenir Shop</td>
<td></td>
</tr>
<tr>
<td>135</td>
<td>21.02.07</td>
<td>Senior Deputy Head of Kratu District Office</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>21.02.07</td>
<td>Tourism Development Staff, Patong Municipality Office</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>22.02.07</td>
<td>General Manager/Owner, Medium Thai Resort</td>
<td></td>
</tr>
<tr>
<td>138</td>
<td>22.02.07</td>
<td>Manager, Foreign Medium Hotel</td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>22.02.07</td>
<td>Manager, Small Thai Hotel</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Time</td>
<td>Occupation</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>140</td>
<td>22.02.07</td>
<td>S</td>
<td>Head of Local Occupation Group Beach Umbrella Group</td>
</tr>
<tr>
<td>141</td>
<td>23.02.07</td>
<td>E</td>
<td>Bar Owner And Manager Foreign-Owned Bar</td>
</tr>
<tr>
<td>142</td>
<td>23.02.07</td>
<td>E</td>
<td>Owner Thai Spa</td>
</tr>
<tr>
<td>143</td>
<td>23.02.07</td>
<td>K</td>
<td>Owner Thai Restaurant</td>
</tr>
<tr>
<td>144</td>
<td>23.02.07</td>
<td>(S)</td>
<td>Administration Manager Large Thai Resort</td>
</tr>
<tr>
<td>145</td>
<td>23.02.07</td>
<td>(S)</td>
<td>Head Of Local Occupation Group 2 Ex-Head Of Local Occupation Group 3 Beach Masseur Group</td>
</tr>
<tr>
<td>146</td>
<td>24.02.07</td>
<td>E</td>
<td>Managing Director Large Thai Resort &amp; PTA Member</td>
</tr>
<tr>
<td>147</td>
<td>24.02.07</td>
<td>K</td>
<td>Taxi Driver Phuket Taxi Service Co-operative</td>
</tr>
<tr>
<td>148</td>
<td>24.02.07</td>
<td>(S)</td>
<td>Head of Local Occupation Group 4 Patong Beach Long-Tailed Boat Group</td>
</tr>
<tr>
<td>149</td>
<td>24.02.07</td>
<td>(S)</td>
<td>Tourist Fishing Boat Owner Fishing Shop</td>
</tr>
<tr>
<td>150</td>
<td>25.02.07</td>
<td>(K)</td>
<td>Owner Internet Shop</td>
</tr>
<tr>
<td>151</td>
<td>25.02.07</td>
<td>(S)</td>
<td>Member of Local Occupation Group 5 Speed Boat/Jet Boat Owner</td>
</tr>
<tr>
<td>152</td>
<td>25.02.07</td>
<td>(S)</td>
<td>Head of Local Occupation Group Beach Vendor Group</td>
</tr>
<tr>
<td>153</td>
<td>26.02.07</td>
<td>(E)</td>
<td>Manager Small Thai Hotel, Travel Agent, &amp; Medical Clinic</td>
</tr>
<tr>
<td>154</td>
<td>26.02.07</td>
<td>(E)</td>
<td>Owner Foreign-Owned Bar Owner</td>
</tr>
<tr>
<td>155</td>
<td>26.02.07</td>
<td>(S)</td>
<td>Association Head of Local Occupation Group Shop Massage Group</td>
</tr>
<tr>
<td>156</td>
<td>27.02.07</td>
<td>(K)</td>
<td>Manager SME Bank- Phuket Branch</td>
</tr>
<tr>
<td>157</td>
<td>05.03.07</td>
<td>(E)</td>
<td>Owner Foreign-Owned Small Guesthouse &amp; Restaurant</td>
</tr>
<tr>
<td>158</td>
<td>05.03.07</td>
<td>(E)</td>
<td>Owner Foreign-Owned Restaurant &amp; Bar</td>
</tr>
<tr>
<td>159</td>
<td>06.03.07</td>
<td>(E)</td>
<td>Shop Manager Souvenir Shop</td>
</tr>
<tr>
<td>160</td>
<td>06.03.07</td>
<td>(E)</td>
<td>Travel Agent Worker Travel Agency</td>
</tr>
<tr>
<td>161</td>
<td>06.03.07</td>
<td>(E)</td>
<td>Manager Foreign-Owned Restaurant (Pub)</td>
</tr>
<tr>
<td>162</td>
<td>06.03.07</td>
<td>(K)</td>
<td>Car And Motorbike Rental Owner Car/Motorbike Rental</td>
</tr>
<tr>
<td>163</td>
<td>06.03.07</td>
<td>(K)</td>
<td>Restaurant Employee Restaurant</td>
</tr>
<tr>
<td>164</td>
<td>06.03.07</td>
<td>(K)</td>
<td>Souvenir Shop Owner Souvenir Shop</td>
</tr>
<tr>
<td>165</td>
<td>06.03.07</td>
<td>(K)</td>
<td>Bar Employee Patong Bar</td>
</tr>
<tr>
<td>166</td>
<td>06.03.07</td>
<td>(S)</td>
<td>Laundry Owner Laundry Shop</td>
</tr>
<tr>
<td>167</td>
<td>06.03.07</td>
<td>(S)</td>
<td>Tailor Shop Owner Tailor Shop</td>
</tr>
<tr>
<td>168</td>
<td>06.03.07</td>
<td>(S)</td>
<td>Accountant and General Hotel Management Large Thai Hotel</td>
</tr>
<tr>
<td>169</td>
<td>07.03.07</td>
<td>(E&amp;S)</td>
<td>Manager Small Thai Hotel</td>
</tr>
<tr>
<td>170</td>
<td>07.03.07</td>
<td></td>
<td>Travel Agent</td>
</tr>
</tbody>
</table>

375
<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Title</th>
<th>Organization/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>171</td>
<td>07.03.07</td>
<td>Travel Agent</td>
<td>Travel Agency</td>
</tr>
<tr>
<td>172</td>
<td>07.03.07</td>
<td>Head of Local Occupation Group 6</td>
<td>Patong Motorbike Service Cooperative</td>
</tr>
<tr>
<td>173</td>
<td>07.03.07</td>
<td>Masseur</td>
<td>Thai Massage Shop</td>
</tr>
<tr>
<td>174</td>
<td>08.03.07</td>
<td>Guesthouse Owner</td>
<td>Small Thai Hotel</td>
</tr>
<tr>
<td>175</td>
<td>08.03.07</td>
<td>Guesthouse Employee</td>
<td>Thai Guesthouse</td>
</tr>
<tr>
<td>176</td>
<td>08.03.07</td>
<td>General Manager</td>
<td>Medium Thai Hotel</td>
</tr>
<tr>
<td>177</td>
<td>08.03.07</td>
<td>Member of Local Occupation Group 1</td>
<td>Long-Tailed Boat Group</td>
</tr>
<tr>
<td>178</td>
<td>08.03.07</td>
<td>Member of Local Occupation Group 2</td>
<td>Long-Tailed Boat Group</td>
</tr>
<tr>
<td>179</td>
<td>09.03.07</td>
<td>Tour Guide</td>
<td>Travel Agent</td>
</tr>
<tr>
<td>180</td>
<td>09.03.07</td>
<td>Tour Guide</td>
<td>Travel Agent</td>
</tr>
<tr>
<td>181</td>
<td>09.03.07</td>
<td>Owner</td>
<td>Internet Shop</td>
</tr>
<tr>
<td>182</td>
<td>09.03.07</td>
<td>Patong Tourist Police Officer</td>
<td></td>
</tr>
<tr>
<td>183</td>
<td>10.03.07</td>
<td>Owner</td>
<td>Small Thai Hotel</td>
</tr>
<tr>
<td>184</td>
<td>11.03.07</td>
<td>Guesthouse and Restaurant Co-Owner</td>
<td>Small Foreign Hotel</td>
</tr>
<tr>
<td>185</td>
<td>11.03.07</td>
<td>Deputy Manager</td>
<td>Thai-owned Bar</td>
</tr>
<tr>
<td>186</td>
<td>12.03.07</td>
<td>Member Of Local Occupation 3</td>
<td>Beach Vender Group</td>
</tr>
<tr>
<td>187</td>
<td>12.03.07</td>
<td>General Manager</td>
<td>Small Thai Hotel Business</td>
</tr>
<tr>
<td>188</td>
<td>13.03.07</td>
<td>Head of Tourism Rescue Centre</td>
<td>Tourism Rescue Centre (Navy)</td>
</tr>
<tr>
<td>189</td>
<td>13.03.07</td>
<td>Taxi Driver</td>
<td>Small Travel Company</td>
</tr>
<tr>
<td>190</td>
<td>15.03.07</td>
<td>Travel Agent</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>191</td>
<td>15.03.07</td>
<td>Travel Agent</td>
<td>Phi Phi</td>
</tr>
<tr>
<td>192</td>
<td>15.03.07</td>
<td>Head of Krabi Strategy Planning</td>
<td>Krabi Town</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public Health Officer and Deputy Provincial Strategy Planning</td>
<td>Krabi Town</td>
</tr>
<tr>
<td>193</td>
<td>16.03.07</td>
<td>Swedish Microcredit Foundation</td>
<td>Phi Phi Don Branch</td>
</tr>
<tr>
<td>194</td>
<td>16.03.07</td>
<td>General Manager</td>
<td>Dive Operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>195</td>
<td>16.03.07</td>
<td>Grocer</td>
<td>Cooperative grocery of community</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>196</td>
<td>16.03.07</td>
<td>Souvenir shop owner</td>
<td>Tonsai Beach</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>197</td>
<td>16.03.07</td>
<td>Provincial Centre of Tourism, Sport and Recreation</td>
<td>Krabi Town</td>
</tr>
<tr>
<td>198</td>
<td>17.03.07</td>
<td>Book Centre and Souvenir Shop</td>
<td>Tonsai Beach</td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Position</td>
<td>Organization</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>199</td>
<td>17.03.07</td>
<td>Thai Medium Guesthouse</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>200</td>
<td>18.03.07</td>
<td>Souvenir Shop Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>201</td>
<td>18.03.07</td>
<td>Souvenir Shop Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>202</td>
<td>18.03.07</td>
<td>Muang District Officer</td>
<td>Phi Phi Branch Office</td>
</tr>
<tr>
<td>203</td>
<td>19.03.07</td>
<td>General Manager</td>
<td>Large Hotel</td>
</tr>
<tr>
<td>204</td>
<td>19.03.07</td>
<td>Bar Manager</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>205</td>
<td>19.03.07</td>
<td>Restaurant Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>206</td>
<td>19.03.07</td>
<td>Village Headman and Small Thai Hotel Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>207</td>
<td>19.03.07</td>
<td>Tour Guide and Travel Agent</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>208</td>
<td>19.03.07</td>
<td>Civil Engineering</td>
<td>The Office of Disaster Prevention and Mitigation</td>
</tr>
<tr>
<td>209</td>
<td>19.03.07 &amp;</td>
<td>Civil Engineers (x2)</td>
<td>Department of Public Works, Town and Country Planning</td>
</tr>
<tr>
<td></td>
<td>05.11.09</td>
<td></td>
<td>Krabi Branch</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Krabi Town</td>
</tr>
<tr>
<td>210</td>
<td>20.03.07</td>
<td>Manager</td>
<td>Dive Operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>211</td>
<td>20.03.07</td>
<td>Manager</td>
<td>Thai Medium Hotel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi</td>
</tr>
<tr>
<td>212</td>
<td>20.03.07</td>
<td>Long-tail and Tourist Boat Operator</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>213</td>
<td>20.03.07</td>
<td>Labour Bureau Officer</td>
<td>Krabi Labour Bureau</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Krabi Town</td>
</tr>
<tr>
<td>214</td>
<td>20.03.07</td>
<td>Departmental Representative</td>
<td>Department of Natural Resources and Environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Krabi Branch</td>
</tr>
<tr>
<td>215</td>
<td>21.03.07</td>
<td>Foreign Bar Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>216</td>
<td>21.03.07</td>
<td>Foreign Restaurant Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>217</td>
<td>21.03.07</td>
<td>Thai Restaurant Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>218</td>
<td>21.03.07</td>
<td>Travel Agency Staff</td>
<td>Phi Phi</td>
</tr>
<tr>
<td>219</td>
<td>21.03.07</td>
<td>Hotel staff</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>220</td>
<td>21.03.07</td>
<td>Pharmacy Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>221</td>
<td>21.03.07</td>
<td>Chief Administrator of PAO</td>
<td>Provincial Administrative Organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Krabi Town</td>
</tr>
<tr>
<td>222</td>
<td>21.03.07</td>
<td>Head of Chief of Administrator Division, PAO</td>
<td>Provincial Administrative Organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Krabi Town</td>
</tr>
<tr>
<td>223</td>
<td>21.03.07</td>
<td>Ex-chairman of Krabi Professional Guide Association</td>
<td>Provincial Administrative Organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Krabi Town</td>
</tr>
<tr>
<td>224</td>
<td>21.03.07</td>
<td>Head of PAO Tourism and Sport Promotion</td>
<td>Provincial Administrative Organisation</td>
</tr>
</tbody>
</table>

