

# **Tsunami and Conflict in Sri Lanka<sup>1</sup>**

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## Executive Summary

This report examines connections between the Indian Ocean tsunami of December 26, 2004 and Sri Lanka's ongoing civil war between the Sinhalese majority-dominated government and the Liberation Tigers of Tamil Eelam (LTTE), better known as the "Tamil Tigers". An initial question of interest was whether the tsunami and ensuing relief efforts precipitated a renewal of fighting and the eventual end, almost three years to the day after the tsunami, of a ceasefire agreement signed in 2002. Recent Government of Sri Lanka (GoSL) victories on the battlefield raise a more provocative question: did the tsunami and relief efforts tilt the balance of power in favor of GoSL? While many studies have looked at the role of corrupt agents and insurgents in co-opting relief funds, few have looked at the possibility that disasters and disaster relief could create incentives for a government to return to war.

While this report comes to no definitive conclusions, it garners considerable evidence supporting an affirmative answer to this question. The author has linked district-level data on financial assistance flows with more detailed community-level data on population distribution, tsunami damage, and recovery. Government data sources were complemented by a survey of 141 communities in five heavily affected districts in Eastern and Southern Sri Lanka.

With respect to tsunami damage, the report highlights the following key facts

- As is now well known, over two-thirds of tsunami damage was concentrated in Northern and Eastern Provinces, home to much of the Tamil and Muslim minorities.
- Less well understood is the extent of Tamil suffering in what some have perceived to have been a Muslim tragedy. Estimation of the ethnic distribution of damage using community-level data suggest that 48% of destroyed homes belonged to Tamils, 23% to Muslims, and 29% to Sinhalese. A similar proportion of deaths were to Tamils.
- The complex political ecology and history of population transfer in Eastern Province placed large, vulnerable Tamil communities in close proximity to the coast. In majority-Muslim Ampara, the most heavily affected district, only 30% of the population was Tamil yet 52% of destroyed homes belonged to Tamils. Eastern Province Tamils once constituted the principal base of financial, logistical, and military support for the LTTE.
- The comprehensive population transfer policies of the LTTE had forced out the Muslims of Northern Province long before the tsunami, rendering a substantial Tamil impact.
- The LTTE sustained an uncertain amount of damage to military, logistical, and administrative capacity during the conflict, though probably minimal.

With respect to the post-tsunami relief effort, the report reinforces media reports of regional bias in the aid delivery and housing reconstruction

- Expenditures in the all important housing sector were considerably higher, on a per-destroyed-home basis, in Sinhala-majority Southern and Western Province than in Northern and Eastern Province. Expenditures were particularly low in the most heavily affected areas of Eastern Province, Ampara and Batticaloa District.

- Housing expenditures extraordinarily high in Sinhalese-majority areas with high levels of support and identification with the ruling Sri Lankan Freedom Party (SLFP), President Mahinda Rajapakse, elected in late-2005 on an anti-ceasefire platform, and SLFP's virulently nationalist coalition partners the Janatha Vimukthi Peramuna (JVP). Rajapakse's home district of Hambantota received four times the average expenditure per home and six times that received by the most heavily affected eastern district.
- Some of this bias reflected the failure to convert funding allocations into expenditures, possibly due to the conflict, but it primarily reflected bias in initial donor allocations.
- The bias towards the south and Hambantota in particular were consistent across bilateral, multilateral, and non-governmental donors. Bilateral donors tended to exert a strong bias against areas of LTTE control while multilateral donors balanced these tendencies.
- Funding biases resulted in divergent rates of housing reconstruction. By the end of 2006, only 20% of homes had been rebuilt in Ampara, 30% in Batticaloa. In Southern Province, Hambantota had received more than three new houses for every one destroyed (4,065 built versus 1,290 destroyed) and Matara had almost reached the break-even point, while the opposition stronghold of Galle had seen only 50% of homes replaced.

Taken together, the tsunami and the relief effort constituted at minimum a net \$150 million dollar transfer to the southwest of the country relative to the northeast before taking into account the cost in loss of life. The unfavorable distribution of within-district impacts for the Tamil population could only have exacerbated LTTE challenges in resource extraction and manpower recruitment. While these imbalances could not have been decisive in a renewed conflict, they could certainly have altered the GoSL calculus for assessing the potential costs and benefits to pursuing a military solution. The two years immediately following the tsunami saw annual increases in defense spending amounting to 40% per year. While inflation rose precipitously, some of the burdens of new expenditures, particularly on the SLFP support base, were mitigated by access to tsunami relief. GoSL has promised, credibly, that by the fourth anniversary of the tsunami they will have regained administrative and military control of the entire country.

The report ends with some modest recommendations and difficult questions for the way forward. To avoid misallocations of humanitarian resources in complex political ecologies, it is recommended that social vulnerability surveillance mechanisms be established, with possibilities for rapid linkage to disaster assessment mechanisms. Challenging questions persist for the future of aid delivery. It is easy to say that the renewal of conflict, even for those who would be happy to see the end of the LTTE, represent a suboptimal outcome from a humanitarian relief standpoint due to the damage, the instability, the further deterioration of conflict resolution mechanisms, and the high likelihood that the GoSL victory merely represents a shift to a guerrilla war, not an end to war. Yet it is difficult to identify approaches to the delivery of humanitarian assistance in such a contested context that would not create the incentives for belligerence.

## **Glossary**

ADB	Asian Development Bank
CFA	Cease Fire Agreement
DAD	Development Assistance Database
DCS	Department of Census and Statistics
DSs	Divisional Secretariats
GAM	Free Aceh Movement
GDP	Gross Domestic Product
GoSL	Government of Sri Lanka
GNs	Grama Niladaris (lowest level of government)
INGO	International Non Governmental Organization
JVP	Janatha Vimukhti Peramuna (People's Liberation Front)
LTTE	Liberation Tigers of Tamil Eelam
NGO	Non Governmental Organization
P-TOMS	Post-Tsunami Operational Management Structure
SLFP	Sri Lankan Freedom Party
TEC	Tsunami Evaluation Coalition
TRO	Tamil Rehabilitation Organization
UNDP	United Nations Development Program
UNP	United National Party

## **I. Introduction**

The Indian Ocean tsunami of December 26, 2004 is now widely regarded as one of the most significant natural disaster events of modern history. Its impact can be measured in the total loss of lives (estimated at about 225,000), in the number of countries experiencing loss of life (likely 14, covering a 4,000 mile radius), and in the global outpouring of grief and direct humanitarian relief and recovery assistance.

The tsunami has come to be associated with divergent trajectories in two of Asia's most persistent and violent civil insurgencies: in Tamil-controlled provinces of the island nation of Sri Lanka, and in the Aceh province of Indonesia. The conflict between the Government of Sri Lanka (GoSL) and the Liberation Tigers of Tamil Eelam (LTTE), who seek an independent Tamil homeland in the most tsunami-affected northern and eastern areas of the island nation, surged in the years following the tsunami. In Aceh, the separatist Indonesian province on the western tip of the island of Sumatra, it has been argued that the devastation of the tsunami, which killed 140,000 people there alone, precipitated a Finnish-brokered peace settlement between the Free Aceh Movement (GAM) and the government.

The debate over the role of the tsunami in the resumption of hostilities in Sri Lanka has been indecisive. Experts have developed well-reasoned arguments explaining why the tsunami was a so-called triggering event for the resumption of hostilities or, conversely, why the tsunami merely hastened or had no effect on a renewal of conflict that was inevitable given the incentives and attitudes on both sides. Into this fairly academic debate about intentions, a recent and stunning series of GoSL victories over LTTE forces raises a more provocative question: did the tsunami alter the balance of power in this long-stable conflict in favor of GoSL?

This paper attempts to shed light on the second question, and in the process perhaps explain the first, by looking at the impact of the tsunami on the balance of power in the conflict. It does not attempt to offer a deterministic, historiographic account of the path to war or the current GoSL advantage, but merely to summarize the available meso-level evidence on the relative impact of the tsunami on the capabilities and well-being of the parties to the conflict. The analysis will leverage publically available data on damage and aid flows, as well as more locally-specific data gathered in an ongoing study of post-tsunami Sri Lanka. I focus on the differential impacts of the tsunami and the ensuing aid efforts on the relative capabilities of the majority Sinhalese population and those of the Tamil minority, as well as the substantial Tamil-speaking Muslim minority living in Eastern Province. I also look specifically at differential tsunami impacts on key political strongholds of the parties to the conflict, namely the LTTE, the ruling Sri Lanka Freedom Party (SLFP) and the Sinhalese nationalist Janatha Vimukthi Peramuna (JVP) party.

After a brief review of existing evidence on disaster and conflict, I will offer a contextual overview of the Sri Lanka conflict and its connection to population movements. Subsequent sections will separately address the differential impact of the tsunami itself on key population groups, looking at how conflict-related population movements and vulnerability shaped the population impacts of the tsunami. After briefly reviewing the failed political arrangements aimed at delivering tsunami aid to both sides of the conflict, I estimate differentials in the flow of

foreign humanitarian assistance to these groups. I conclude with a summary accounting of the impact of the tsunami and the aid flow on the key groups. While the tsunami was neither a necessary nor sufficient condition for conflict reemergence or government victory, it may well have been a major contributing factor. Two considerations emerge for humanitarian practice: new approaches to balancing aid deliveries to belligerent parties, and better methods for anticipating and addressing the complex political ecologies of conflict environments.

## **II. Disaster and Conflict**

A growing body of research has generated significant insight into the underlying causes of conflict and the proximate processes leading to conflict escalation. Quantitative, cross-national regression approaches have been used to identify the “correlates of conflict”, with particular insight into the incentives for violence (including ethnic or economic grievance, resource scarcity, and elite exploitation of grievances). At the same time, a literature based on “comprehensive” case studies of conflict emergence and escalation have further emphasized the importance of access to conflict resources, including organization capacity, patronage and support networks, financial resources, human resources, and political capital. Each line of research has led to similar conclusions about the important role of ethnic and social grievances of parties to conflict, the capabilities of the parties, and the capacity of the state to manage conflicts. These literatures have further addressed the role of supposedly exogenous forces – including natural disaster, international financial flows, and the availability of weapons – on the emergence or escalation of conflict.

Collier and Hoeffler (1998) developed a simple yet powerful model of the political economy of conflict in which “the incentive for rebellion is the product of the probability of victory and its consequences”. Others have extended this model to look specifically at conflict reemergence (Quinn et al. 2007). A number of studies have applied this framework to address the role of natural disasters or foreign assistance in conflict emergence (Blouin and Pallage 2008). A recent paper by Nel and Righarts (2008) finds that natural disasters increase the short-term risk of conflict. While Collier and Hoeffler (2002) find no effect of aid on conflict reemergence outside of an economic growth effect, they do find that foreign aid promotes military expenditure (see also Collier and Hoeffler 2007).

The case study approach has found that conflicts such as in Rwanda and Sudan were driven in part by foreign assistance. Considerable concern was voiced about the role of foreign donors in supporting discrimination against minority groups, in fuelling insurgency and insecurity, or in supporting military build-up (Gasper 1999; Le Billon 2001; Cliffe and Luckham 2000; Fox 2001; Barnett 2005). Of particular concern has been the increasing tendency for modern humanitarian operations to span the entire continuum of emergency relief to long-term political and economic development (Fox 2001; Goyder et al. 2006). Many contest that whereas the former activity can be carried in a largely apolitical fashion, the latter can more readily co-opted to reflect the political agendas of geopolitical powers and local political elites (Buchanan-Smith and Maxwell 1994; Weiss 1999; Easterly 2003; Hillhorst 2002; Freeman 2004). Ofstad (2002) raised concerns about the magnitude and approach for aid delivery in post-conflict Sri Lanka, noting in particular the risks posed by the traditional bilateral development approach in which aid is delivered in a supposedly apolitical fashion while avoiding all conflict-affected areas.

Furthermore, the literature on the political ecology of conflict environments has promoted the need for donor awareness of the complex vulnerabilities of disaster impact and disaster response (Blaikie and Brookfield 1987; Peet and Watts 2004; Bryant and Bailey 1997; Peluso and Watts 2001; Bohle and Fünfgeld 2007). In a review of the humanitarian response in Sri Lanka, Goodhand and Klem (2005) describe the general concerns:

Although natural disasters are in a sense ‘non discriminatory’, war-affected countries have higher preexisting levels of vulnerability, whilst the distribution of vulnerability tends to be geographically concentrated in the areas most affected by violence.

The recognition that aid delivery cannot be made apolitical led in part to the development of the SPHERE standards for humanitarian intervention (SPHERE 2004; Tong 2004). The SPHERE standards emphasize the need for better evaluation of humanitarian response, better awareness of political realities, and an emphasis on a broader range of rehabilitation activities that can be summarized under the mantra of “build back better”. The decision support and data management mandated under the SPHERE approach facilitate the population-level analysis of damage and aid flows included in this paper. They also create two clear tensions in aid delivery, first between the desire to address political realities and the continued lack of advance data on political ecologic vulnerabilities, and second between the desire to build back better and the heightened risk that such advanced rehabilitation efforts will be captured by corruption or the very patronage systems that fuel conflict or generate vulnerability.

### III. The Sri Lankan Civil War

The conflict in Sri Lanka is neither a simple ethnic contest nor a mere two-sided affair. Studies from the fields of political economy, geography, anthropology, and sociology emphasize that the titanic military struggle between GoSL and the LTTE was by no means inevitable, but instead the product of a continuing series of alienating and isolating moves by GoSL and escalating responses from the Tamil community.

In 2004, Sri Lanka’s population composition by ethnicity/nationality was 74% Sinhalese (primarily Buddhist), 18% Tamil (primarily Hindu), and 7% Muslim (Department of Census and Statistics 2001). Total population was about 20 million. A substantial proportion of the country’s population lives within two compressed coastal ecosystems, a moist plain in the south and a dry zone in the northeast. As Figure 1 suggests, almost 20% of the country’s population lived in the tsunami-affected divisions, few of which strayed more than about 10 miles from the coast. Although the key ethnic parties to the conflict can be divided regionally, with Sinhalese in the south and Tamils and Muslims in the east, these broad ethnic groupings contain considerably diversity.

The Tamil population includes two separate groups. **Sri Lankan Tamils**, the key protagonists in the civil war, largely represent descendants of established Tamil populations dating back to the 19<sup>th</sup> century. A majority of Sri Lankan Tamils continue to live in the dry zone in the north and east of the country, though substantial numbers live in the capital city Colombo or have migrated to India, Canada, Australia, and other western countries. A majority of Sri Lankan Tamils

are Hindu, though a sizeable majority adhere to a variety of Protestant denominations. Further distinctions relate to caste and regional identity (Bush 1993). They will henceforth be referred to simply as **Tamils**.

**Indian Tamils**, who mostly live in and around tea estates in interior mountain areas, are descendants of workers transplanted from Tamil Nadu state in India during the British era. Their involvement in the civil war is largely incidental.

Most of the **Sinhalese** population dwell in the “wet zone”, the southern triangle connecting Colombo, the ancient mountain capital of Kandy, and the coastal areas of Galle, Matara, and Hambantota but substantial numbers also live in the north and east of the island. A majority adhere to Theravada Buddhism, with a sizable Catholic minority.

The **Muslim** population again consists of two separate groups, descendants of pre-colonial Arab traders who speak Tamil and live in the north and east of the island (particularly in Ampara and Trincomalee, formerly in Jaffna) and descendants of colonial-era Malay migrants who live on the south coast. Members of both groups also maintain a significant presence in Colombo.

While the ethnic divide traces to the presence of two separate Sinhalese and Tamil kingdoms at the time of colonization, the first grievances emerged with British policies favoring Tamils in colonial schools and civil service jobs. The post-colonial period witnessed a series of Sinhalese-language laws, affirmative action policies favoring Sinhalese, and a series of pogroms carried out by Sinhalese actors (de Silva 1997). The LTTE was formed in 1972 with a series of guerrilla attacks and political assassinations.

The move to increasingly organized violence was also neither two-sided nor inevitable. In fact many have made the argument that the seeds for inter-ethnic violence, military action, and ethnic chauvinism began with the brutal 1971 uprising by partisans of the virulently nationalist Buddhist social movement, the JVP. From their base in Hambantota District, in what is sometimes referred to as Sri Lanka’s deep south, the JVP staged a campaign of violence against Sinhalese and Tamil elites that killed between 1,000 and 10,000 partisans, soldiers, and civilians (Peebles 2006). Some point to the JVP episode for both a precedent for violent resolution of conflict. Furthermore, as in many similar cases of multiethnic societies, Abeyaratne (2004) argues that GoSL efforts to pacify and rehabilitate most of the JVP leaders may have contributed to the growing reliance on the Sinhalese language and Buddhist religion as sources of state legitimacy. Furthermore, the need to address the grievances that JVP represented contributed to an emerging system of patronage and entitlements within the Sinhalese population. The JVP staged a second, smaller insurrection in 1987-89 in objection to Indian intervention in the Tamil conflict.

Widespread conflict between the LTTE and GoSL began only in 1983 following an LTTE attack on a military outpost and the events of Black July, when between 400 and 3,000 Tamils were killed and many more fled in Sinhalese-majority areas (Peebles 2006). The LTTE articulated demands for an independent homeland in the Northern Province, with a largely Tamil



population, and Eastern Province, with a mixed population of Tamils and Muslims, who are mostly Tamil-speaking (Wilkinson 2003).

The LTTE has gained a global reputation for its tactical success in overcoming a significant resource and legitimacy gap, for narrowing this gap through a highly globalized network, and for its ruthlessness in leveraging the resources of the Tamil populations and maintaining control (Fair 2004; Baetjer 2007). In addition to governing, until recently, large stretches of northeast Sri Lanka, the LTTE has maintained a standing army, intelligence agencies, an elite women's battalion, the world's largest non-state navy, and more recently a rudimentary air force that staged a number of audacious attacks on the Sri Lankan armed forces.

Critical to building this capacity has been the LTTE's ability to leverage a durable and deep base of support from inside and outside Sri Lanka. Many have argued that the principal pillar of LTTE capacity and legitimacy lies in the Tamil diaspora. Wealthy Tamil communities in Australia, Canada, Switzerland and elsewhere have acted as political and media agents while providing significant financial support, both voluntary and coerced, to relatives, to the LTTE, and to the Tamil Rehabilitation Organization (TRO) and other charitable proxies (Byman et al. 2001; Fair 2004). Some have argued that legal restrictions of financial transfers to outlaw organizations following the September 11 attacks in the US had an impact on diaspora support (Gunaratna 2003). More recently the LTTE developed lucrative income streams through the smuggling of weapons to other insurgent groups in South Asia and through the finance of legitimate and illegitimate businesses in Colombo and abroad. Local support for the LTTE is discussed in the next section.

As the world's longest-running civil war, the Tamil conflict has had tremendous impact on loss of life and economic growth. It is estimated to have led to the death of 70,000 people, and the displacement of one million, or 5% of the population (Wilkinson 2003). Sri Lankan defense expenditures have risen from very low levels in 1982 (what specifically?) to 4.6% in 2008 (Pradhan 2001; Arunatilake et al. 2001; Ministry of Finance and Planning 2007, 2008).

Estimates of the total costs of the conflict range from the substantial to the staggering. Grobar and Gnanaselvam (1993) estimated the cumulative growth costs from 1983 to 1988 at about 20% of gross domestic product (GDP). Arunatilake et al. (2001) incorporate forgone investments, tourism impacts, lost property and human capital including areas under LTTE control to produce a cumulative cost from 1983 to 1996 of 168% of the 1996 GDP. This context provided obvious economic incentives for the Sinhalese-dominated government to end the war, but complex political dynamics also militated against efforts at peaceful solutions.

At the time of the tsunami, GoSL forces had retaken Jaffna District in Northern Province, which could be reached from the Sri Lanka mainland either by sea or by travelling through Mullaitivu and Kilinochchi Districts, which remain under LTTE control. Mullaitivu and Kilinochchi maintain parallel administrative and ministerial structures, with most public services remaining under GoSL control while a separate police, military, and courts are administered by the LTTE. A formal cease fire agreement (CFA), brokered by the Norwegian government and monitored by a coalition of EU and Scandinavian governments, was signed in 2003 (Wilkinson 2003). Nevertheless many argued at the time that the emotional, social, and demographic fallout from the conflict would make a long-term resolution quite difficult.

## **IV. Population, Politics, and Welfare on the Eve of the Tsunami**

Perhaps the most significant effects of the conflict lie in the deprivation and displacement of large segments of the population, setting the stage for continued degradation of conflict resolution mechanism and setting the stage for the tsunami and the acrimony surrounding the humanitarian relief process (Frerks and van Leeuwen 2000; Goodhand et al. 2000; Korf 2005). At the time of the ceasefire it was argued that no peaceful or viable mechanisms existed for inter-ethnic conflict resolution or power sharing (Orjuela 2003; Frerks and van Leeuwen 2000). On the contrary, the increasing legitimacy of the JVP in the Sinhalese-dominated parliament balanced the incentives toward renewed conflict. Goodhand et al. (2000) describe a more comprehensive set of conflict effects on the population of the northeast:

At the macro-level, war has accentuated regional imbalances. A range of factors restrict economic opportunities in the north-east including: multiple displacements; the development of ethnic enclaves; restrictions on mobility through road blocks and the pass system; an economic blockade; and restrictions on agricultural necessities and deep-sea fishing. Moreover government services have declined and there is limited investment in the region.

In spite of the considerable negative impacts of the conflict, Sri Lanka maintained a reputation for successful provision of entitlements throughout the conflict era, including one of the world's most cost effective health systems (Caldwell 1985; Anand and Kanbur 1990; Anand and Ravallion 1993). Yet there is evidence that the efficacy of these programs had degraded over time and that they had come to function as expressions of Sinhalese exclusionism first and favoritism towards core Sinhalese political constituencies. In particular, the dual forces of LTTE invasion and exploitation combined with GoSL policies aimed at supporting Sinhalese settler populations created conditions of considerable displacement and grievance. I discuss the politics of population and entitlements first in the northeast and then in Sinhalese-majority portions of the country. Population distribution is summarized in Figure 1.

### ***IV. 1. Tamil and Muslim Majority Areas in the North and East***

The Northern and Eastern Provinces are characterized by key distinctions in terms of LTTE control, social organization, population composition, and conflict impacts. The community of northern Tamils, particularly those from Jaffna, held pre-eminence in terms of caste, culture, and preference under British rule (Bush 1993). The LTTE has always made its base in the Northern Province, first in the largest population center, Jaffna, and then in the Wannu region, with their headquarters in the Kilinochchi District just to the south. While Jaffna and the Wannu once had substantial Muslim majorities, these populations were displaced by LTTE fighters during the 1990s. The conflict in the north has always been characterized by clearly delineated lines of control. The LTTE has maintained near formal judicial and military control of the Wannu for most of the conflict period, although bureaucratic and social services have operated in a complete parallel state structure (Matthews 2004). Aside from a brief period of LTTE control, Jaffna has remained under GoSL control, creating a difficult situation in which supplies can only reach Jaffna by sea or via highway through the Wannu, where the LTTE has maintained effective and lucrative tariff and toll posts. Fighting in the north has often consisted of conventional battles fought along well-defined battle lines. O'Sullivan (1997) describes the level of functionality, if not prosperity, prevailing in the sparsely populated north in the late 1990s:

In the north, the costs of the war were more an effect of the blockade than a reflection of a complete reversion to a situation where social capital has broken down... reversion to an "opportunistic equilibrium" in the north was prevented, in part, by the development of non-government institutions and alternative structures which came to serve the purposes that weakened or destroyed government institutions were no longer able to fulfill.

By contrast, Eastern Province has been characterized by considerably greater population heterogeneity, a more complex system of overlapping political and military control, and a much less conventional and diffuse mode of conflict. Until recently most areas of Eastern Province were characterized by a mix of GoSL and LTTE control, with considerable LTTE influence in government-controlled areas through informal taxation and extortion, through military intimidation, and through the sympathy of local government agents of Tamil descent. A number of coastal areas remained under LTTE control. More typical was a regime in which areas along the coastal highway were under GoSL control, while agricultural areas on the opposite side of coastal lagoons and uncleared jungle areas remained critical redoubts for LTTE cadres. In recent years GoSL has moved to a system of direct military governance, with tight controls on freedom of movement including permits, checkpoints, and closed military zones. These activities affect both the freedom of action of LTTE cadres and the livelihoods of local populations, as O'Sullivan (1997) describes in contrast to the north:

The type of warfare employed in the east, involving massacres, disappearances and identifications, seriously affected entitlements by breaking down the intangible element necessary for economic relations and the fair provision of public services—trust. This destruction of trust and the widespread suspicion and hostility accompanying it both reflected the dearth of civil institutions in the east and prevented their further evolution. So, on the one hand, the mode of warfare affects the costs of war by affecting the development or regeneration of institutions of civil society which can help supplement non-market entitlements.