377
<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Position</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>225</td>
<td>21.03.07</td>
<td>Head of Labour Training Division</td>
<td>Krabi Town</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td>Krabi Labour Skill and Development Centre</td>
<td></td>
</tr>
<tr>
<td>226</td>
<td>22.03.07</td>
<td>Manager</td>
<td>Krabi Town</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td>Diver Operator</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>227</td>
<td>22.03.07</td>
<td>Small business owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>228</td>
<td>22.03.07</td>
<td>Restaurant staff</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(K)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>229</td>
<td>22.03.07</td>
<td>Small Thai Resort Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(K)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>22.03.07</td>
<td>Bar Staff</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(K)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>231</td>
<td>22.03.07</td>
<td>Office Representative</td>
<td>Provincial Public Health Office, Krabi</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td>Krabi Town</td>
</tr>
<tr>
<td>232</td>
<td>22.03.07</td>
<td>President</td>
<td>Krabi Tourist Association (KTA)</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td>Managing Director</td>
<td>Travel Agency &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Headman</td>
<td>Headman</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ao Nang District (Kamnan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>233</td>
<td>23.03.07</td>
<td>General Manager</td>
<td>Small Thai Resort</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>234</td>
<td>23.03.07</td>
<td>Representative</td>
<td>Noparatara Beach – Phi Phi Islands National Park</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>235</td>
<td>23.03.07</td>
<td>Chief of Administrator</td>
<td>Ao Nang TAO</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td>TAO Legislator/Lawyer</td>
</tr>
<tr>
<td>236</td>
<td>24.03.07</td>
<td>Executive Director</td>
<td>Medium Thai Resort</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>237</td>
<td>24.03.07</td>
<td>Manager</td>
<td>Diver Operator</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>238</td>
<td>25.03.07</td>
<td>Dive Master</td>
<td>Diver Operator</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td>Phi Phi</td>
</tr>
<tr>
<td>239</td>
<td>25.03.07</td>
<td>Dive Shop Employee</td>
<td>Bungalow Owner</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td>Ao Nang TAO member</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>240</td>
<td>26.03.07</td>
<td>Foreign Small Guesthouse Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>241</td>
<td>26.03.07</td>
<td>Foreign Restaurant Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>242</td>
<td>27.03.07</td>
<td>Massage Shop Co-owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>243</td>
<td>27.03.07</td>
<td>Owners</td>
<td>Small Thai Guesthouse and Restaurant</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>244</td>
<td>27.03.07</td>
<td>Sales and Marketing Manager</td>
<td>Large Hotel</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secretary of Krabi Tourism Association</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Position</td>
<td>Organization</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>245</td>
<td>28.03.07</td>
<td>Manager</td>
<td>Travel Agency Phi Phi Don</td>
</tr>
<tr>
<td>246</td>
<td>29.03.07 –</td>
<td>UNEP-led Workshop on „Disaster Risk Reduction in Tourism“</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>247</td>
<td>30.03.07</td>
<td>Bar Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>248</td>
<td>30.03.07</td>
<td>Restaurant and Medium Hotel Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>249</td>
<td>30.03.07</td>
<td>Islamic Leader, Speed Boat Rental Business, Small Electricity Generator Business Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>250</td>
<td>30.03.07</td>
<td>Chairman</td>
<td>Phi Phi Tourism Club &amp; Medium Resort Owner</td>
</tr>
<tr>
<td>251</td>
<td>31.03.07</td>
<td>Waitress</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>252</td>
<td>31.03.07</td>
<td>Spa Manager</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>253</td>
<td>31.03.07 &amp;</td>
<td>Long-tailed Tourist Boat Operators</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>254</td>
<td>04.07</td>
<td>Massage Shop Owner</td>
<td>Phi Phi</td>
</tr>
<tr>
<td>255</td>
<td>04.07</td>
<td>Long-tailed Tourist Boat Operator</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>256</td>
<td>02.04.07</td>
<td>Bookshop Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>257</td>
<td>02.04.07</td>
<td>Dive Operator Staff</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>258</td>
<td>02.04.07</td>
<td>Small Restaurant Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>259</td>
<td>2.04.07</td>
<td>Massage Shop Co-owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>260</td>
<td>2.04.07</td>
<td>Laundry Shop Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>261</td>
<td>2.04.07</td>
<td>Beach Umbrella Worker</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>262</td>
<td>03.04.07</td>
<td>Bar Co-owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>263</td>
<td>03.04.07</td>
<td>Manager</td>
<td>Small Thai Bungalows Phi Phi Don</td>
</tr>
<tr>
<td>264</td>
<td>3.04.07</td>
<td>Accounting Staff</td>
<td>Large Thai Hotel Phi Phi Don</td>
</tr>
<tr>
<td>265</td>
<td>3.04.07</td>
<td>Electricity Generator Operator</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>266</td>
<td>04.04.07</td>
<td>Reservations and Front Desk Manager</td>
<td>Medium Thai Resort Phi Phi Don</td>
</tr>
<tr>
<td>267</td>
<td>04.04.07</td>
<td>Jewellery Shop Worker</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>268</td>
<td>04.04.07</td>
<td>Owner/Leader of SME Group</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>269</td>
<td>04.04.07</td>
<td>Medium Thai Hotel Manager</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>270</td>
<td>4.04.07</td>
<td>Local Laundry Shop Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>271</td>
<td>4.04.07</td>
<td>Beach Kayak Worker</td>
<td>Water Sport Group (Kayak, Wave Board, and Banana Boat) Phi Phi Don</td>
</tr>
<tr>
<td>272</td>
<td>4.04.07</td>
<td>Chairman, Speed Boat Cooperative</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>273</td>
<td>05.04.07</td>
<td>Foreign Restaurant Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Title</td>
<td>Location</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>274</td>
<td>05.04.07</td>
<td>Human Resources Manager</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(K)</td>
<td>Medium Thai Hotel</td>
<td></td>
</tr>
<tr>
<td>275</td>
<td>5.04.07</td>
<td>Souvenir Shop Owner</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>276</td>
<td>5.04.07</td>
<td>Beach/Island Vendor</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>277</td>
<td>6.04.07</td>
<td>Chairman, Koh Phi Phi Marine Resource Conservation Club</td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>278</td>
<td>07.04.07</td>
<td>Co-owners</td>
<td>Large Resort</td>
</tr>
<tr>
<td></td>
<td>(E)</td>
<td></td>
<td>Phi Phi Don</td>
</tr>
<tr>
<td>279</td>
<td>05.11.09</td>
<td>Deputy District Head of Muang Krabi</td>
<td>Muang Krabi</td>
</tr>
<tr>
<td></td>
<td>(S)</td>
<td></td>
<td>Krabi Town</td>
</tr>
</tbody>
</table>