GoSL policies with respect to population and development in Eastern Province have been characterized first by a regime of ethnic transmigration of Sinhalese populations, and second by an effort to segregate all three ethnic groups into segregated zones of ethnic concentration (Routray and Singh 2007). Upland areas of Eastern Province have always had a Sinhalese majority population. In the immediate post-colonial period GoSL engaged in a number of major irrigation and flood control projects on the Maya Oya, Gal Oya, and Mahaveli Rivers (Peebles 1990; Bastian 1999; Dunham and Jayasuriya 2001). These projects provided preferential water access to upland Sinhalese populations and served as a platform for programs encouraging the systematic migration of Sinhalese populations into cleared jungle and populated Tamil- or Muslim-majority areas (Peebles 1990; Korf and Engel 2006; Korf 2005).

These practices often promoted tacit or active support for the LTTE among local populations in spite of popular disgust with LTTE violence, appropriation of property, coercive recruitment or abduction of child soldiers, and a series of levies and tariffs that often crippled local population. Considerable evidence suggests that by the time of the ceasefire a majority of child soldiers and an increasing proportion of LTTE levies were drawn from the much larger population of the east (UTHR 1993). In 2007 Singh (2007) cites a report claiming that 7,500 out of 18,000 active

LTTE cadres were from Batticaloa and Ampara, while the number of child soldier recruitments post-CFA had been more than 2,000 in the east compared to only 500-600 in the north.

At the same time this environment created considerable tension between Muslim and Tamil populations living under various regimes of control as well as intra-Tamil conflict between northerners and easterners and by caste. The CFA in some ways exacerbated these tensions by providing LTTE with a singular position as lead negotiator for the Tamils and by formalizing their control over areas of the east where they had not previously held sway, including areas with sizable Muslim populations, even as GoSL forces maintained a tight perimeter around the area with control of upstream water resources.

Eastern-northern tensions culminated in 2004 with an opportunistic split from the LTTE by the top LTTE military leader in Eastern Province, Colonel Karuna, to the government side, ostensibly in the name of eastern autonomy. While the split was not complete, it nonetheless limited the freedom of LTTE military action, fundraising, and recruitment, particularly in Karuna's stronghold of Batticaloa District.

Downstream coastal areas of Eastern Province contain a complex mix of all three ethnic groups. Population displacement, through military and economic measures, has reshaped both the demographic balance and level of integration of the populations. In general, Sinhalese populations tend to concentrate in upland areas with greater water access; Tamils tend to live in lowland agricultural areas, fishing villages along coastal lagoons, with some low caste groups living in towns and cities; while Muslims tend to concentrate in towns and cities along the coastal highways. These general patterns are accompanied by further variation between the three districts.

In the north, the population of Trincomalee District is predominately Muslim with a significant Sinhalese minority. It is also the only district with a substantial Sinhalese population living in close coastal proximity. Recent years have seen a considerable reordering of population. Preferential access to the Mahaveli water scheme and other resources has led to a growth in the Sinhalese population. Secondary access to resources by Tamil and Muslim populations has been driven both by LTTE actions against the local Muslim population, occasional Muslim militancy, and governmental allocation of entitlements to favored groups, typically Muslims (Korf and Silva 2003; Korf and Engel 2006). A substantial number of Tamils have migrated away from rural coastal areas to Trincomalee town, Batticaloa District, Colombo, and overseas.

Batticaloa District is the only area of Eastern Province with a clear Tamil majority. In 2005 the coastal population of almost 400,000 was 73% Tamil and 26% Muslim, with a number of other minority groups and only a scattering of Sinhalese. A number of areas of Batticaloa District, including the coastal area of Vaharai, remained under LTTE control at the time of the tsunami. At the time of the tsunami control of most of Batticaloa was contested between the Karuna faction, with GoSL support, and the LTTE.

Ampara District, hardest hit by the tsunami, contains the largest concentrations of Muslim population in the country as well as a considerable Tamil community. The district itself is a wartime creation, which combined the predominately Sinhalese areas around Ampara town with the coastal Tamil and Muslim regions typically identified by the major town of Kalmunai. Considering only the coastal Divisional Secretariats divisions of each district, Ampara's population at the time of the tsunami was 64% Muslim and 30% Tamil. The only significant Sinhalese presence was found in the southernmost areas of Lahugala and Pottuvil, largely in inland areas unaffected by the tsunami.

As mentioned above, GoSL entitlement policies created considerable room for Muslim leaders to exercise authority or garner resources in Ampara and Trincomalee, even as LTTE cadres controlled significant swathes of jungle and engaged in violence at the increasingly segregated frontiers of mixed Tamil-Muslim towns such as Akkaraipattu. Unlike the comprehensive and violent displacement of Muslim and Sinhalese populations from Northern Province, displacement in much of Eastern Province, particularly Ampara and Trincomalee, was characterized instead by a gradual combination of physical violence, shifting economic power, and access to entitlements, namely water. While few studies have documented the exact conditions, timing, and destination of these displacements, the next section will make clear that they resulted in the placement of Ampara Tamil communities in a vulnerable position with respect to the coast in the most heavily tsunami-affected district.

#### ***IV.2. Sinhalese Majority Areas in the South and West***

A description of Sinhalese majority areas affected by the tsunami is simpler, though still arguably with great relevance to the re-emergence of conflict. Each of the three major districts – going from west to east Galle, Matara, and Hambantota – have overwhelming Sinhalese majorities. Yet it is significant in terms of the distribution of tsunami impact that most of the substantial Muslim minorities, mostly of Malay origin, in each district lived in cities placed directly on the coast. None of these areas has more than a token Tamil presence.

While the ethnic compositions of the three southern districts are similar, their political orientations are not. Prosperous Galle District lies in trading and even commuting range of Colombo and much of the country's lucrative tourism industry is based there. Galle is also the historical power base of the United National Party (UNP), which led the country into the peace accords. By contrast Hambantota is both poorer, more dependent on state entitlements, and both more stridently Buddhist and nationalist. The JVP uprising began in Hambantota District. More importantly, the current President and previous Prime Minister Mahinda Rajapakse hails from Hambantota District and previously served as a barrister in Tangalle, the largest city in Hambantota. In the 2001 election, JVP received 21% of votes in Hambantota, 13% in Matara, and 11% in the rest of Southern and Western Province compared to between 4 and 9% in southern areas away from the coast. The victorious United National Party received over 50% of votes in Sinhalese-majority areas as a whole, compared to 40% in Hambantota, 42% in Matara, and 40% in Galle. These trends grew stronger in the 2004 parliamentary poll when SLFP and JVP joined forces under the United People's Freedom Alliance. UPFA received 45.6% of votes nationwide compared to 64% in Hambantota, 60% in Matara, and 57% in Galle compared to about 50% in Sinhalese-majority areas as a whole.

In Western Province, the rural and suburban district of Kalutara has a substantial majority Sinhalese population while coastal areas of Colombo District contain sizable Tamil (20.7%) and Muslim (18.4%) minorities.

## **V. Tsunami Impact by District and Ethnicity**

### ***V.1. District Patterns of Damage***

The tsunami made significant landfall in each of Sri Lanka's 14 coastal districts. Figure 2 depicts the district pattern of damage in terms of the death toll and the estimated number of homes destroyed (National Disaster Management Centre 2005; Department of Census and Statistics 2005). The impact was felt first and, by most measures most severely, in areas to the east and therefore directly facing the source of the wave in Sumatra. By most any measure Ampara was the most heavily affected district, though there is considerable deviation between death toll and housing estimates. Relative to total coastal population, the extent of impact in Ampara was particularly high, though it should be noted that the area with the greatest housing and mortality impact relative to population was Mullaitivu, in the LTTE-controlled north. Although Batticaloa's coastal population was large compared to Ampara's, this includes densely populated areas of Batticaloa town, which were protected from direct wave impact by its large coastal lagoon; outlying coastal areas were among the nation's hardest hit. In the east, Trincomalee also sustained heavy damage, though considerably less than in Batticaloa, Ampara. In the north, Mullaitivu and Jaffna District experienced substantial housing damage and loss of life.

In spite of a more indirect wave impact, high population densities, coastal settlement patterns, and flat terrain led to substantial mortality and housing impacts in each of the three districts of Southern Province. With the lowest population and a protective harbor, Hambantota experienced the least housing damage, but the death toll and property damage was demonstrably high due to the loss of fishermen and their boats. Damages were much less substantial in Western Province, but high population densities in Colombo and Kalutara nonetheless resulted in considerable housing damage. As the final section shows, the size and quality of housing and the presence of a number of damaged businesses resulted in considerable additional property loss in Colombo, though more of those losses were insured.

### ***V.2. Ethnic Patterns of Damage***

The death toll statistics indicate without a doubt that the tsunami had a disproportionate effect on both the Tamil and Muslim minority communities. Considerable uncertainty exists, however, in terms of precise impacts and especially the relative impact on Tamils and Muslims. In the immediate aftermath of the tsunami, news began to circulate about its overwhelming impact on the Muslim population. Reports in the Muslim and national press suggested that over half of the dead were Muslim, a meme that gained considerable currency among donors as well. A report by the Muslim Information Centre of Sri Lanka in 2005 indicated that 41% of the dead were Muslim, a shocking impact given that Muslims make up only 8% of the population (Arab News 2005).

Two immediate concerns emerge with regard to these calculations of the Muslim impact. First, death toll is only one measure of tsunami impact, and the district-wise distribution of housing

suggests a much more balanced distribution, for instance between majority-Muslim Ampara and majority-Tamil Batticaloa. Housing impacts would be equally important in understanding the total impact of the tsunami on a community. Second, conclusions about the total mortality impact on the Muslim population were predicated on a series of potentially untenable assumptions about the relative distribution of tsunami deaths or homes destroyed at the below-district level. First, it would be easy but incorrect to assume that the 32% Tamil minority in Ampara and the 26% Muslim minority in Batticaloa roughly cancel one another out. Furthermore, it was suggested that the concentration of Muslims in cities, which tend to lie near the coast, would have made them more vulnerable.

Both of these assumptions turn out to be untenable, a relevant concern both for how they obscured the overall ethnic impact of the tsunami and because they allowed aid agencies to ignore the impact of the tsunami on vulnerable communities in Sri Lanka's complex political ecology. While it remains difficult to construct reliable population death toll estimates at the below-district level, I have constructed such estimates for the tsunami's housing impact, reported in greater depth in Kuhn (2008). While most of the affected districts had mixed ethnic population distributions, ongoing segregationist policies mean that most Divisional Secretariats (DSs) and all but a handful of Grama Niladaris (GNs), the lowest unit of political organization, are mono-ethnic. By directly collecting ethnic composition from GNs and linking them to DCS housing damage estimates, I was able to estimate with a considerable degree of precision the total ethnic distribution of destroyed homes in each district and study these distributions.

As Table 1 indicates, the results suggest that assumptions about the below-district distribution of housing damage dramatically underestimate the impact of the tsunami on the Tamil population. The first set of damage estimates is based on an assumption that the ethnic distribution of damage within a district would reflect the overall distribution of that district's coastal DS divisions, as indicated in Figure 1. As logic would suggest, the minority of Tamil homes in Ampara and Muslim homes in Batticaloa would cancel one another out.

Yet when below-district damage and ethnic composition are employed, we see a different reality with considerably greater Tamil impact than was previously known. In majority-Muslim Ampara, Tamils accounted for only 32% of the population but 51% of the homes destroyed. In contrast, in Batticaloa Tamils were relatively worse affected even though they were the majority population. The district population was 73% Tamil, but the data indicate that that 88% of destroyed homes belonged to Tamils. In contrast, about 100% of all homes lost in Northern Province belonged to Tamils as a result of aggressive patterns of ethnic cleansing (Routray and Singh 2007). In Southern Province the concentration of Muslims in coastal cities did result in upward adjustments in Muslim homes destroyed, but not in large numbers. In Hambantota and Matara, GN-based estimate imply about 700 additional Muslim homes lost compared to the district estimate. In Galle, however, the largest concentration of Muslims resided in the city of Galle, which was protected by the impenetrable walls of the old Dutch-era fortress.

Putting the district-specific estimates together, Table 1 indicates that a fairly naïve district-based estimate of the ethnic composition of destroyed homes would have significantly underestimated the extent of damage in the Tamil community. The total percentage of destroyed homes belonging to Tamils rises from 42% to 48%, while the percentage Muslim drops from 27% to 23%. If we assume for the moment that tsunami-related deaths were distributed within villages at

the same pattern as destroyed homes, we can adjust the death toll estimates from Figure 2 and get a rough estimate of the ethnic distribution of tsunami deaths. This is shown in Figure 3, which suggests that an estimated 46-47% of those who died in the tsunami were probably Tamil, 23-25% were Muslim, and 29-30% were Sinhalese.

For overall context, it is useful to remember that the national population distribution at the time was 74% Sinhalese, 18% Tamil, and 7% Muslim. Clearly the average Sri Lanka Muslim had a substantially higher relative risk of dying than a Sinhalese and a slightly higher relative risk than a Tamil. But, as shown in Figure 1, the population distribution of the coastal districts affected by the tsunami was in fact 61% Sinhalese, 21% Tamil, and 17% Muslim. Using the coastal population as a comparison point, it remains clear that both Tamils and Muslims were substantially more impacted by the tsunami than Sinhalese, but coastal Tamil communities would appear to have been relatively harder hit.

One way to summarize this finding would be to say that Muslims were heavily affected because they lived near the coast, while Tamils were heavily affected both because they were near the coast and they were more vulnerable. An ongoing paper on the particular dynamics of tsunami impact in Ampara provides greater detail on the demographic and socioeconomic processes underlying this disparity (Kuhn 2008). To summarize, while Muslims did indeed live in cities on the coast, these cities were often somewhat removed from the coasts and Muslims often lived in neighborhoods that were in some way protected, with a few devastating exceptions such as Kalmunai and Maruthamunai. In contrast, Tamils tended to live in more vulnerable areas of cities or in highly vulnerable rural towns such as Komari and Sinna Mugathuwaram, often situated on sand bars between ocean and coastal lagoon and often suffering a complete loss of housing and property with some of the highest rates of mortality.

Table 2 uses GN-level data on total households and damaged homes to divide homes destroyed in the tsunami into heavily (>30% of houses destroyed) and moderately affected communities for four study groups: Ampara Tamil communities, Ampara Muslim communities, Batticaloa (including Tamil and Muslim), and Southern Province (including a small number of Muslim communities). Within each type of community it indicates the percentage of homes destroyed. The table demonstrates the extent to which Tamil victims were concentrated in heavily affected communities losing more than a third of all homes, indicating a more comprehensive loss of physical and social capital and a more complex rebuilding process. Overall, 80% of Ampara Tamils who lost their homes lived in heavily affected communities compared to only about 58% of Ampara Muslim ones. Tamil heavily affected communities were also worse affected, losing about 70% of all homes compared to 51% in heavily affected Muslim communities.

Tamil communities in general, and heavily affected ones in particular, also experienced severe socioeconomic disadvantage relative to Ampara Muslims or any other community of interest in the study. Table 3 summarizes an analysis of community survey data collected in 141 GNs indicating that the most heavily affected Tamil communities had substantially lower living standards than the already poor Tamil average, while heavily affected Muslim communities were better off than the Muslim average.<sup>2</sup> All Ampara Muslim communities were above average on

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<sup>2</sup> The Living Standards Index was generated from a factor analysis of community prevalence of indoor water taps, flush toilets, cement or block walls, gas or electric cooking facilities, and electric lighting source.



this index, and heavily affected communities, mostly in relatively prosperous towns, were above average. Ampara Tamil communities were well below average. While the inland Tamil communities unaffected by the tsunami were even worse off, the heavily affected communities housing 80% of Ampara's Tamil victims were also about one standard deviation below average. Overall living standards were higher in Southern Province and lower in Batticaloa District. The survey did not cover the Northern Province. Socioeconomic disadvantage among must certainly have played a role in determining the level of tsunami damage (for instance through poor coastal protections or housing) and would, in a perfect world, have suggested that a greater level of attention be paid to restoring the homes and livelihoods of such communities.

## **VI. Post-tsunami relief and recovery**

### ***VI. 1. Contested Relief Processes***

It is by now conventional wisdom that the global response to the Indian Ocean tsunami of December 26, 2004 was unprecedented in its scale and complexity. Foreign governments, international organizations, multilateral institutions, and private citizens allocated and delivered more financial and logistical assistance than had been delivered following any natural disaster, before or since (UNDP 2005; Flint and Goyder 2006; Houghton 2007). Foreign donors became more deeply involved in direct service delivery and reconstruction in unprecedented ways, most notably in the area of housing reconstruction. The appointment of a former US President, Bill Clinton, as Special Envoy for the tsunami enhanced funding prospects that were already high due to the extensive media coverage. Donor commitments to the original humanitarian flash appeal issued in January 2005 were timely and covered 120% of estimated costs. Detailed damage assessments were then prepared by Asian Development Bank (ADB), the World Bank, and the Japanese International Cooperation Agency (ADB 2005). UNDP set out a post-tsunami reconstruction strategy based on the key principle of matching funding to objectively assessed damage. Around 98% of proposed recovery and reconstruction activities were funded in the two most heavily affected countries, Indonesia and Sri Lanka (TEC 2006). An unprecedented 50% of funds were allocated through UN mechanisms that were unconditional with respect to sector or region. This still left considerable room for donor expression of regional or sectoral preferences through the underfunding of UN commitments and through remaining funding commitments, particularly in the housing sector, were mostly coordinated by or operating through government channels.

The immediate aftermath of the disaster also saw a brief period of cooperation between the GoSL, LTTE, and even stridently Sinhalese-nationalists groups such as the JVP (Peiris 2005; Izzadeen 2005). Izzadeen reported in 2005:

The prompt aid by civil society organizations to the tsunami-affected people - even while the Government appeared to be in complete disarray - was seen as a precursor, not only to rebuilding Sri Lanka but also to achieving an elusive national unity. Everyone was helping the affected people without differences of race, ethnicity, caste or class. For a moment it seemed that even the divisive politics, which has long been the bane of this country, had been swept away by the great waves. Many believed that a real peace was now possible, since the tsunami had weakened the LTTE's ability to resume the war, and an apparently

over-confident President Kumaratunga declared that she could say for certain that there would not be another war. Politics seemed to be a dirty word for the first time since universal adult franchise had been introduced in Sri Lanka in 1931.

Yet as early as January 22, 2005 both sides had expressed concerns that foreign assistance funds would be used for military expenditures rather than relief along with other suspicions. Shortly after the tsunami GoSL designated a coastal buffer zone within which housing reconstruction was forbidden. The boundaries, 100m in the south and 200m in the east and north, were perceived by many as a means of slowing the pace of housing reconstruction in the east. With considerable foreign pressure, an emergent joint mechanism for aid delivery was formalized under the CPA as the Post-Tsunami Operational Management Structure (P-TOMS) June 24, 2005. This would have established a joint management and oversight structure for tsunami relief, and district-level committees that would have majority LTTE representation in the north and east. Immediately, JVP withdrew from the coalition government and filed a constitutional case against P-TOMS (Baetjer 2007). On July 15, 2005, the Sri Lanka Supreme Court ruled key provisions of P-TOMS to be unconstitutional. Few donor or academic reports document specific donor responses to this development. Though it likely had some impact on donors more accustomed to working with governments, many donors had already oriented their funding frameworks around the possibility of a P-TOMS collapse. United Nations agencies, for instance, reported no change in their intentions to distribute aid throughout the island (Senadhira 2005).

The election in November 2005 of Mahinda Rajapakse as President was followed by further escalation in tension. Rajapakse received 66% of the vote in Hambantota, 63% in Matara, 59% and Galle, and 53% in Kalutara compared to 50% overall. By comparison, he received 19% of votes in Batticaloa, 33% in coastal Ampara, and 38% in Trincomalee in spite of a declared LTTE boycott of the election. No successor framework for joint operations or finance emerged; instead the conflict reignited, including a series of widely reported atrocities by GoSL and LTTE against civilians and aid workers.

## ***VI. 2. Foreign Assistance Flows***

Post-tsunami foreign assistance effort did not reflect the regional distribution of damage affecting Tamil and Muslim populations. This section describes the level of donor financial contribution based on data from the Development Assistance Database (DAD) maintained by United Nations Development Program (UNDP)-Bangkok. DAD includes data for all post-tsunami relief, recovery, and rehabilitation projects funded by international or national donors for all implementers, both government and non-government. This analysis focuses only on funding in the Social Services and Infrastructure sector. Data on housing completion from published sources and the tsunami field study. Some of the disparity between level of damage and levels of support and action results from the reemerging conflict, but much of the disparity was present in donor commitments that preceded the renewal of fighting.

Table 4 compares assistance flows in the housing and infrastructure sector to the number of homes destroyed for each affected province and district. Overall, just over one billion dollars were committed to housing and infrastructure, or \$20,474 per home. This budget sector includes other costs such as community infrastructure around affected communities, and so was bound to be higher than the \$5,000 per home budgeted for most donor- and owner-driven housing projects. As of May 2008, only \$351 million, or 35%, had actually been expended, which

averaged to \$7,092 per home. Unexpended project costs could suggest incomplete data, but a number of factors suggest otherwise. First, most of the unexpended costs reflect funds that were never even disbursed (about 55% of costs were actually disbursed). The gap between commitments and expenditures is a common in most humanitarian emergencies (Feyzioglu et al. 1998; UN News Service 2005). One commonly heard though unsubstantiated story holds that more of the funds committed after Hurricane Mitch hit Honduras in 1998 were actually spent on the tsunami than on Mitch itself. Second, the rate of expenditure in the Sri Lanka DAD database was comparable to the rate observed for Thailand (32%) and Maldives (49%). It is also comparable to the expenditure rate found in the more comprehensive and up-to-date EDIMS database maintained by the Government of Sri Lanka (39%). A few distinct regional patterns emerge in the data.

In **Eastern Province**, Ampara and Batticaloa, each with 20% of damage, received about 14% of total housing assistance, or about \$14,000 per home destroyed. Actual expenditures (\$5,247 for Ampara, \$4,641 for Batticaloa) were roughly in line with the typical \$5,000 per home cost employed by most agencies and by the government's owner-driven housing grant program. Trincomalee, which also has a significant Sinhalese population, received a substantially large allocation (\$35,619 per home). More of that was left unexpended, but the average expenditure remained \$8,431.

In **Northern Province**, Kilinochchi, the LTTE base, received a substantial aid commitment relative to damage (\$132,464), though much of this was not delivered. This was also balanced out by the particularly low commitment to heavily affected Mullaitivu District (\$10,411). A relatively high rate of expenditure mitigated this deficit, but Mullaitivu nonetheless received the lowest expenditure per home at \$4,469. Aid commitments and expenditures in government-controlled Jaffna District were above average per home, both in terms of commitment (\$21,670) and expenditure (\$6,937).

Overall, housing commitments to **Southern Province** were substantially higher than in the rest of the country, though there was also considerable variation by district in line with Sinhalese political alignments. In Hambantota, the power base of the ruling SLFP and its JVP partners, \$103 million was committed to the sector, or almost \$80,000 per destroyed home. None of this seemingly excess commitment was eliminated during the expenditure process as 34% of the total commitment was expended, resulting in a \$26,966 expenditure per destroyed home, or more than five times more funding per home destroyed than in the three hardest-hit northern districts of Ampara, Batticaloa, and Mullaitivu. Next door Matara received less, though still considerably more than average. Matara was allocated \$36,557 per home destroyed and 44% of these funds were actually expended, resulting in a per home expenditure of \$16,145, or three times higher than heavily affected northeast districts. By contrast, Galle District, the base of the opposition party, was just about average in terms of per home commitment (\$19,242) and expenditure (\$6,814), though still 40% higher than heavily affected northeast districts.

In **Western Province** commitments were about average, though again higher than in the northeast. In Colombo, low per home commitments and expenditures reflected the greater number of insured losses. Like neighboring Galle District the heavily affected Kalutara, also an opposition party stronghold, received average commitments and expenditures. Lightly affected Gampaha, north of Colombo, received substantially above-average commitments, reflecting in part the tendency for some funders to divide commitments equally among all affected districts irrespective of impacts.

Taken together, expenditures indicate a significant bias in the provision of housing assistance relative to the level of housing impact. Table 5 disaggregates this pattern by specific donor type. For the total recovery effort, the expenditure per home in a single district (from Table 4) is compared to the national expenditure per home using a relative contribution ratio. For each donor type, the ratio compares the expenditure per home in a particular district to the national expenditure per home for that donor type. Overall, expenditures per damaged home were twice as high in Southern Province as in the northeast. Within the south, aid per home was 3.75 times higher than average in the president's home district Hambantota, 1.94 times higher in neighboring Matara, and merely average in other areas of the south. Overall expenditures were less favorable to Eastern Province, which received 79% of the national per house average. Particularly disadvantaged were Batticaloa (66% of average) and Ampara (74%) while Trincomalee, the only district with a substantial Sinhalese population living in coastal divisions, was 23% above average. Overall Northern Province expenditures were around the average, though considerably lower than those found in the south. Expenditures per house were four times the average in the LTTE base of Kilinochchi, though this was starting from a small number of damaged homes. Allocations to Mullaitivu were only 73% of average. Expenditures in government-controlled Jaffna District were about average.