**Research Team**
1. Emma Calgaro  Macquarie University/Stockholm Environment Institute
2. Sopon Naruchaikusol  Stockholm Environment Institute-Asia
3. Kannapa Pongponrat  Stockholm Environment Institute-Asia
Appendix B  Case history design and implementation

1. Overview and rationale of use
Case or oral histories were included in the research design because they effectively reveal how an event unfolded, why and what the experience of interest was like from a personal perspective (Dunn, 2005; George and Stratford, 2005). Evolving out of the foundational work obtained through the open-ended interview process, the case histories provided more in-depth detail about the participant’s personal histories, their choices and motivations for choosing tourism as a livelihood source and the progression of their business/working interests and opportunities over space and time. The case histories also provided information on the way in which destination community members responded to, coped with and adapted to disasters. Select oral histories conducted with founding members of each destination community also provided insights into how destinations as imagined spaces evolve over space and time and the multiple agendas that shaped each destination. But most importantly, these testimonials allowed participants to speak for themselves and create their own texts in their own words (Brockington and Sullivan, 2003; Dunn, 2005) whilst allowing the researcher to track and understand the evolution of social processes through time and space (George and Stratford, 2005). Together these collective and personal accounts of livelihood choices and destination evolution provided a tapestry of ideas, aspirations, goals, opportunities and limitations that form the contextual conditions from which vulnerability and resilience evolves.

2. Objectives
The main objectives of undertaking case histories in the assessment of destination vulnerability were to:

a. Establish the developmental processes of tourism in each destination pre-tsunami and document post-tsunami changes;
b. Ascertain institutional responses to the tsunami in each destination;
c. Identify the pre- and post-tsunami conditions that influence vulnerability levels in each destination; and
d. Investigate the interconnected nature of identified socio-political and environmental factors and the way they are constructed across a range of scales.
Appendix B

3. Sampling design and deployment

The 31 case histories were undertaken with key informants and random stakeholders who embraced the opportunity to talk in length about their personal experiences. An average of 10 were undertaken in each destination (in Phi Phi Don opportunity saw the completion of 11) to capture a range of personal stories from individuals that had lived through the disaster and seen their respective destinations evolve. A summary of all the case histories undertaken is presented in Table B 1. In keeping with the sampling process used for the open-ended interviews detailed in Appendix A, participants were chosen using:

a. Tourism stakeholder listings provided by NGOs that had undertaken tsunami-related work in the destination areas.

b. Snowballing techniques including personal referrals and introductions. These were very effective in securing new stakeholder interviews in each community and creating a rapport.

c. Random sampling based on tourism maps and street observations.

The case histories were undertaken between January and April 2007 by the same three member research team that undertook the open-ended interviews ie. myself and Kannapa Pongponrat and Sopon Naruchaikusol of SEI. Each case history was carried out in a location suggested by the interviewee and lasted between 60 and 120 minutes. Case histories were taped unless participants expressed discomfort with recordings to ensure that the rich detail provided was recorded. As with the open-ended interviews, the identities of the participants were kept confidential using pseudonyms.
<table>
<thead>
<tr>
<th>Date</th>
<th>Participant</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.01.07</td>
<td>General Manager &amp; Owner Thai Large Resort Nang Thong &amp; Former President of Phang Nga Hotels Association</td>
<td>Participant provided information on: the financing of the recovery, construction aspects, of the recovery effort, political problems with rebuilding in a sustainable manner (no will and corruption payments), limitations to collaborations with provincial and local government authorities &amp; marketing strategies and collaborations with TAT. Participant’s activity with the Phang Nga Tourism Association has diminished in the last 2 years because they have had too much to worry about with rebuilding. They also commented that the Phang Nga Tourism Association has not been so strong or active in petitioning for a strong recovery in the last year due to a lack of strong leadership. This just goes to show that organisations are only as strong or motivated as their leaders. Unfortunately the Association may have lost some power and effect through inactivity over the last 2 years.</td>
</tr>
<tr>
<td>23.01.07</td>
<td>Thai Small Guesthouse Owner Thai Food Restaurant and Guest House</td>
<td>Participant talked about her experiences with rebuilding her business. She did not register her business. Unclear why. She says it’s easy to start a business but she is currently struggling to keep her business open. Her English boyfriend send money back from England to help her survive but she actually lies about the amount she needs. She asks for more and uses this money to pay off credit card debt. She is afraid of him finding out how much she owes because she thinks that he will insist that she sell the business because it is costing them too much.</td>
</tr>
<tr>
<td>21.01.07 &amp; 25.01.07</td>
<td>Foreign Bungalow Owner Bang Niang Beach</td>
<td>Provided detailed information on the politics of the recovery along with changes in type of development that could impair repeat tourist flows, problems of enforcing regulations, and getting access to funds to rebuild for small resorts and businesses particularly in Bang Niang. Local elites get away with violating the new building regulations. Similarly, the power of the local elites is so ingrained in the system that the locals will not do anything against the wishes of the local elite. For this participant, the informal governance system is not fair, very corrupt and self-serving. Participant explained the predicament of each of the resorts and businesses in Bang Niang. Also discussed the current needs of the community &amp; the Thai habit of not following advice given by a foreigner due to them not wanting to lose face – a stumbling block for successful business practices as sometimes Thais misunderstand what the western market wants. It also shows mistrust within the community.</td>
</tr>
<tr>
<td>25.01.07</td>
<td>Thai ex-owner of restaurant Bang Niang</td>
<td>She used to have a bungalow in Bang Sak but then sold the bungalow to open a restaurant in Bang Niang instead. She had no insurance for this restaurant plus she got a loan from bank to open this. After tsunami, she received only THB20,000 from government and that’s all she got for assistance. She did not know how to get access or apply for assistance from different organisations. She has still been unable to reopen her restaurant. Her husband works as tour guide but the income steam is unreliable. People are starting to think she is mentally sick.</td>
</tr>
<tr>
<td>29.01.07</td>
<td>Tourist Information and Tour Booking Service Bang Niang Beach</td>
<td>Before the tsunami, she had her own business in Nang Thong but now she works for a resort. She gave information about: corruption and inequality of assistance in the area, difference between high and low seasons, rebuilding her business after the tsunami, and amazing support from repeat clients which are largely German.</td>
</tr>
<tr>
<td>30.01.07</td>
<td>Manager</td>
<td>This was a fantastic case history. It became very clear throughout the interview that this family has grown with Khao Lak (one of the original families) and they understand their market completely. They evolve with the market but know their...</td>
</tr>
<tr>
<td>Date</td>
<td>Role</td>
<td>Details</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>01.02.07</td>
<td>Managing Director</td>
<td>Large Thai Resort Nang Thong - They have built slowly so they do not have large loans. And even though they are a medium sized resort they do not rely on operator advertising for business. It's all based on repeat clients and word of mouth. They are self sufficient in monetary terms and market terms - very resilient to shocks. They are also actively looking at ways to diversify their markets while retaining their unique market positioning. They do not have formal tourism training but this family is smart and they think in the long-term. They are a shining example of how to run a tourism business. The participant also realizes that the tsunami created an opportunity for the TAT to learn more about tourism and become more actively involved in its development. She sees this as key for Khao Lak’s future development as a sustainable destination community.</td>
</tr>
<tr>
<td>06.02.07</td>
<td>Tailor</td>
<td>Ecotourism Training Centre Bang Niang - This centre focuses on training young people to become leaders in their own communities and in doing so is building capacity for the future. The training to become Diving Masters is the means through which the centre aims to achieve this. The participant set up the centre after noticing that very little funds or programs were directed at building capacity for young adults that were left with nothing following the tsunami in a community that relies heavily on tourism. Both aspects were being ignored. This centre benefits both the people and the sector. Participant also spoke in depth about where the idea originated from and his personal journey which resulted in this work in Khao Lak.</td>
</tr>
<tr>
<td>07.02.07</td>
<td>Diving Operator Manager</td>
<td>Tailor Nang Thong Village - Fantastick interview re Burmese workers rights. The participant is Burmese and runs a tailoring business in partnership with his friend. He came to Thailand in 2000 as an illegal immigrant and worked in Bangkok, Patong &amp; now Khao Lak. He has a legal workers permit now but he still has to pay the police to ensure that they leave his business (which is legal) alone. Also his workers permit is only for Phang Nga – he cannot legally work in any other province and transferring this visa to another province is very difficult. His brother and friend only have immigrant working passes which give Burmese workers limited working options (construction and very low skilled jobs the Thais don’t want). But immigrant cards are only valid for a particular job meaning that it is extremely difficult for Burmese workers to change jobs. To do so they need the permission of their current employer and their new employer in the new location and province. This leaves them very vulnerable to abuse by employers – if they are not paid they cannot even leave. They are tied both to the job and the mercy of the employer. The participant says that conditions for Burmese have improved a lot since the tsunami. The plight of the Burmese workers came under international scrutiny following the tsunami. This attention has attracted support from various NGOs that help illegal and legal Burmese with workers rights and give them a voice. They have no voice through the Thai government because many are illegal and will be deported (they are considered criminals by the Burmese government) but those that are legal are disliked by Thai and seen as thieves – this dislike is rooted in historical Thai-Burmese conflicts and still runs deep for Thais. From a business perspective, he is struggling like other tailors who rely on resorts to attract business to Khao Lak. He has borrowed from friends to cover shop rental and taxes. But he is still better off here in Khao Lak than in Burma so despite the business uncertainty and hassles with the police, he will remain in Khao Lak- he has no real choice. He has no access to tourism support groups.</td>
</tr>
<tr>
<td></td>
<td>Diving Operator Manager</td>
<td>Tailor Nang Thong Village - The participant is the manager of a dive company. He was here at the time of the tsunami and gave an account of that day and the immediate help that was received or not in this case --not all details of the stories were written down. For more detail, go to last quarter of tape. The owner of the dive shop is Swedish but has a Thai wife. The participant said the business has built back slowly due to the owner receiving no help from the Thai or Swedish government despite the fact that the original shop was totally destroyed along with the dive equipment and boat (all of which is very expensive to replace). It was located down next to the Happy Lagoon Restaurant and Bungalows across from Nang Thong Beach. He gave info on...</td>
</tr>
</tbody>
</table>
the strong client base (that was made even stronger as a result of the tsunami event), the slow recovery process, the lack of financial aid, price rises in Khao Lak to cover recovery costs, impact of negative press in 2005 but positive effect on long term tourist flows (most westerners know where Khao Lak is now), the cooperation between the dive community members to help support each other during the 2005/6 season and funding initiatives started by himself to help fund the community (www.diveaid.com). He also talks about the nature of Khao Lak in contrast to Phuket and who controls this.