The breakout by donor type offers insight into the ways in which funding priorities affected the overall housing deficit in the northeast. Each of the three main donor types, constituting 97% of all housing assistance, favored Southern Province in their commitments, but their approaches to the north and east differed.

**Bilateral aid** was considerably tilted towards the south and away from the rebel-controlled north. Eastern Province received substantial aid, but this was heavily concentrated in moderately affected Trincomalee District, the only affected area in the east with a large coastal Sinhalese population. Bilateral donors gave less than half their average allocation to Mullaitivu and just more than half of the average to Batticaloa, and two thirds of the average to Jaffna. In Southern Province, bilateral expenditure per home destroyed was 64% higher than their national average, though expenditures in Western Province were lower than average. The table does not show the further variation in geographic distribution of expenditures between bilateral donors such as the United States which displayed a strong preference for government-controlled areas in the northeast versus European donors who emphasized LTTE-controlled areas. Either way both shared a bias towards the south.

**Multilateral funding** showed a comparable if slightly lower level of bias towards Southern Province but a different pattern of bias with respect to the northeast. Multilateral expenditures were higher in LTTE-controlled areas and lower in government-controlled portions of the northeast. Multilaterals expenditures in affected districts of Northern Province were substantially higher than their average commitment (44% higher), but were well below average in Eastern Province (36% lower). Average funding for Southern Province was 45% above average. Within the northeast this had the effect of balancing the bilateral preference for supporting government-controlled areas, but the overall southern advantage remained. It remains unclear whether the balancing of funds to government- and LTTE-controlled areas of the northeast was the result of conscious coordination between America, other bilateral, and multilateral donors. It is clear that such a “good cop, bad cop” approach was applied to prior development and peace-building assistance before and during the CFA (Burke and Mulakala 2005). What is notable is the extent of the southern advantage that results from this balancing among areas of the northeast.

**International Non Government Organizations** (INGOs) were the largest source of housing assistance. INGOs exerted a substantial bias towards Southern Province, giving 4 times their average allocation to Hambantota District. INGO contributions in the northeast were much lower than in the south, and balanced evenly between Eastern Province (82% of the average) and Northern Province (88% of average). INGO contributions to Kilinochchi were quite high (5.46 times average), suggesting the presence of some Tamil welfare organizations in the database.

These findings imply a comprehensive imbalance of donations that cuts across all donor types. They do not back up anecdotal stories attributing the majority of the waste or mistargeting to NGOs. While it is quite likely that many unregistered agencies distributed aid in a haphazard or inappropriate manner, these results suggest that the major NGOs that accounted for 40% of the total housing recovery effort behaved in a similar fashion to bilateral and multilateral agencies. All exercised a bias in favor of the political base of the ruling political party.

### ***VI. 3. Impact on Housing Reconstruction***

Differential aid commitments resulted in population-level variations. Figure 3 compares the number of homes destroyed in the tsunami and the number built in the reconstruction effort for the districts included in the GN survey, separating Ampara into Tamil and Muslim villages. These results reflect data through the end of 2006, so some more homes were built subsequently. A clear ordering emerges. By the end of 2006 Ampara and Batticaloa had replaced 20% and 30% of homes, respectively, with about 80% of these homes being replaced through the owner-driven grant program. In Galle, the least favored and wealthiest of the southern districts, 50% of homes had been rebuilt, with almost all coming from the owner driven program. In Matara, not only had 96% of homes had been rebuilt, but a great majority had been built through direct donor construction efforts. Finally, Hambantota had received more than three new homes for every home destroyed in the tsunami.

Extrapolating these estimates to other parts of the country based on the level of expenditure in those areas would suggest that the Tamil community had lost about 18,000 net homes (23,795 homes destroyed and perhaps 6,000 built). Assuming 4 persons per households, this means that 72,000 Tamils, or 15% of the Tamil population of the northeast, remained homeless or ill-housed by the end of 2006, two years after the tsunami. In Ampara in particular, the 4,000 Tamil families still unhoused at that time would have constituted about 38% of the district's Tamil population still homeless. In larger Batticaloa, only 10% of the Tamil population remained homeless as a result of the tsunami, but rates of homelessness would have been considerably higher in coastal areas, while interior areas were experiencing high rates of displacement due to the renewed conflict. By contrast, southern Sri Lanka had experienced no net loss of housing. In fact, in addition to receiving one house for every tsunami victim (supposing all victims received a home), the net gain of 2,800 homes in Hambantota district implied that 5% of the district's population had received a new or second home.

## **VII. The Coda: Renewed Conflict, Decisive Victory**

After the collapse of P-TOMS and the election of President Rajapakse, LTTE leader Prabhakaran, in his annual martyr's speech on November 27, 2005, declared that the LTTE would renew its struggle. A series of battles were followed by a further five month period of renewed peace talks before the LTTE pulled out of talks on April 20, 2006. From that point on the total number of casualties rose and the balance of casualties began to shift in the government's favor. The total number of fatalities rose from 109 in 2004 and 330 in 2005 to 4,126 in 2006, including 981 civilians and 2,319 LTTE cadres (SAIR 2007). Government forces repulsed LTTE attacks in Trincomalee in the east and Jaffna in the north, and regained control of Sampur in Trincomalee. January 2, 2007 the GoSL announced that it would pull out of the cease fire agreement. In 2007, GoSL began a major and successful offensive. The government regained control of tsunami-affected Vakarai in Batticaloa District after a lengthy siege, gaining complete control of the east, and began its assault on the north. In 2007 4,369 died, with the vast majority (3,345) being LTTE fighters (SAIR 2008). In 2008 there have been a number of major land and sea battles with continued GoSL advantage. In August 2008 GoSL regained complete control of Manner district in the north and began what seemed to be an irresistible push toward reclaiming the LTTE strongholds in Kilinochchi and Mullaitivu (SAIR 2008).

We are thus left asking not whether the tsunami caused the renewal of conflict in Sri Lanka, but whether the tsunami and response altered the balance of power. Most experts in the region seem to suggest that the conflict was always likely to resume. In spite of the temporary success of the CFA, many have argued that the mechanisms for sustained conflict resolution simply did not exist. In spite there has been some suggestion that the tsunami and the ensuing grievances surrounding the delivery of aid and the collapse of the P-TOMS agreement might have hastened the inevitable march back to war. Yet such discussions were largely predicated on the notion that the LTTE would be unwilling to accept any peace settlement, and thus would be the inevitable instigator of renewed conflict. In the event, the reemergence of conflict was driven as much by government actions and rhetoric as that of the LTTE, even though the government would have had much to lose had the entire aid program been disrupted.

What effect might the tsunami have had on the delicate balance of power in Sri Lanka's civil war? First, the tsunami constituted a fairly sizeable net economic transfer away from the key

pools of support for the LTTE and towards the Sinhalese heartland. Table 6 compares the initial fiscal assessment of tsunami damages conducted by the World Bank and Asian Development Bank with expenditures from DAD (ADB 2005). Taken together, the tsunami relief process constituted a net \$150 million dollar advantage for the southwest versus the northeast. A number of specific considerations suggest that the net impact of the tsunami and the relief process was considerably larger. Most immediately, even a conservative estimation of the statistical value of a lost life at \$50,000 would increase the net impact over \$500 million in favor of the southwest. While neither the southwest nor the northeast are monoethnic entities, additional factors suggest that the tsunami may have had even more devastating for the Tamil community and enabling for the Sinhalese leadership.

The net loss of resources was concentrated in four Tamil majority districts of Jaffna, Kilinochchi, Mullaitivu and Batticaloa totaling about \$50 million. In the case of Jaffna and Mullaitivu, these losses were substantial, 314 and 810 per person respectively. Each of these areas also suffered considerable loss of life. Substantial minorities of the Tamil population of Mullaitivu, Batticaloa, and Ampara remained homeless more than two years after the tsunami. Assessed tsunami damages in Muslim majority Ampara and Trincomalee were matched by relief funds, but this does not account for the substantial loss of life in these areas. Nor does it account for the likelihood that relief funds in Ampara and Trincomalee could be diverted away from Tamil communities or at least those sympathetic to the LTTE. The detailed assessment of the distribution of damage in Ampara demonstrates that Tamils suffered a majority of home damage in this 65% Muslim district, that more Tamil victims came from communities were thoroughly devastated, and that these communities suffered high levels of socioeconomic vulnerability as a result of the conflict. Yet much of the public and donor discourse surrounding the tsunami presented it as a Muslim tragedy. Scholars have noted the particular failure of donor-driven relief mechanisms to formulate fair approaches to working the complex political ecology of Ampara in particular (de Silva 2008).

In contrast, post-tsunami relief efforts in Sinhalese majority areas were substantial enough to result in an estimated \$100 million positive transfer to these areas. More specifically, this surplus was concentrated in districts with strong support for the ruling SLFP and its nationalist JVP partners, including \$41 million dollars (\$174 per person) and 2,800 new homes for Hambantota District and \$20 million for Matara (\$74 per person).

While military capabilities are hardly a simple result of economic and population capabilities, they two are certainly connected. On the Sinhalese side, the relative lack of tsunami damage and the relative surplus of relief in Sinhalese areas may have encouraged voters to return the UNP with a substantial parliamentary majority and presidential mandate that enabled a more brisk march to war. Furthermore, the availability of substantial funds for tsunami relief; extensive rehabilitation of livelihoods, finance, industries; and considerable debt relief may have eased, at least temporarily, the fiscal and political costs of increasing on-budget allocations to defense by 29% in 2006 (from \$800 million to \$1 billion) and a further 32% in 2007 (to \$1.4 billion). During this period defense spending as a share of GDP rose from 2.8% to 4.4%. Although these fiscal actions have taken an inevitable toll on foreign investment flows, preferential trade agreements with wealthy nations, and the rate of inflation, the tsunami may have created enough fiscal and political space to facilitate the scaled up military efforts. For instance, the simple difference between tsunami relief and assessed damages to southern Sri Lanka, about \$100

million, would have constituted about 50% of the net increase in defense spending in 2006, the first post-tsunami budget, versus 2005.

On the LTTE side, there exists at least some evidence that the tsunami's impact was not merely economic. Press accounts appear to indicate that the tsunami had an impact on the military and civil capabilities of the LTTE shadow government based in the devastated coastal area of Kilinochchi. These effects were probably minimal, but great uncertainty surrounds them. Initial reports suggest that the LTTE lost more than 1,000 cadres at its naval base in Mullaitivu, but the LTTE acknowledge only a handful. Reports of damage to the sea tiger naval fleet were more plausible, but the ferocity of later sea battles would indicate that the damage was not complete. Still, it is plausible that the damage was sufficient to limit LTTE capacity to maintain supply lines, fight sea battles, and protect the coastline. It would seem likely that the more substantial impact of the tsunami on the LTTE resulted from the loss of lives and property among populations they depend on for financial, military, and logistical support.

Two unrelated factors clearly played a role in the shifting balance of power, though both could very well have been exacerbated by the tsunami. First, the global crackdown on financial transfers to political groups in the aftermath of the September 11 attacks may already have begun to take a toll on the capabilities of the LTTE, though it is unclear how substantial these effects were (Gunaratna 2003; US Treasury 2007). But in the absence of the tsunami, the shifting legal environment would have merely constituted a shortage of resources, possibly only temporary and awaiting a new approach to shadow financial transfers. It could therefore be argued that the negative transfer caused by the tsunami amplified the effects of the financial system changes, creating a pressing demand for capital in a period of shortage. It is clear that the Tamil Rehabilitation Organization and other global Tamil welfare organizations were unable to transfer enough funds to offset their disadvantage in the international assistance program (Cherian 2006).

Second, government efforts to support the breakaway Karuna faction in Eastern Province would have compromised Tamil support for the LTTE in Eastern Province even in the absence of the tsunami. All the same, the tsunami may have hampered ongoing LTTE efforts to subjugate the breakaway faction and reestablish taxation and administrative mechanisms. Moreover, the tsunami may also have altered the balance of power between the Karuna faction, financed and armed directly by GoSL, and an increasingly constrained LTTE.

## **VIII. Conclusions**

In light of these findings, it is not possible to conclude with certainty that the tsunami either encouraged the GoSL to march to war or enabled them to do so with such success. But we may draw a few relevant conclusions. First, it is highly plausible that the tsunami's impact and the distribution of post-tsunami relief efforts contributed to the decisive outcome in a variety of ways. The foreign aid response provided differential net benefit to the dominant party in the conflict and specifically to areas supporting the ruling party. These allocations and the political space they opened up may at least have altered the cost-benefit calculus of Sri Lankan political and military leaders. The effects of foreign assistance could well have been amplified if Sri Lankan intelligence had classified evidence of substantial damages to LTTE military capability. It remains unclear whether such allocations resulted from inattention to detail or from a political



imperative, but it is noteworthy that the extent of southern bias in foreign assistance was much greater among bilateral donors, particularly the United States, than among multilaterals.

Second, it also seems likely that the differential impact of the tsunami on coastal Tamil populations, itself a result of past rounds of conflict, left the Tamil population more vulnerable than even was assessed by most aid agencies. Even if aid had been allocated more fairly at the regional level based on regional reporting, the resulting levels of aid would still have resulted in a differential negative impact of the tsunami on the Tamil population. While foreign assistance agencies should perhaps make more rapid and comprehensive efforts to address the needs of threatened localities even if their burdens are the result of random processes, it is clear that the burdens faced by Tamil communities were not random but rather result of discriminatory policies pursued by the GoSL. In this light, it would seem reasonable to expect post-disaster relief agencies working in conflict-affected areas to be acutely aware of the likelihood that minority communities would be more heavily affected than would appear from a simple regional assessment. One possible solution would involve methods for conducting highly localized rapid assessments and more readily incorporating these findings into commitments. A simpler, yet less precise approach would be to adjust regional commitments in accordance with the likelihood, based on existing evidence of coastal vulnerability in conflict areas, that local minorities will have greater recovery and relief needs.

If we are to conclude that post-tsunami relief efforts contributed to a decisive end to the 25-year civil conflict in Sri Lanka, one final question would be whether this outcome was so bad. After all, members of the international system are surely free to exercise whatever priorities they please when providing assistance to foreign countries? The LTTE have an extensive reputation of severe human rights violations and exploitation at home and extortion and smuggling abroad. Is not the defeat of such a notorious organization a reasonable part of “building back better”?

This conclusion may be satisfying to some, but concern still exists about the nature of the current balance of power and the path by which it was reached. First, experts with local knowledge point out that the military and territorial defeat of the LTTE does not necessarily imply the end to the war, merely the beginning of a new guerilla phase of the war. More consequentially, the grievances that brought the country’s Tamil population to support the LTTE still exist and in fact have been exacerbated by perceptions of the post-tsunami relief process and by a series of well-publicized human rights violations. The GoSL’s march towards a policy of ethnic segregation of population and biased distribution of entitlements has been further institutionalized by the post-tsunami relief process. While the temporary immiseration of the Tamil population contributed to current government success, the path to alleviating this misery in a pluralistic fashion is unknown. The war and the post-tsunami recovery process have also reopened numerous other grievances within the society, between Muslims and Tamils, between conflict-affected and tsunami affected groups, and between class and political groupings within Sinhalese society.

The post-tsunami relief process may have tilted the Sri Lankan calculus temporarily in favor of a government military solution, but it did little to change the permanent balance of power. The distribution of damage and foreign assistance created incentives, possibly perverse ones, to encourage a short-term action with as yet unknown long-term effects. The creation of such incentives seems like a risk worth avoiding on the grounds of ethical humanitarian practice and stability, and due to economic and humanitarian costs of the past two years of fighting. Yet it is

difficult to make clear recommendations for how to avoid creating such incentives when engaging in such a massive aid effort. It seems reasonable to suspect that the bias in housing relief to Hambantota was in some ways the price of doing business, though no qualitative reporting has yet uncovered how these decisions were made. If international humanitarian interventions are to engage in a broadening range of development activities in a world of increasing vulnerability to disaster these kinds of ethical quandaries seem inevitable.

Table 1: Estimates of Ethnic Distributed of Destroyed Homes Using District-level and below-district population distributions

Province	District	Using District Population Distribution				Using Grama Niladari / Divisional Secretariat Population Distribution		
		Total	Tamil	Muslim	Sinhala	Tamil	Muslim	Sinhala
Eastern	Ampara	10,566	3,339	6,783	402	5,351	5,175	38
	Batticaloa	9,835	7,219	2,528	20	8,615	974	41
	Trincomalee	4,600	317	2,870	1,389	469	3,164	967
Northern	Jaffna	3,686	3,686	0	0	3,686	0	0
	Kilinochchi	288	288	0	0	288	0	0
	Mullaitivu	5,137	5,137	0	0	5,137	0	0
Southern	Galle	5,557	22	406	5,118	6	434	5,117
	Hambantota	1,290	5	32	1,253	5	326	960
	Matara	2,500	8	128	2,365	7	427	2,063
Western	Colombo	3,088	639	568	1,776	177	159	2,752
	Gampaha	314	10	14	286	35	34	245
	Kalutara	2,654	35	234	2,312	19	483	2,152
<b>Total</b>		<b>49,515</b>	<b>20,704</b>	<b>13,563</b>	<b>14,919</b>	<b>23,795</b>	<b>11,176</b>	<b>14,335</b>
<b>% of Total</b>			<b>42%</b>	<b>27%</b>	<b>30%</b>	<b>48%</b>	<b>23%</b>	<b>29%</b>

Source: Department of Census and Statistics, Census of Population and Housing (2001), Census on the Buildings and People Affected by the Tsunami (2005); Secondary Data Collection from Divisional Secretariats (2006)

Table 2: Tsunami-Damaged Households Divided into Moderately and Heavily Damaged Communities and Extent of Damage in Each Community Type, by Study Group

Study Group	Moderate Damage			Heavy Damage		
	Households	Homes Destroyed	% Destroyed	Households	Homes Destroyed	% Destroyed
Southern Province	62,091	4,765	8%	6,382	3,246	51%
Ampara District Muslim	20,830	2,268	11%	5,977	3,029	51%
Ampara District Tamil	7,192	1,056	15%	6,040	4,206	70%
Batticaloa District	24,861	3,071	12%	8,379	5,604	67%
Total		11,160			16,085	

Source: Same as Table 1

Notes: Heavy damage defined as 30% or more of houses destroyed

Study group defined as follows: Southern Province includes all affected portions of Galle, Matara, Hambantota Districts (including some Muslim communities); Ampara District is divided into Tamil and Muslims; Batticaloa includes Tamil and Muslims communities together

Table 3: Community Living Standards Index, by Study Group and Severity of Impact

Study Group	Unaffected	Moderately Affected	Heavily Affected	Total
Southern Province	0.12	0.72	0.45	0.45
Ampara Muslim	0.03	0.05	0.44	0.07
Ampara Tamil	-1.19	-0.46	-0.95	-0.90
Batticaloa	-0.66	-0.62	-0.48	-0.62
Total	-0.19	0.23	-0.30	0.00

Source: Tsunami Impact Survey; DCS(2005)

Table 4: Post-tsunami recovery allocations and expenditures to Social Services and Infrastructure Sector compared to Housing Damage for all projects tracked in Development Assistance Database, by Province and District

District	Cost			Expenditure		
	Housing Damage	Total (\$millions)	Per Home (\$)	Total (\$millions)	Per Home (\$)	Percent of cost
Ampara	12,640	141	11,122	55	4,386	39%
Batticaloa	11,657	140	12,003	46	3,916	33%
Trincomalee	5,322	164	30,787	39	7,287	24%
<b>Eastern Province</b>	<b>29,619</b>	<b>444</b>	<b>15,002</b>	<b>140</b>	<b>4,722</b>	<b>31%</b>
Jaffna	4,143	80	19,279	26	6,172	32%
Kilinochchi	288	38	132,464	7	23,141	17%
Mullaitivu	5,276	53	10,137	23	4,352	43%
<b>Northern Province</b>	<b>9,707</b>	<b>172</b>	<b>17,669</b>	<b>55</b>	<b>5,686</b>	<b>32%</b>
Galle	7,071	107	15,122	38	5,355	35%
Hambantota	1,559	103	66,035	35	22,320	34%
Matara	3,492	91	26,176	40	11,560	44%
<b>Southern Province</b>	<b>12,121</b>	<b>301</b>	<b>24,852</b>	<b>113</b>	<b>9,324</b>	<b>38%</b>
Colombo	3,739	29	7,692	15	4,124	54%
Gampaha	447	17	38,219	9	19,388	51%
Kalutara	3,422	51	14,863	19	5,562	37%
<b>Western Province</b>	<b>7,607</b>	<b>97</b>	<b>12,709</b>	<b>43</b>	<b>5,667</b>	<b>45%</b>
<b>Total</b>	<b>59,054</b>	<b>1014</b>	<b>17,171</b>	<b>351</b>	<b>5,944</b>	<b>35%</b>

Source: Development Assistance Database (2008) records all projects coded under Social Services and Infrastructure sector, including national and international donors; population data from secondary data collection in Divisional Secretariats (2006)

Table 5: Post-tsunami expenditures to Social Services and Infrastructure Sector per house and relative to national per-house average, for All Donors and by Donor Type

	All Donors		Bilateral		Multilateral		INGO	
	Per House	Relative	Per House	Relative	Per House	Relative	Per House	Relative
Ampara	4,386	0.74	1,266	0.79	2,004	0.57	1,069	0.84
Batticaloa	3,916	0.66	857	0.54	1,840	0.65	1,208	0.77
Trincomalee	7,287	1.23	3,663	2.30	2,086	0.79	1,469	0.87
Eastern Province	4,722	0.79	1,536	0.96	1,954	0.64	1,196	0.82
Jaffna	6,172	1.04	1,051	0.66	2,131	1.59	2,961	0.89
Kilinochchi	23,141	3.89	2,507	1.57	13,054	4.00	7,460	5.46
Mullaitivu	4,352	0.73	669	0.42	1,486	1.18	2,197	0.62
Northern Province	5,686	0.96	887	0.56	2,104	1.44	2,679	0.88
Galle	5,355	0.90	1,287	0.81	1,959	1.09	2,030	0.82
Hambantota	22,320	3.75	4,746	2.97	9,640	3.71	6,910	4.03
Matara	11,560	1.94	4,316	2.70	4,742	1.17	2,186	1.98
Southern Province	9,324	1.57	2,604	1.63	3,749	1.45	2,702	1.57
Colombo	4,124	0.69	618	0.39	2,378	0.46	857	0.99
Gampaha	19,388	3.26	10,367	6.50	1,887	3.82	7,129	0.79
Kalutara	5,562	0.94	482	0.30	2,289	1.50	2,791	0.96
Western Province	5,667	0.95	1,129	0.71	2,309	1.12	2,095	0.97
Total	5,947	1.00	1,596	1.00	2,393	1.00	1,865	1.00
Percent of Total	100%		27%		40%		31%	

Source: Same as Table 4;

Notes: Expenditure per house for all donors taken from Table 4 expenditure per house.