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.02.07</td>
<td>English Trainer</td>
<td>Khao Lak</td>
<td>Very interesting but very sad. Participant was here just after the tsunami and stayed to help. She provided info on: Khao Lak characteristics pre and post tsunami, occupancy rates in some of the resorts, unequal distribution of funds and the lack of government support for tourism businesses in Khao Lak, impact of tsunami on the community and various stories of the survival and immediate impact on locals &amp; English training in Khao Lak.</td>
</tr>
<tr>
<td>13.02.07</td>
<td>Executive Assistant General Manager</td>
<td>Patong Beach &amp; Vice President Phuket &amp; Phuket Tourist Association (PTA)</td>
<td>Phuket Tourism Authority seems to be the powerhouse behind tourism development here. They organised the Phuket Recovery Centre and centralized help through this centre, linking up with all the relevant government departments here in Phuket and funding bodies. This way the populace that was affected had a one-stop shop for help and assistance re social security payouts, engineering and structural requirements for rebuilding, marketing drives, lawyers, financial grants for rebuilding for all types of businesses including souvenir shops, resorts, tour operators etc. They even organised funding through member donations. They raised 3million BHT just from members to assist small business in their rebuilding. And they even organised for payments to businesses that may not have lost property but business. Pretty amazing compared to Khao Lak that had no such centralised or organised body to do this. And not surprising they are still struggling. This case history was instrumental in understanding the central role the Association played in the recovery revealed how important it is to be able to access resources quickly and have strong leadership in streamlining this access. These points are KEY to reducing vulnerability. Patong may not be a good example of environmental protection but they are extremely well connected and organized when it comes to social networks and access to the right avenues of power and influence. Scale of action also very important here.</td>
</tr>
<tr>
<td>14.02.07 &amp; 23.02.07</td>
<td>Travel Agent &amp; Member of PTA &amp; Phuket Recovery Centre</td>
<td>Patong Beach Phuket</td>
<td>Participant has two businesses (small hotel built after tsunami + Travel agency). Participant provided info on: Phuket Tourist Association and their role in the recovery effort, the Phuket Recovery Centre, access to finances at the micro-small-medium-large business level, lack of involvement of the government sector in shaping tourism development (private sector shapes development in Phuket and this includes the influence tour operators have over the Phuket tourist product – this correlates with what was said in Khao Lak) the PTAs power and linkages to all levels of governance and influence in Thai tourism circles. Not all is rosy for micro-businesses. They have no credit rating as before the tsunami they never needed access to credit. Many have borrowed money from informal sources (other private stakeholders) but with an interest rate of 20% per month, its difficult for them to pay their debts back. This also creates money flow problems for the private lenders who can’t get their money back. Also advised on the land issues in Kamala – some small businesses built on public land. After the disaster, they struggled to get access to this land.</td>
</tr>
<tr>
<td>15.02.07</td>
<td>General Manager</td>
<td>Patong Beach</td>
<td>Participant provided information on: corruption in Phuket (tsunami aid money did not go to the right people – it went to friends and family of local officials), self-help for the refinancing of the recovery (rich vs opportunistic change in ownerships from those that could not access financing to start again to those that were waiting to take this opportunity to access shop space), lack of planning (lots of plans but those few that are implemented are not managed and maintained = failed plans</td>
</tr>
</tbody>
</table>
due to no follow-up and wasted resources, occupancy, ownership rates in Patong, key markets, pollution pre-tsunami and problems with effluent going directly into the sea, staffing (paid staff through recovery period to keep staff & help them) and training. Participant also commented on risk. There were also warnings transmitted from German satellites a few days prior detecting movement in the plates but this warning went unheeded due to the impact of a false warning on tourism numbers (interesting – check this out!). Also advised on the links between Phuket over development and the growth of Khao Lak – development spilled over into Khao Lak for some Phuket business owners that were looking for new horizons. Participant’s friend was a hotelier in Phuket then decided to move business in Khao Lak as it was booming. Had just opened before tsunami when whole business was washed away. Now he is bankrupt. The family tailoring business started in Phuket and then branched out to Khao Lak. Add this to history of Patong – did not know this was the case before and haven’t flagged this in interview write-up as this was an afterthought that dawned on me later.

16.0.07  
Tailor employee  
Tailor Shop  
Patong Beach  
Participant is Burmese and had worked in Phuket for 6 years. He provided information on: unequal treatment of Burmese working in Thailand (similar story to those from Khao Lak), no help for Burmese after tsunami, corruption payments to traffic and local police (despite having the correct papers), recovery of small businesses in Phuket, loans from friends and family & ownership changeover of some small businesses, help from repeat guests.

19.02.07  
General Manager  
Thai Large Resort  
Karon Beach  
& Tsunami Recovery Centre  
He and his PTA colleagues had such foresight and knew that getting tourism back asap was imperative not only for the stability of the tourism industry but the community as a whole as tourism makes up 80% of development and business in Phuket. HUGE! The Tsunami Recovery Centre was opened in the 2nd week of January 2005 – very quick initiative focussed on both physially damaged businesses and those who lost business. Gave info on: importance of access to information in facilitating quick recovery for both businesses & main tourist markets, the function and activities of the Tsunami Recovery Centre, access to multiple and multi-scaled avenues of power, creation of new support networks for small businesses with little access to financial support, and usage of website as central point for information sharing, promotion, recovery updates, logging of assistance needs of small businesses in particular, & lethargy of governmental support within 1st year. Also commented on impact of drops on tourist levels down supply chain (which includes local produce from farmers and fishermen) and perceptions of needs and the deserved (government looks good if they help local communities”). This interview makes it very clear that the PTA and businesses run this town and were integral to the recovery. They are the ones that instigated the idea of soft loans (government took credit for that under Andaman Recovery Plan), media drives and familiarisation trips for tour ops and media reps. This shows power of strong leadership, access to power avenues and know-how. Members of PTA drew upon their own resources to promote a quick recovery. Stark contrast between Phuket & Khao Lak. Khao Lak can only dream of type of organisation but then Phuket has had a long time to develop this.

21.02.07  
Director  
Phuket Professional Guide Association  
Guide & Travel Consultant  
Phuket Town  
It was clear when speaking to her that Phuket’s tourism community gets its strength from two things: the established nature of the community – it is 40 years old & it had very strong associations and organisations that assisted the community members access the resources they needed to recover. Granted the association do not help every single stakeholder But they do petition for resources on behalf of many businesses that help the majority recover. Gave information on: role of various associations in the recovery, overview of avenues of power at the provincial, municipality and local level. Also stated why Patong has been more successful in their recovery than Kamala _ Patong is governed by a municipality that oversees all development compared to Kamala that is ruled by the TAO that evidently is not so organised or strong.