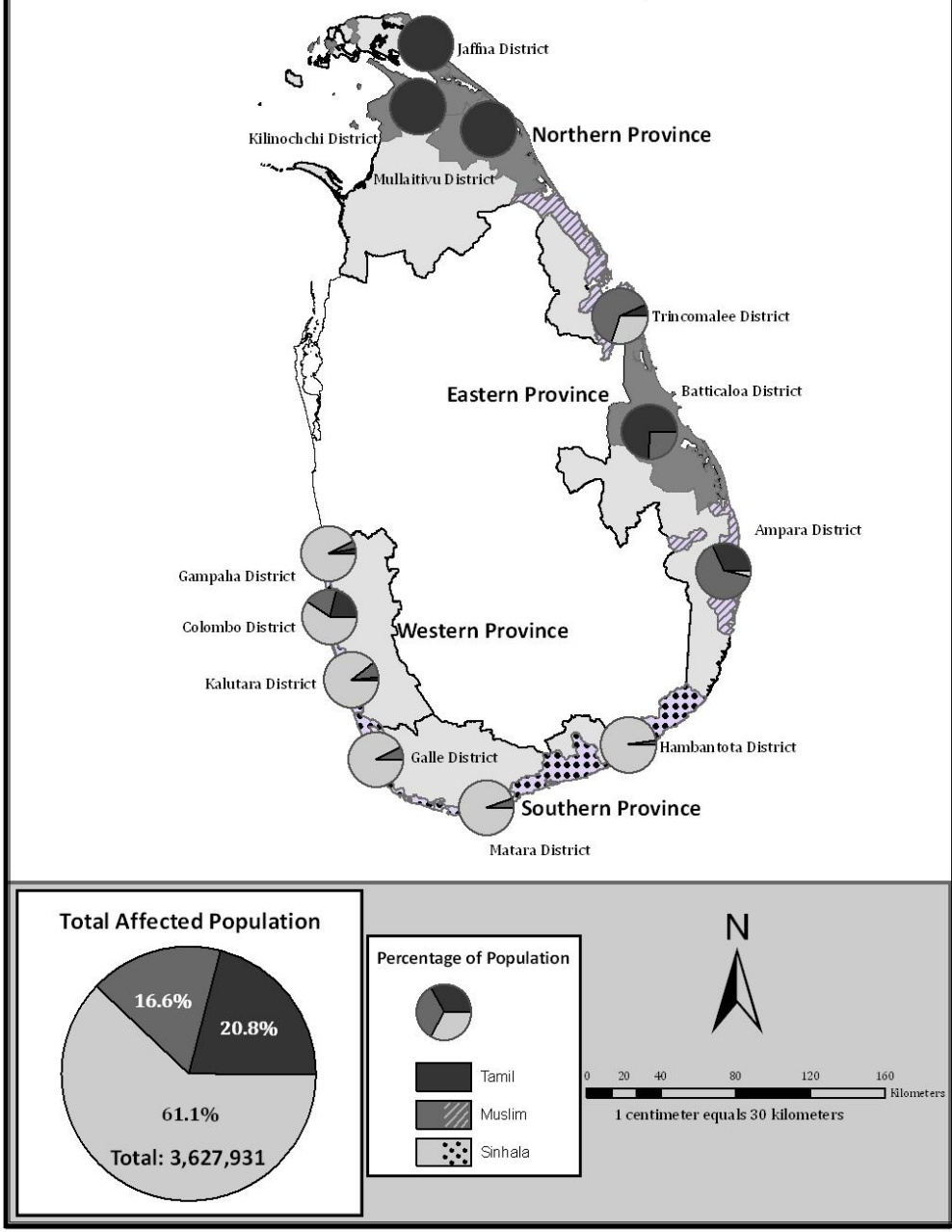
Table 6: Estimated Net Fiscal Impact of Tsunami on Northeast and Southwest of Sri Lanka  
(All values in Millions of Dollars)

	Northeast			Southwest		
	Damage	Recovery	Net Impact	Damage	Recovery	Net loss
Housing Impact	271	195	-76	101	156	+55
Other Damage Sectors	240	241	+1	146	180	+34
Total	511	437	-74	247	336	+89
Deaths @ \$50,000	1,031		-1,031	661		-661
Total	1,542	437	-1,105	908	336	-572

Source: Asian Development Bank (2005); Previous tables and figures

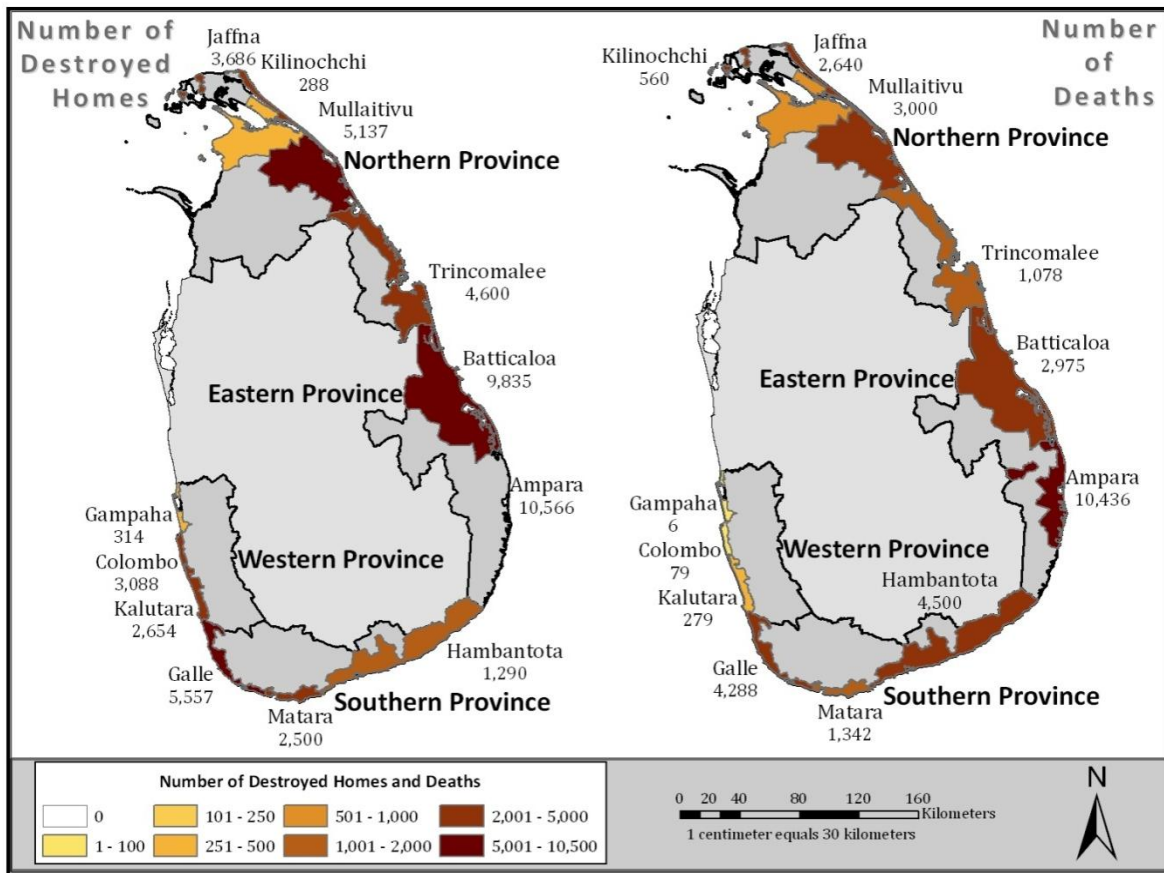


Figure 1: Ethnic Population Distribution of Tsunami-Affected Divisions, by District



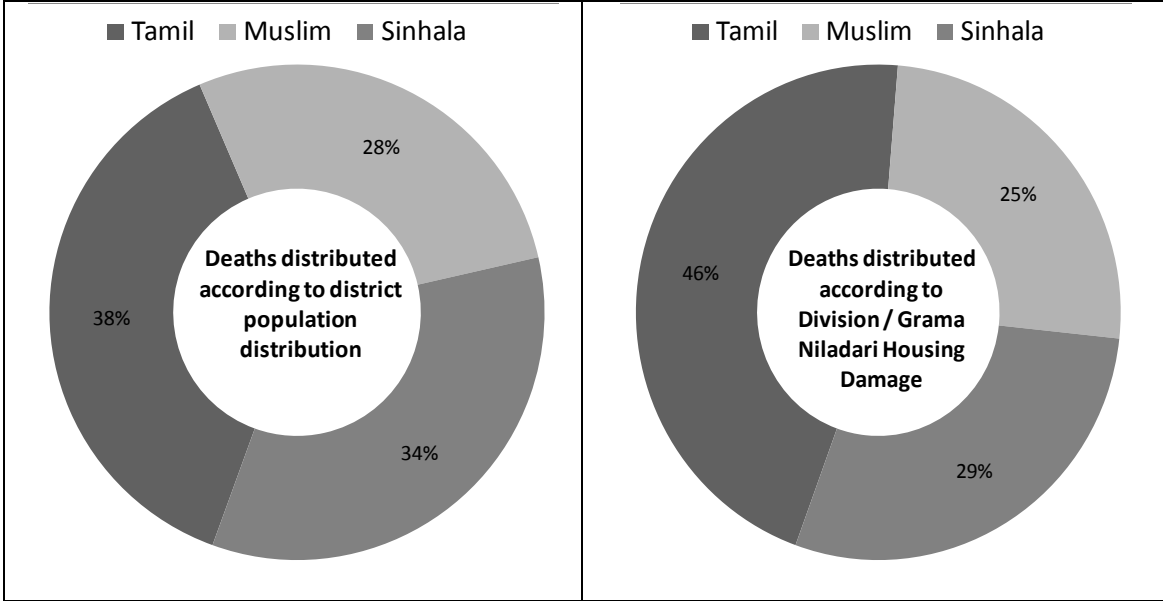
Source: Department of Census and Statistics (2001); Secondary data collection at Divisional Secretariats

**Figure 2: Tsunami Deaths and Homes Destroyed by District**



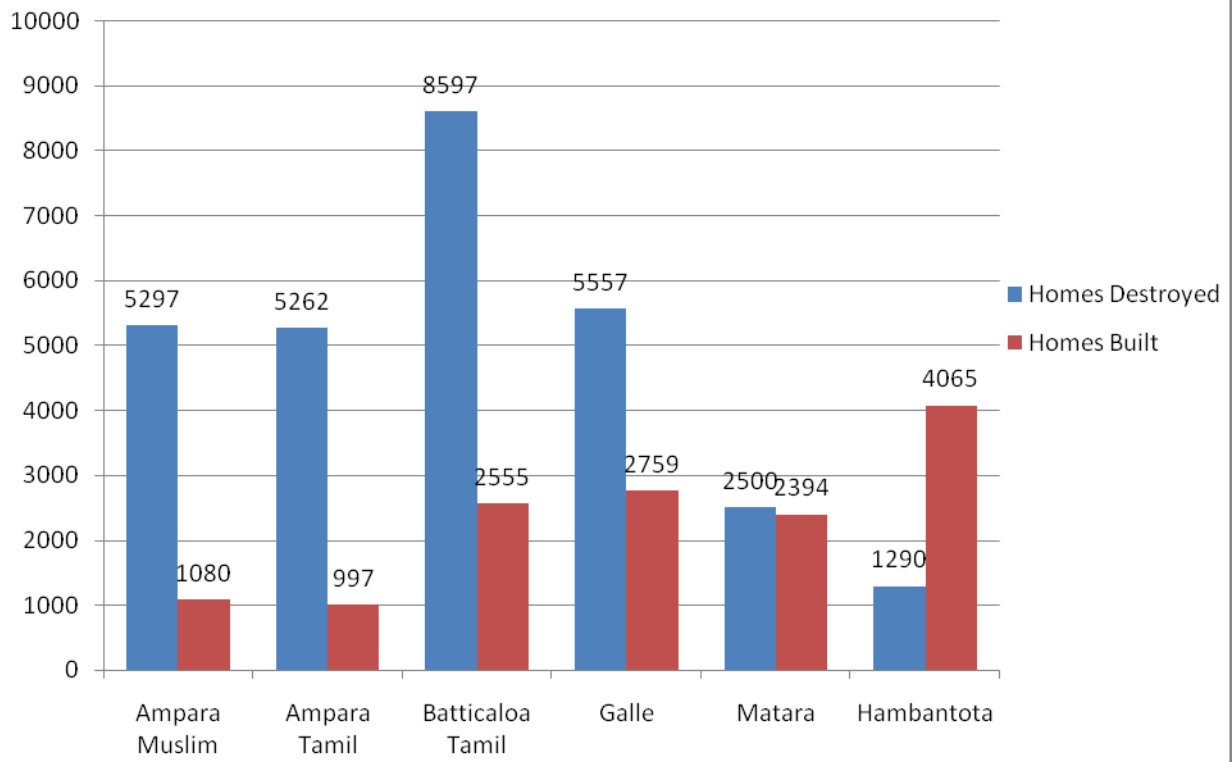
Source: Deaths from National Disaster Management Centre (2005); Homes from Department of Census and Statistics (2005)

**Figure 3: Estimated Ethnic Distribution of Tsunami Deaths Using Distribution of Population and Housing Damage**



Source: Same as Table 2

**Figure 4: Total Homes Destroyed and Total Homes Built, selected sub-populations**



Source: Secondary data collection with Divisional Secretariats

Abeyaratne, Sirimal. 2004. Economic Roots of Political Conflict: The Case of Sri Lanka. *World Economy* 27(8): 1295-1314.

Anand, Sudhir, and Ravi Kanbur. 1990. "Public Policy and Basic Needs Provision: Intervention and Achievement in Sri Lanka." In Jean Dreze and Amartya Sen, eds., *The Political Economy of Hunger*, vol. 3, Endemic Hunger. Oxford: Clarendon Press.

Anand, Sudhir, and Martin Ravallion 1993. Human development in poor countries: On the role of private incomes and public services. *Journal of Economic Perspectives* 7: 133- 150.

Arab News 2005. Half of Lanka Tsunami Dead Muslims. 10 January 2005.

Arunatilake, Nisha, Sisira Jayasuriya, Saman Kelegama. 2001. The Economic Cost of the War in Sri Lanka. *World Development* 29(9): 1483-1500.