24.02.07  
Managing Director  
Large Thai Resort  
The participant is essentially the founder of Phuket as a tourist destination. He described the history of Phuket as a destination and explained how the tourism business has grown and developed in Patong, then Kamala (a bit) and how this
<table>
<thead>
<tr>
<th>Date</th>
<th>Role/Industry</th>
<th>Location</th>
<th>Notes/Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>388</td>
<td>Nai Yang Beach and National Park Founder of PTA</td>
<td>Phuket</td>
<td>Interest has spread out to Krabi first, Phi Phi Islands &amp; most recently Phang Nga. Phuket was big tin-mining area pre-tourism, complimented by subsistence fishing, palm and rubber plantations. Also gave brief history of Phuket Tourist Association and their campaign for support from government at the very beginning to make Phuket an international destination. Emphatic that there has been no planning with Phuket at all. A detailed master plan was done for Phuket in late 1970s before development really started that factored in environmental considerations, waste management &amp; zoning to avoid inappropriate development. This was not implemented due to: budgetary constraints, no political will to implement and maintain such a comprehensive plan, transitory government members &amp; lack of skills and forethought at the local levels. This was the problem at the beginning and still remains a problem today with all new plans (including the Andaman Recovery Plan). The private sector has always been behind advancements in Phuket not the government and this will continue into the future as there is no room now to introduce new sustainable plans.</td>
</tr>
<tr>
<td>26.02.07</td>
<td>Foreign Bar Owner</td>
<td>Patong Beach</td>
<td>The participant is an Australian that owns a bar on Bangla Road. He bought it 7 years ago with his own money brought from Australia. He has other businesses in Australia also. Opened bar after 2 days as there was a lot of damage despite being only a few doors from the beach road. Has strong client base from Australia who return 3-4 times a year (mainly miners who come over on their long 6 weeks breaks), Sweden &amp; Europeans. He financed the rebuilding using his own funds. Most bars on Bangla Road were open within the first few weeks after the tsunami. He had insurance but only basic insurance and had no pre-existing loans. Now it is difficult for businesses to get comprehensive insurance – insurance companies won’t give it to businesses in the tsunami area (might need to check this).</td>
</tr>
<tr>
<td>05.03.07</td>
<td>Small Foreign Guesthouse, Restaurant &amp; Bar</td>
<td>Patong</td>
<td>The participant is English and has lived in Thailand for eight years. She started her guesthouse (12 rooms) and restaurant using savings that she brought from England but her business has it evolved over the last eight years. She also has a pie making business that she runs con-currently with the guesthouse and restaurant. She provided interesting insights into: access to finances for foreigners, pre-and post-tsunami, lack of assistance from the Thai and British government, unequal treatment for Thais and foreigners with regard to assistance - deservedness versus the needy issue is also a problem in Patong - lack of recovery for many foreign businesses, corruption and lack of planning in Patong.</td>
</tr>
<tr>
<td>08.03.07</td>
<td>Front Desk Manager</td>
<td>Patong</td>
<td>The participant has worked in Patong for 7 years, 3 months for current employer. She spoke candidly about: conditions for workers including access to training and skills, lack of unions or representative bodies for workers, how Patong has changed over the last 7 years, Patong as the focus for government recovery efforts over other destinations, and recovery of tourism in Patong since the tsunami.</td>
</tr>
</tbody>
</table>
| 19.03.07   | General Manager        | Phi Phi Don | The participant is a member of one of the main land-owning families on the island. The family started the Phi Phi Hotel 13 years ago. The interview was long as he showed me around the family’s 4 properties. He gave lots of info on: history of his family’s involvement on Phi Phi, main markets, impact of tsunami on hotels and tenant businesses, lack of planning and planning conflicts regarding post-tsunami plans (including Andaman Recovery Plan & DASTA’s failed plans), access to financing (they funded recovery with savings, alternate family businesses – palm farms, rubber plantations – and soft loans) and insurance (they had insurance but it did not cover full costs of repair), access to markets, total lack of government support from TAT or central government following the tsunami, strength of PP tourism community members (they help themselves), Thai Hotels Association membership and Phi Phi Tourism Association membership, importance of cooperating as a group to create a strong platform and voice for the tourism community of Phi Phi in terms of marketing and planning for the future. He also talked a lot about the limited access PP has to water resources, electricity and garbage – these should
be supported and supplied by the government but they are not despite the fact that they pay high taxes due to the high price of land. He says that whilst they have money on the island, the community cannot supply these facilities on a long term basis for themselves – they need help and are very angry that they don’t receive this basic support.

21.03.07
Foreign Bar Owner
Phi Phi Don

He told me his story: when he first came to Phi Phi as a tourist, his experience of being caught in the tsunami, his involvement in the clean-up with Hi Phi Phi, his decision to stay after the tsunami, the opening of new opportunities for him in PP (the owner of Phi Phi Villa Resort offered him land on the beach to open a restaurant), access to financing to start the restaurant in 2005 (he used EUR100,000 of his own money to build the restaurant), and business through 2005 & 2006. He also commented on the lack of government support in Phi Phi following the tsunami – people in the community helped themselves. There is some corruption and payouts to police in PP but he is lucky to be on the good side of the police.

24.03.07
Manager
Dive Operator
Phi Phi Don

The participant has been working on Phi Phi for 12 years as a dive instructor, videographer, dive master and now manager. The dive operator is owned by Thai partners but the participant unofficially funds the growth of the dive operator. He gave info on: the growth of Phi Phi over the last 12 years and his story, the growth of the dive shop, rental conditions, access to finances pre-and post-tsunami, pre-and post-tsunami, lack of insurance (due to the lack of fire station on the island – cant get insurance easily without these basic services, process of rebuilding (limited government support vs volunteer assistance), working conditions for foreigners and access to visas, main markets and differences between high and low seasons, planning delays >> rebuilding delays. He also spoke about his involvement with the Dive Camp and Hi Phi Phi and the lack of basic infrastructure.

26.03.07
Foreign Small Guesthouse Owner
Phi Phi Don

The participant moved to Thailand with her husband straight after she finished her masters degree in Sydney. Her and her husband started a restaurant in Krabi 13 years ago and then moved to Phi Phi 4 years ago. They converted their restaurant into a Guesthouse (named after her daughter) 1 month before the tsunami hit. She and her husband also has a house in Phuket and a rubber plantation in Krabi. The conversion was funded partially by savings and partially by a loan from the bank. She did not have insurance at that time. The tsunami wave destroyed the ground floor of her guesthouse but the building was structurally sound. She lost her daughter and her sister as a result of the tsunami as well as 7 Thai staff. She received some assistance from the Australian government (money for the funerals of her family members, and social security payments from Centrelink for the first 3 months of 2005 when she was home. They also received THB10,000 for the death of their family members to help pay for the funeral ceremonies in Thailand. Her sister had life insurance. Some of the life insurance money was used to pay off her pre-existing loan and for rebuilding the guesthouse. She also received donations but distributed them to people that she knew needed them more – she not only had access to some of the life insurance money but also had savings to fall back on and live off for 7 months before she returned to Phi Phi on 3 August 2005 (her dead daughter’s birthday). The guesthouse was opened again in December 2005. Business during 2006 was OK – occupancy was approximately 50%. But this past high season has seen occupancy return to 100% over the past 4 months. Spoke about the volunteer efforts in the recovery. The participant also gave interesting insights into the power dynamics of the main 4 families and their access to land, finances and power. Also said that there are not many foreign businesses with the exception of the dive shops.

26.03.07
Foreign Restaurant Owner
Phi Phi Don

Excellent case history! The participant has lived on Phi Phi Don for 20 years. He was one of the first businesses on the island apart from a few resorts. He came initially by mistake as a tourist (he was supposed to go to another island but was taken to PP instead). He fell in love with the place and decided to stay and start a business. Initially started a bar/café near
<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Participant Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.03.07</td>
<td>Owners Small Thai Guesthouse &amp; Restaurant Phi Phi Don</td>
<td>The Inn began 20 years ago. The family who owns the Inn &amp; Restaurant &amp; Backpackers is originally from Krabi but moved here to start their small hotel. It started with 10 rooms and then grew over time. When they started the business, there was not much else on the island except for coconut trees and some subsistence fishing. They initially built their business using family savings and expended their business over time using the profits. Six years ago, they added the Rock Restaurant &amp; Backpackers. At this time, they took out a loan from the bank to refurbish the Tara Inn which was originally made out of wood. The new structure was more solid, constructed out of concrete. At the time of the tsunami, the guesthouse had 18 rooms and the backpackers could sleep up to 16 in one large room. The owners lost THB2 million due to the tsunami. Damage was direct and indirect – people broke windows and doors at the time of the wave as they were desperate to find refuge in the Inn which is on the hill. Loan payments have been suspended on the pre-existing loan for 3 years (interest only). Managed to get another loan post-tsunami to pay for rebuilding at low interest rate using their land deeds from their house as collateral. SME Bank not an option as they did not want to lose control over their business. Complained about little assistance from government – only got THB20,000 in total but gave this to their staff. They went to post-tsunami planning meetings but saw that there were no results and stopped going – from then they helped themselves. Had insurance for their staff but staff had troubles claiming this money – too bureaucratic. Now complain about future planning of PP saying that Thais on the island think only about money and the short-term – waste water solution is too small for volume of water. Wants big business owners to do more for recycling. Tanks are not enough and without a good environment, tourists will not come. Then there will be no money! Also talked a bit about power dynamics on PP.</td>
</tr>
<tr>
<td>30.03.07</td>
<td>Thai Bar Owner Phi Phi Don</td>
<td>The participant is Thai but came to Phi Phi after living in the US. She opened a restaurant 12 years ago then grew over time. She has owned her Bar for the past 8 years. She lost 3 family members in the tsunami and is now looking to sell her bar despite rebuilding. She gave information on: access to land, rental conditions, access to finances pre (savings and profits &amp; private loans pre-tsunami) and post-tsunami (savings &amp; bank loan), brief development history of Phi Phi, main markets and changes in the market over last 12 years, self-help after tsunami (businesses help themselves), access to insurance (none), planning problems on the island (lots of meetings pre and post-tsunami but never any action &gt;&gt;&gt;meeting fatigue and drop in interest and participation), power base (main families can do what they want as they have money &gt;&gt;&gt; access to national park land) &amp; power relations (one of main families is local mafia – get jealous of other successful businesses and try to intimidate business owners they do not like), access to insurance benefits fro her staff (she paid the insurance in full and provide her staff with money through 8 months when she was closed), part played by volunteers in the rebuilding, and business levels pre and post tsunami.</td>
</tr>
</tbody>
</table>
| 02.04.07 | Small Restaurant Owner Phi Phi Don | The participant was from Sri Saket province, north-eastern part. He used to work at restaurant in Pa Thong then moved to work as a chef on PP 1 month before tsunami. He was hit by the wave and was sent to Krabi hospital. He came back to open his own restaurant by receiving financial aid from his friend who was from America. He rents the land that the
<table>
<thead>
<tr>
<th>Date</th>
<th>Role</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>04.04.07</td>
<td>Owner/Leader of SME group Phi Phi Don</td>
<td>The participant is from Trang province. First he opened a small shop to sell clothes in Phi Phi then he take over Phi Phi Inn business before Tsunami. He is the leader to form a loose group of small and medium entrepreneurs during early recovery period. There was less assistance from government. Business sector help themselves with assistance from volunteers and tourists. German company gave 5,000,000 B for community and he put as “Credit union cooperative”. About DASTA and planning from government, it came with politicians” benefits with the big investors, so Phi Phi community did not accept them. Now Phi Phi is waiting for a plan that appropriate for local condition which should be come up as soon as possible since Phi Phi really in need of planning and management system.</td>
</tr>
<tr>
<td>04.04.07</td>
<td>Medium Thai Hotel Manager Phi Phi Don</td>
<td>The hotel group the participant works for is a big group of business owned by one of the main families. This group has various businesses such as resort, ferry, salons, massages, and mini-marts. The hotel was not damaged much. It opened after tsunami 2-3 days to serve as accommodation for volunteer with very low price on that time. Government did little to support the community at that time and have shown little support to date. Business need to be run in Phi Phi, so entrepreneurs try to help themselves for restart business. Phi Phi lack of political voices to call for attention from outside community, not like Pa Thong that some politicians have business around Pa Thong area, so they receive supporting and attention. Phi Phi lacks of linkage between community and government.</td>
</tr>
<tr>
<td>07.04.07</td>
<td>Co-owners Large Resort Phi Phi Don</td>
<td>They started their first resort (2 star bungalows) 20 years ago as a small bungalow resort of 20. They got a small loan for this and then built over time using the profits which have always been high on Phi Phi. They then built their hotel financed through another loan as well as profits. They did have insurance on both properties but it was not enough to cover the renovation costs (1/6th of cost post-tsunami). They have access to finance to rebuild (sold resort not on PP, sold off land on mainland + have a large loan from bank based on the acquisition of a piece of land that their plaza is now situated on). What is holding them up is the lack of a finished development plan being drawn up now by the Department of Town and Country Planning. They gave information on the development of Phi Phi as a destination and its changing markets over time, lack of impact of other shocks, access to finances, access to land (rent with long lease of 10 years), lack of development plans for PP throughout its developmental history, process of drafting development plan for PP + departments involved and the many blockages that have hindered the finalisation and implementation of a developmental plan for PP (little interest from TAO, nepotism at TAO level meaning that plans that do not favour powerful family members are not endorsed by PP TAO representatives, corruption involving local officials and powerful families of PP with regard to planning approval and access to land – money can buy you anything in Thailand, lack of strong Tourism Association and reasons for this (he started the PP Tourism Association which was then taken over by another community member took over – doesn’t have unity among island community as everyone is only interested in making money), lack of long-term vision among community members (short-term monetary goals most important), lack of consideration of natural environment, lack of community spirit (the Thai people do not help each other – all out for themselves), power dynamic of island community (nepotism and money hinder long-term planning and goals).</td>
</tr>
</tbody>
</table>
Appendix C  Focus group discussion design

1. Overview and rationale of use

Focus group discussions (FGDs) are a valuable tool for the exploration of group norms and the socio-political dynamics that shape human interactions and outcomes (May, 2001). The tapestry of processes and practices that make up the social world and the richness of relationships between people and places come to the fore (Cameron, 2005: 119). In doing so, focus group discussions promote the formulation of simultaneous insights and understanding for both researchers and participants during the research process (Goss and Leinbach, 1996: 116-117). This transforms knowledge through social learning, promotes empowerment among the „researched”, heightens participant participation throughout the research process and creates opportunities for social transformation (Cameron, 2005).

The use of this method in analysing destination vulnerability proved advantageous for three reasons. First, it encouraged interaction between group members and provided an opportunity for participants to explore different points of view, reconsider their own views, and formulate new opinions (Cameron, 2005). For Kitzinger,

> Participants do not just agree with each other. They also misunderstand one another, question one another, try to persuade each other of the justice of their own point of view and sometimes they vehemently disagree (1994: 113).

The process of social learning is important for building unity and common understandings within and across community groups and sub-groups, a process that is an integral component of successful resilience building strategies. Second, this dynamic and energetic interaction between participants proved instrumental in highlighting the power discourses that shape thoughts and actions within the communities and at what level these occur. Identifying these underlying drivers of social patterns and change and the scale at which they occur provides information on appropriate entry points for transformative action. Third, the creation of small community forums provided us as researchers with an opportunity to report back on initial findings ascertained from other data (in this case secondary documents, open-ended interviews and case histories), verify results and gain answers to outstanding queries. In doing so, this gave the participants an opportunity to directly influence the output.
2. Objectives

The objectives of the FGDs were four-fold:

a. Identify the pre- and post-tsunami conditions that influence vulnerability levels in each destination;

b. Investigate the interconnected nature of identified socio-political and environmental vulnerability factors and the way they are constructed across a range of scales;

c. To gain feedback and validation of preliminary findings from the open-ended interviews and case histories; and

d. Explore community-led solutions to building capacity and resilience in their community.

3. Sampling design and deployment

A total of 23 FGDs were undertaken in the case study destinations (10 in Khao Lak, 10 in Patong and 11 in Phi Phi Don). A list of the FGDs is presented in Table C 1. The stakeholder groups included in the FGDs were chosen from the private sector stakeholder groups used in the interview sampling design (see Table A 1, Table A 2, and Table A 3 in Appendix A). They represent dominant stakeholder groups and existing informal stakeholder collectives. The participants were grouped in accordance to these stakeholder groupings to promote ease and comfort amongst the participants. Many of those that shared a profession and belonged to the same stakeholder group knew each other through every-day business dealings and social activities. The intended target groups were adjusted once in the field due to the availability of participants. Availability of participants did prove problematic for some stakeholder groups (small foreign and Thai hotels/bungalows, restaurant participants, and dive shops) due to the timing of the FGDs. The FGDs were undertaken in September 2007, which falls into the low season for Khao Lak when many small businesses are closed. Availability in Phi Phi Don and Patong was hindered by people being too busy to attend. Furthermore, some small Thai hotel/bungalow owners cancelled and rescheduled on numerous occasions due to unforeseen problems that needed urgent attention.

Participants were chosen from the interview participant list presented in Table A 4 (Appendix A) personal referrals and snowballing techniques. The average size of each group was between 3 to 7 participants to facilitate a good in-depth discussion where all participants have ample chance to voice and discuss issues. One exception to this was the massage group in Khao Lak where there was much interest. The duration of the FGDs was approximately 1.5 hours. The FGDs were facilitated by members of the core three member research team with the help of research assistants.
Appendix C

1. Kannapa Pongponrat  Stockholm Environment Institute-Asia
2. Sopon Naruchaikusol  Stockholm Environment Institute-Asia
3. Emma Calgaro    Macquarie University/Stockholm Environment Institute
4. Ratchaneekorn Thongthip  Khuk Khak Community Knowledge Management Centre
   (Khao Lak Research Assistant)
5. Phenphan Manyuen  Research Assistant for Patong and Phi Phi Don
6. Lalita Chatmongkol  Research Assistant for Patong and Phi Phi Don

Table C 1: Focus Discussion Participant Groups and schedule

<table>
<thead>
<tr>
<th>Group</th>
<th>Date (dd.mm.yy)</th>
<th>Time</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>KHAO LAK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Massage</td>
<td>09.09.07</td>
<td>15.15-17.05</td>
<td>14</td>
</tr>
<tr>
<td>B Thai-owned medium &amp; large hotels/resorts</td>
<td>10.09.07</td>
<td>10.15-11.50</td>
<td>4-7</td>
</tr>
<tr>
<td>C Tourist Boats</td>
<td>10.09.07</td>
<td>15.05-16.20</td>
<td>4</td>
</tr>
<tr>
<td>D Thai-owned Restaurants</td>
<td>11.09.07</td>
<td>10.50-12.20</td>
<td>6</td>
</tr>
<tr>
<td>E Thai-owned small resorts/guesthouses</td>
<td>12.09.07</td>
<td>10.10-11.50</td>
<td>3</td>
</tr>
<tr>
<td>F Foreign-owned small businesses</td>
<td>14.09.07</td>
<td>14.30-15.50</td>
<td>3</td>
</tr>
<tr>
<td>G Tour Agencies</td>
<td>16.09.07</td>
<td>09.50-11.30</td>
<td>3</td>
</tr>
<tr>
<td>PATONG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Beach Massage</td>
<td>17.09.07</td>
<td>11.20-13.00</td>
<td>6</td>
</tr>
<tr>
<td>I Tailors &amp; Burmese workers</td>
<td>19.09.07</td>
<td>14.50-16.20</td>
<td>7</td>
</tr>
<tr>
<td>J Tourist boats (Long tail &amp; speed boats)</td>
<td>19.09.07</td>
<td>18.30-20.30</td>
<td>3</td>
</tr>
<tr>
<td>K Beach Umbrella operators</td>
<td>20.09.07</td>
<td>10.40-12.10</td>
<td>4</td>
</tr>
<tr>
<td>L Taxis</td>
<td>20.09.07</td>
<td>14.25-15.25</td>
<td>2</td>
</tr>
<tr>
<td>M Beach Vendors</td>
<td>21.09.07</td>
<td>10.55-12.10</td>
<td>2</td>
</tr>
<tr>
<td>N Motorbike Taxis</td>
<td>21.09.07</td>
<td>15.05-16.30</td>
<td>4-5</td>
</tr>
<tr>
<td>PHI PHI DON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Massage Shop</td>
<td>24.09.07</td>
<td>11.00-12.25</td>
<td>7</td>
</tr>
<tr>
<td>P Beach Umbrella/Water Sports</td>
<td>24.09.07</td>
<td>15.40-17.10</td>
<td>10</td>
</tr>
<tr>
<td>Q Dive Operators</td>
<td>25.09.07</td>
<td>10.30-12.00</td>
<td>3</td>
</tr>
<tr>
<td>R Restaurants/Bars</td>
<td>26.09.07</td>
<td>15.30-16.40</td>
<td>2</td>
</tr>
<tr>
<td>S Tour Agencies</td>
<td>26.09.07</td>
<td>18.45-19.50</td>
<td>5</td>
</tr>
<tr>
<td>T Medium/Large Resorts</td>
<td>27.09.07</td>
<td>10.05-12.10</td>
<td>3</td>
</tr>
<tr>
<td>U Souvenir Shops</td>
<td>27.09.07</td>
<td>14.30-15.30</td>
<td>4</td>
</tr>
<tr>
<td>V Resort/Bungalow Staff</td>
<td>28.09.07</td>
<td>16.10-17.25</td>
<td>17</td>
</tr>
<tr>
<td>W Small Resorts/Bungalows</td>
<td>29.09.07</td>
<td>20.25-21.25</td>
<td>3</td>
</tr>
</tbody>
</table>
4. Methods