Asian Development Bank 2005. *Sri Lanka 2005 Post-Tsunami Recovery Program Preliminary Damage and Needs Assessment*. Prepared By Asian Development Bank, Japan Bank for International Cooperation, and World Bank, Colombo, Sri Lanka, January 10 – 28, 2005

Baetjer, Patrick B. 2007. An Alternative View: Sri Lanka's Experience with an Enduring Insurgency. In Joseph R. Cerami and Jay W. Boggs (eds.), *The Interagency and Counterinsurgency Warfare: Stability, Security, Transition, and Reconstruction Roles*. US Army Strategic Studies Institute.

Barnett. 2005. Humanitarianism Transformed. *Perspectives on Politics* 3: 723-740

Bastian, S., The failure of the state formation, identity conflict and civil society responses – the case of Sri Lanka, (University of Manchester/University of Bradford, September 1999) p.24.

Blaikie, P. M., and H. C. Brookfield. 1987. *Land degradation and society*. London: Methuen.

Blouin, Max and Stephane Pallage. 2008. Humanitarian Relief and Civil Conflict. *Journal of Conflict Resolution* 52(4): 548-565.

Bohle, Hans-Georg and Hartmut Fünfgeld. 2007. The Political Ecology of Violence in Eastern Sri Lanka. *Development and Change*. 38(4): 667-687

Bryant, R and S. Bailey S. 1997. *Third World political ecology*. London: Routledge.

Buchanan-Smith, M.S. and Maxwell, S. 1994. Linking relief and development: an introduction and overview, *IDS Bulletin* 25(4).

Burke, Adam and Anthea Mulakala. 2005. *Donors and Peacebuilding: Part of the Sri Lanka Strategic Conflict Assessment 2005*. Asia Foundation, Colombo.

Bush, Kenneth D. 1993. Reading Between the Lines: Intra-Group Heterogeneity and Conflict in Sri Lanka. *Refuge* 13(3): 15-22.

Byman, Daniel, Peter Chalk, Bruce Hoffman, William Rosenau, David Brannan. 2001. *Trends in Outside Support for Insurgent Movements*. Santa Monica: RAND Research Monograph.

Caldwell, J.C. 1986. Routes to low mortality in poor countries. *Population and Development Review* 12(2): 171-220.

Cherian, Saji. LTTE's Diaspora Resources. *South Asia Intelligence Review*. Vol 4, No 38. 4/3/2006. [http://www.satp.org/satporgtp/sair/Archives/4\\_38.htm#assessment2](http://www.satp.org/satporgtp/sair/Archives/4_38.htm#assessment2)

Cliffe, Lionel and Robin Luckham. 2000. What Happens to the State in Conflict?: Political Analysis as a Tool for Planning Humanitarian Assistance. *Disasters* 24(4): 291-313

Collier, Paul and Anke Hoeffler. 1998. "On Economic Causes of Civil War." *Oxford Economic Papers* 50 (4): 563-73.

Collier, Paul, and Anke Hoeffler. 2002. Aid, policy and peace: Reducing the risks of civil conflict. *Defence and Peace Economics* 13 (6): 435-50.

Collier, Paul and Anke Hoeffler. 2007. Unintended Consequences: Does Aid Promote Arms Races. *Oxford Bulletin of Economics and Statistics* 69 (1): 1-27.

De Silva, KM. 1997. Affirmative Action Policies: The Sri Lankan Experience. *Ethnic Studies Report* XV(2): 245-287.

De Silva, M.W. Amarasiri. 2008. Ethnicity, politics and inequality: post-tsunami humanitarian aid delivery in Ampara District, Sri Lanka. *Disasters* 33(2): 253-273.

Department of Census and Statistics. 2005. Census on the Buildings and People Affected by the Tsunami, web-based reporting and personal data transmission.

Department of Census and Statistics. 2001. Census of Population and Housing. CD Data file.

Development Assistance Database (DAD). 2008. UNDP, Bangkok.

Dunham, David and Sisira Jayasuriya. 2001. Liberalisation and Political Decay: Sri Lanka's Journey from Welfare State to a Brutalised Society. Institute of Social Studies, Netherlands, Working Paper 352.

Easterly, William 2003. The cartel of good intentions: the problem of bureaucracy in foreign aid. *Journal of Policy Reform* 5(4): 1-28.

Fair, C. Christine. 2004. *Urban Battle Fields of South Asia Lessons Learned from Sri Lanka, India, and Pakistan*. Santa Monica: RAND Arroyo Center

Feyzioglu, Tarhan, Vinaya Swaroop, and Min Zhu. 1998. A Panel Data Analysis of the Fungibility of Foreign Aid. *World Bank Economic Review* 12: 29-58.

Flint, M. H. Goyder. 2006. *Funding the tsunami response*. Tsunami Evaluation Coalition, London .

Freeman, Paul K. 2004. Allocation of post-disaster reconstruction financing to housing. *Building Research & Information* 32(5): 427-437

Frerks, G. and M. van Leeuwen. 2000. The Netherlands and Sri Lanka: Dutch Policies and Interventions with Regard to the Conflict in Sri Lanka. The Hague: Conflict Research Unit, Clingendael Institute.

Frerks, G. B. Klem. 2005. Tsunami Response in Sri Lanka Report on a Field Visit From 6–20 February 2005. Clingendael (Netherlands Institute of International Relations), Wageningen University, Wageningen .

Fox, Fiona. 2001 New Humanitarianism: Does It Provide a Moral Banner for the 21st Century?. *Disasters* 25(4): 275-289

Gasper, Desmond R. 1999. “Drawing a line”: Ethical and political strategies in complex emergency assistance. *European Journal of Development Research* 11(2): 87–114.

Goodhand, J., N. Lewer, and D. Hulme. 2000. NGOs and Peace-Building: Sri Lanka Study. Manchester: Institute for Development, Policy and Management, University of Manchester.

Goodhand, J., N. Lewer, and D. Hulme. 2000. Social Capital and the Political Economy of Violence: A Case Study of Sri Lanka. *Disasters* 24(4): 390-406.

Goodhand Jonathan and Bart Klem 2005. *Aid, conflict and peacebuilding in Sri Lanka 2000–2005*. Asia Foundation, Colombo.

Goyder, Hugh, Cowan Coventry, Jerry Adams, Tania Kaiser, Suzanne Williams and Ian Smillie 2006. *Linking Relief, Recovery, and Development (LRRD) – Policy Study*, London: Tsunami Evaluation Coalition.

Grobar, Lisa Morris and Shiranthi Gnanaselvam. 1993. The Economic Effects of the Sri Lankan Civil War. *Economic Development and Cultural Change* 41(2): 395-405.

Gunaratna, Rohan 2003. Sri Lanka: Feeding the Tamil Tigers, in: Ballentine, K. and Sherman, J.: *The Political Economy of Armed Conflict – Beyond Greed and Grievance*. Boulder, CO: Lynne Rienner, p. 197 – 224.

Hilhorst, Dorothea 2002. ‘Being Good at Doing Good? Quality and Accountability of Humanitarian NGOs’. *Disasters* 26(3): 193–212.

Houghton, Rachel 2007. *The Tsunami Evaluation Coalition: Implications for Practice*, London: Tsunami Evaluation Coalition.

Izzadeen, Ahmed. 2005. Aid adds Venom to Politics. *South Asia Intelligence Review* 3(28): January 24, 2005.

Korf, Benedikt. 2005. Rethinking the Greed–Grievance Nexus: Property Rights and the Political Economy of War in Sri Lanka. *Journal of Peace Research* 42(3): 201-217.

Korf, Benedikt and Stefanie Engel. 2006. On the Incentives of Violence: Greed and Pride in Sri Lanka's Civil War. *South Asia Economic Journal* 7(1): 99-116.

Korf, Benedikt and Kalinga Tudor Silva. 2003. Poverty, Ethnicity and Conflict in Sri Lanka. In "Staying Poor: Chronic Poverty and Development Policy. Chronic Poverty Research Centre, Department for International Development, UK.

Kuhn, Randall. 2008. Conflict, Coastal Vulnerability, and Resiliency in Tsunami-Affected Communities of Sri Lanka. In M. Gamburd, D. McGilvray (eds.), *Tsunami Recovery in Sri Lanka: Ethnic and Regional Dimensions*, Routledge Press, forthcoming.

Le Billon, Philippe 2001. The political ecology of war: natural resources and armed conflicts. *Political Geography* 20(5): 561-584.

Matthews, Bruce 2004. 'In pursuit of an 'interim administration' in Sri Lanka's North and East: opportunity or 'peace trap'?. *The Round Table* 93(373): 75-94

Ministry of Finance and Planning. 2007. Government of Sri Lanka

Ministry of Finance and Planning. 2008. Government of Sri Lanka

National Disaster Management Centre 2005. Official tsunami death toll statistics.

Nel, Philip and Marjolein Righarts. 2008. Natural Disasters and the Risk of Violent Civil Conflict. *International Studies Quarterly* 52(1): 159-185.

Ofstad, Arve. 2002. Countries in Violent Conflict and Aid Strategies: The Case of Sri Lanka. *World Development* 30(2): 165-180.

Orjuela, Camilla. 2003. Building Peace in Sri Lanka: a Role for Civil Society? *Journal of Peace Research* 40(2): 195-212.

O'Sullivan, Meghan. 1997. Household Entitlements During Wartime: The Experience of Sri Lanka. *Oxford Development Studies* 25(1):

Peebles, Patrick. 1990. Colonization and Ethnic Conflict in the Dry Zone of Sri Lanka. *Journal of Asian Studies* 49(1): 30-55.

Peebles, Patrick. 2006. *The History of Sri Lanka*. Westport, CT: Greenwood Publishing Group.

Peet, R. and Watts, M., Editors, 2004. *Liberation ecologies (2nd ed.)*, Routledge, London.

Peluso, N.L. and Watts, M. 2001. *Violent environments*. Ithaca, NY: Cornell University Press.

Peiris, G.H. 2005. Polarised Vote. *South Asia Intelligence Review* 4(19).

Pradhan, Gyan. 2001. Economic cost of Sri Lanka's ethnic conflict. *Journal of Contemporary Asia* 31(3): 375-384.



- Quinn, J. Michael, Mason, T. David and Gurses, Mehmet(2007)'Sustaining the Peace: Determinants of Civil War Recurrence. *International Interactions* 33:2,167 — 193
- Raman, B. "The Tsunami & the LTTE". South Asia Analysis Group. Paper no. 1217. 10/1/2005. <http://www.southasiaanalysis.org/papers13/paper1217.html> also appeared in Asia Times online
- Routray, Bibhu Prasad and Singh, Ajit Kumar. 2007. The Pawns of War. *South Asia Intelligence Review* 5(12): October 12, 2006.
- Senadhira, Sugeeswara. 2005. Lankan Envoy says UN Aid Will Flow Despite PTOMS Delay. *Asian Tribune*, 22 July, 2005.
- Singh, Ajit Kumar. 2007. Batticaloa: LTTE's Lost Citadel. *South Asia Intelligence Review* 5(43): May 7, 2007.
- South Asia Intelligence Review. 2007. Sri Lanka Assessment 2007.
- South Asia Intelligence Review. 2008. Sri Lanka Assessment 2008.
- SPHERE Project, Humanitarian Charter and Minimum Standards in Disaster Response, 2004 edn.: <http://www.sphereproject.org/handbook/pages/navbook.htm?param1=0>
- Tong, Jacqui 2004. Questionable Accountability: MSF and Sphere in 2003. *Disasters* 28(2): 176–89.
- Tsunami Evaluation Coalition (TEC). 2006. *Funding the Tsunami Response*. Tsunami Evaluation Coalition, London.
- United Nations Development Program (UNDP). 2005. Post-Tsunami Recovery and Reconstruction Strategy.
- United Nations Security Council. 2006. Report of the Secretary-General on children and armed conflict in Sri Lanka. December 20, 2006.
- United Nations News Service. 2005. Tsunami donor session opens with UN call to pay up and not forget other crises. January 12, 2005.
- US Department of the Treasury. "Treasury Targets Charity Covertly Supporting Violence in Sri Lanka". 11/15/2007. <http://www.treas.gov/press/releases/hp683.htm>
- University Teachers for Human Rights. 1993. The Clash of Ideologies and the Continuing Tragedy in the Batticaloa and Amparai Districts, Special Report No. 14.
- Weiss, Thomas G. 1999. Principles, Politics and Humanitarian Action. *Ethics and International Affairs* XIII: 1–32.
- Wilkinson, Ray 2003. The Road to Recovery: Sri Lanka Emerging from the Ruins. *Refugees* 1(130): 4–13.