4.1 SITUATION ASSESSMENT: PROBLEMS AND POSSIBLE SOLUTIONS
IDENTIFICATION AND PRIORITISING (ranking and scoring)

i. Objectives

- To gain feedback and validation of preliminary findings from the open-ended interviews and case histories;
- To identify the pre- and post-tsunami conditions that influence vulnerability levels in each destination;
- To ascertain current community problems and needs and explore community-led solutions to building capacity and resilience in their community; and
- To prioritise current problems and possible solutions.

ii. Issues and Questions

- Do the participants agree with the problems found from the stakeholder interviews?
- What are the current (2007) and/or additional problems faced by tourism stakeholders?
- How are these problems ranked in terms of importance to community members?
- What are the possible solutions and actions that help to overcome these problems?
- How are these solutions ranked in terms of support and feasibility amongst stakeholders?
- Significant issues to be considered:
  - Social aspects: social network, community strengthening, awareness on assistance, perception on risk
  - Economic aspects: financial support, capital investment, marketing
  - Institutional aspects: plans and policies to support local community, capacity building program
  - Environmental aspects: natural resources planning and management for tourism development
  - Issues of trauma

iii. Organisation

- The facilitator presents the preliminary findings from the interviews and case histories to the participants verbally before writing them up on a board/sheet of paper.
- The facilitator asks participants to discuss (agree/not agree) the presented issues.
- Participants discuss the issues amongst themselves and clarify or add any outstanding issues not already raised.
- Participants prioritise problems by scoring each identified problem using a scale of one to 50 points. This process starts with each participant writing their main problems on soft cards provided by the facilitator, and then awards a score to each problem. This is followed by a wider discussion among group members to
finalise collective opinions and problem prioritisation.

- This process is repeated to ascertain possible solutions. This process starts with each participant writing possible solutions on soft cards provided by the facilitator and then awards a score to each solution using a scale of one to 50 points. This is followed by a wider discussion among group members to finalise collective solutions and prioritisation.

iv. Framework

<table>
<thead>
<tr>
<th>Problems</th>
<th>Scoring (50 points)</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Person A</td>
<td>Person B</td>
</tr>
<tr>
<td>Problem found</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem found</td>
<td></td>
<td></td>
</tr>
<tr>
<td>..........</td>
<td></td>
<td></td>
</tr>
<tr>
<td>..........</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Scoring (50 points)</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Person A</td>
<td>Person B</td>
</tr>
<tr>
<td>Solution for 1&lt;sup&gt;st&lt;/sup&gt; common problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solution for 1&lt;sup&gt;st&lt;/sup&gt; common problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solution for 2&lt;sup&gt;nd&lt;/sup&gt; common problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>..........</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

v. Timing

- The facilitator presents the preliminary findings and issues deduced from the interviews and case histories (5 minutes)
- The facilitator introduces the tool to participants (5 minutes)
- Participants work individually to identify their main problems and rank those problems (5 minutes)
- Participants work together to identify common problems and collectively rank them (10 minutes)
- Participants work individually to identify solutions to the common problems and rank them (10 minutes)
- Participants work together to identify common solutions and agree on solution rankings (10 minutes)
- Total time allocation = 45 minutes.
- Total time allocation = 45 minutes.
4.2 RICH PICTURE

i. **Objectives**
   - To understand the contributing causes and effects for a particular problem identified in situation assessment;
   - To investigate the root causes and competing stakeholder agendas that drive this issue and the way it is constructed across a range of scales.

ii. **Questions**
   - What are causes and effects of main problem identified in the Situation Analysis?
   - Which social actors are involved in this issue and what role do they play in its formulation and continuance?

iii. **Organisation**
   - Participants discuss the causes and effects of the chosen issue identified in the Situation Analysis.
   - Participants draw a rich picture of identified causes and effects of particular problem on a common board or sheet of paper.

iv. **Framework**

![Rich Picture Diagram]

v. **Timing**
   - Facilitator introduces the tool to participants (10 minutes)
   - Participants help to draw rich picture with facilitator guidance (25 minutes)
   - Total time = 35 minutes

4.3 VISIONING ON RESILIENCE BUILDING STRATEGIES

i. **Objective**
   To develop a shared 5-year community vision of desired developmental outcomes and resilience building initiatives designed to reduce their vulnerability and increase the sustainability of their chosen tourism-related livelihoods. This will help them to think creatively about future tourism-orientated goals and sustainability goals and provide a common platform for developing a strategy that will provide support to the tourism community in attaining these goals.
ii. **Issues and Questions**

- What visions do the participants have in terms of future developmental outcomes and resilience building strategies for the next 5 years?
- What factors and steps facilitate the attainment of these visions?
- How does the community execute these steps and at what scale?
- What is the most feasible action plan for attaining the collective Khao Lak 5-year vision and reducing vulnerability?

iii. **Organisation**

- Participants discuss amongst themselves possible visions that reduce their vulnerability to future shocks, build community resilience, and increase the sustainability of their tourism-orientated livelihoods.
- Participants discuss possible factors and steps required to achieve their vision.
- Participants discuss and design a possible action plan for reducing their vulnerability and enhancing their resilience (what, who, how).

iv. **Framework**

<table>
<thead>
<tr>
<th>Vision</th>
<th>Factors</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Facilitating</td>
<td>Activity</td>
</tr>
</tbody>
</table>

v. **Timing**

- Facilitator introduces the tool to the participants (5 minutes)
- Participants discuss their visions for reducing their vulnerability (10 minutes)
- Participants discuss and identify steps that help them to achieve their vision and design a feasible action plan for achieving their collective goals (10 minutes)
- Total time = 25 minutes
Blank page
Appendix D Post-tsunami planning initiatives
Blank page
1. Andaman Tourism Recovery Plan zoning and building regulations

### 2. Sub-regional Development Plan

**Table D1: SRDP Pilot projects affecting (directly or indirectly) Khao Lak, Patong & Phi Phi Don**

<table>
<thead>
<tr>
<th>Sector and sub-focus</th>
<th>Project (P)</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban and regional planning</strong></td>
<td>P: Establishment of new plan-making framework for the Andaman sub-region</td>
<td>Rectify current planning and jurisdiction inconsistencies between government departments and levels by strengthening the administrative planning system that controls the expansion of development in Krabi, Phang Nga and Phuket tourist destinations (including those on Phuket’s west coast), and urban expansion in Phuket Town. Determine institutional support needs for the following four planning components: comprehensive and proactive plan formulation and governance; plan formulation structure for the Andaman sub-region; refining of the zoning process and system; and public awareness and participation in planning process.</td>
</tr>
<tr>
<td></td>
<td>P: Support for the implementation of new centralised wastewater treatment plants in Khao Lak, Patong &amp; Phi Phi</td>
<td>Promote sustainable tourism development in each tourism destination through the following wastewater strategies: (i) Build a centralised and municipally controlled wastewater treatment plant for Khao Lak and introduce an eco-tax on accommodation to be paid in part by tourists to help fund the installation and maintenance of the proposed plants; (ii) Support the introduction and maintenance of a wetlands-based wastewater treatment facility on Phi Phi in partnership with DANIDA and AIT; (iii) Support the rehabilitation of Pak Bang Canal which receives more than 60 percent of wastewater of Patong’s wastewater and the creation of a constructed wetlands with polishing ponds to treat wastewater before it is discharged into the sea.</td>
</tr>
<tr>
<td><strong>Environmental management and infrastructure</strong></td>
<td>P: Environmental conservation promotional program</td>
<td>Promote environmental conservation through the: (i) Implementation of Andaman’s waste management strategy for coastal conservation best practices for residents, developers and tourists to be disseminated in Thai and English via multiple media channels and brochures available at airports, hotels, PAO and TAOS; (ii) Implementation of a ‘Greencall’ public environmental monitoring program to facilitate public reporting to appropriate authorities on pollution problems; (iii) Establishment of “Training the trainer” programmes to build capacity at the local level and strengthen environmental best practices.</td>
</tr>
<tr>
<td></td>
<td>P: Orientation training for environmental management</td>
<td>Increase skills and capacity levels within provincial, district and local government bodies responsible for SRDP implementation through the provision of 2 types of training: (i) Training of key personnel at the provincial and local level in environmental planning and application of the SRDP. This includes instruction on evaluating potential environmental impacts of development, sub-regional plan formulation, and assessment of carrying capacity and mitigation measures over time. (ii) ’Training the trainer’ programmes to build capacity at the local level and strengthen environmental best practices.</td>
</tr>
<tr>
<td><strong>Tourism Marketing and Certification</strong></td>
<td>P: Establishment of Andaman Tourism Marketing and Promotion Board (ATMPB)</td>
<td>Set up an Andaman Tourism Marketing and Promotion Board that: (i) Creates a cohesive Andaman image that can competitively compete for market share in the national and international tourism domain; (ii) Facilitates widespread marketing exposure of smaller enterprises that lack the capital and/or expertise to implement a robust marketing strategy that reaches key national and international markets; (iii) Maximises social and economic contributions that tourism makes for all stakeholders.</td>
</tr>
<tr>
<td></td>
<td>P: Web portal and e-commerce facility</td>
<td>Establish a unified web portal and e-commerce facility that combines research, client relation management (tourists and operators), e-commerce (booking of accommodation and services) and disseminates data and information.</td>
</tr>
<tr>
<td></td>
<td>P: Establishment of joint branding for the Andaman Coast</td>
<td>Develop joint branding for the Andaman that effectively promotes the rich diversity of available activities to key markets; and Generate a unique personality or ‘feel’ for Andaman destinations that creates a unique selling point.</td>
</tr>
<tr>
<td></td>
<td>P: Andaman Coast Certification Program for Tourism (ACT)</td>
<td>Establish an Andaman certification program that incorporates eco-labeling to promote the adoption of sustainable tourism products and services, help suppliers raise their service standards, and create a powerful marketing tool to attract tourists to the region.</td>
</tr>
<tr>
<td><strong>Skill development and Higher Education</strong></td>
<td>P: Strengthening community mechanisms for participation in socio-economic development in the region</td>
<td>Increase skill levels and research capacity of the Andaman Coast populace through the foundation of the University of the Andaman Coast. The proposed University would focus on social sciences (particularly tourism-related courses), science and technology and health sciences.</td>
</tr>
<tr>
<td><strong>Community and Social Development</strong></td>
<td>P: Strengthening community mechanisms for participation in socio-economic development in the region</td>
<td>Increase wider access to the economic benefits of tourism in villages in close proximity to tourism centres (incl. Khao Lak) by: (i) Increasing skills and knowledge of local leaders, enabling them to create innovative mechanisms for ensuring village participation; (ii) Augmenting the effectiveness of community development efforts by fortifying organisational capabilities of governance and community development organisations; (iii) Establishing effective structures to ensure active and sustained participation of community-based organisations (CBOs) and vulnerable groups in local governance.</td>
</tr>
</tbody>
</table>

**SRDP BENEFITING KHAO LAK DIRECTLY OR INDIRECTLY**

| **Urban and regional planning** | P: Restructuring of Khao Lak Town Centre | Prepare a feasibility study for the diversion of the National Highway Route 4 that runs directly through Khao Lak and the conversion of the existing road into a tourism boulevard and rambla. |
| **Community and Social Development** | P: Strengthening community mechanisms for participation in socio-economic development in the region | Increase wider access to the economic benefits of tourism in villages in close proximity to tourism centres (incl. Khao Lak) by: (i) Increasing skills and knowledge of local leaders, enabling them to create innovative mechanisms for ensuring village participation; (ii) Augmenting the effectiveness of community development efforts by fortifying organisational capabilities of governance and community development organisations; (iii) Establishing effective structures to ensure active and sustained participation of community-based organisations (CBOs) and vulnerable groups in local governance. |
| | P: Strengthening multi-sector partnerships for livelihood development in villages | Secure stable tourism-oriented livelihoods for community enterprises and promoting local business competitiveness by: (i) Establishing strong and mutually beneficial partnerships between village communities, CBOs, NGOs, industry and government actors that will facilitate the development of shared plans and activities and greater community cohesion; (ii) Providing training and coaching interventions for CBOs SMEs and cooperatives on business planning and management, product development, network building, enterprise evaluation, communication and social management, and capital generation. |

Sources: ADB (2005; 2006a, 2006b)
3. Sustainable Tourism Rehabilitation and Development of Koh Phi Phi Don and Surrounding Islands Plan by DASTA

Box D 1: Key components of DASTA's redevelopment concept for Phi Phi Don

<table>
<thead>
<tr>
<th>Main DASTA Plan goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Preserve, protect and rehabilitate marine resources including coral reefs and marine habitats;</td>
</tr>
<tr>
<td>- Facilitate the sustainable and safe use of the sea by classifying areas for various activities (particularly diving) and seaports;</td>
</tr>
<tr>
<td>- Restore the shoreline and beaches; and</td>
</tr>
<tr>
<td>- Protect, preserve and restore forests and other terrestrial natural resources.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Redeveloping and repositioning Phi Phi as a tourism destination:</td>
</tr>
<tr>
<td>- Raise the quality of destination facilities and services through a focus on the development of medium and high-class hotels and resorts;</td>
</tr>
<tr>
<td>- Develop tourist services that yield positive experiences and foster return visitation;</td>
</tr>
<tr>
<td>- Distinguish Phi Phi in the competitive international travel market by marketing its distinctive seascape;</td>
</tr>
<tr>
<td>- Promote Phi Phi as a safe destination by maintaining and publicising its emergency management plan and the presence of the Early Warning System.</td>
</tr>
</tbody>
</table>

| (b) Infrastructure development: |
| - Revise and maintain the transportation system designed around usage classifications; |
| - Repair and restore infrastructure, such as the electricity and water services; |
| - Construct a wastewater treatment plant with pipelines from buildings to prevent future disasters; |
| - Manage and transfer solid waste from Phi Phi Don by providing garbage trucks, garbage collection points, and gather and classify all waste for transfer by boat for elimination on land; |
| - Manage land use according to laws regulating area planning, building management, and maintaining the quality of the environment; |
| - Provide safety areas, evacuation routes and emergency management plans for people in the event of natural disasters; |
| - Manage safe marine routes for tourists; |
| - Restrict construction through the designation of prohibited areas to ensure safety for people and properties; |
| - Maintain the dock around Ton Sai Bay in accordance with international standards for transferring passengers, goods and waste; and |
| - Improve health services and transferring of emergency patients to a hospital on the mainland. |

| (c) Land rehabilitation in two main areas: |
| - Private lowlands and beaches (totalling approximately 1320 rai or 20.61per cent of Island) that were human settlements before the declaration of the Hat Noppharat Thara – Phi Phi Islands Marine National Park in 1983. Most of this land is less than 10 metres above sea level. High risk areas to nature disasters should not be settled but should rather be open for afternoon activities only. Consequently, Safety standards specify the size of settlements, population and tourist numbers, the use of natural resources and the environment, and public health management; |
| - Mountains and mangrove forests in the Hat Noppharat Thara – Phi Phi Islands Marine National Park that cover approximately 5086 rai or 79.39per cent of Island. Most of land is mountain landscape (gradient > 20°) with a height of 60 to 190 metres above sea level. The National Park area could be designated for: public use (public institutions, schools, hospitals, temples), as an One Tambon One Product (OTOP) business area, and/or as a disaster-safe area. Public buildings and safety zones in the National Park should be in high areas away from flooding. Private land in high risk areas can be modified into open lowland that is suitable for recreation and afternoon activities. Any government land above 10 metres above sea level should be allowed to be used as a safety zone in the case of another tsunami. |

Box D 2: The DPTCP plan for the redevelopment of Phi Phi Island

<table>
<thead>
<tr>
<th>Regulation definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Coastal line” is defined as the maximum wave distance inland</td>
</tr>
<tr>
<td>“Zone 1” is defined as an area from the coastline to 20 metres inland</td>
</tr>
<tr>
<td>“Zone 2” is defined as an area from Zone 1 to 150 metres inland</td>
</tr>
<tr>
<td>“Zone 3” is defined as an area from Zone 2 to 300 metres inland</td>
</tr>
</tbody>
</table>

Construction regulations on the Phi Phi Islands:

**Zone 1:** Residential house (single house)
- Building height not higher than 6 m (single story house)
- Total building area not more than 75 m²
- Space around building not less than 75 percent

**Zone 2:** The following construction is prohibited:
- Buildings with the height higher than 12 m
- All types of factories, as defined by factory regulations, with a total area for all stories of more than 100 m²
- Theatres
- All types of animal-raising buildings with a total area exceeding 10 m²
- Large buildings with total area exceeding 2000 m²
- Markets with total area exceeding 300 m² or with distance of less than 50 m from other markets
- Gas stations or storage
- Fuel stations or storage
- Signage or billboards except those not exceeding 8 m in height
- Buildings made of non-fire resistant materials or unstable materials except single storey houses or buildings with a height not exceeding 6 m and further than 5 m from other buildings
- Sheds or stalls
- Buildings with less than 60 per cent open space
- Row houses
- Crematories
- Storehouses or transfer buildings for commercial or industrial use
- Solid waste
- Dump sites or landfills

**Zone 3:** The following buildings are prohibited:
- Buildings with a height of more than 16 m
- Buildings having less than 50 percent open space

**Notes:**
- Building height measured from ground level to the highest part of the building.
- In the zones specified in No. 2, any changes in construction or use of the buildings are prohibited. The existing buildings before the announcement of the implementation of these regulations are exempt from these regulations. Officially approved construction plans already under construction are exempt from these regulations.