Five Years On: Livelihoods in Tsunami-affected Communities

EVIDENCE FROM SRI LANKA AND INDIA

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REPORT 4
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1. Introduction

This report investigates the livelihoods of households in post-tsunami housing resettlement programs in Sri Lanka and India and discusses policy issues and challenges for future livelihoods development.

South Asian coastal communities rely on a limited and precarious livelihoods base. Marine resources, which are the principal source of income for many households and indirectly support many more, are under pressure from over-fishing and eco-system degradation. At the same time, options for diversification or switching to alternative income generating activities (IGAs) are constrained by poor infrastructure, low educational attainment, lack of access to finance and a lack of attention to pro-poor development in emerging livelihoods sectors such as tourism and labour markets abroad. In rural areas geographic isolation constitutes an additional disadvantage, restricting access to jobs and markets and discouraging investment, while low-income urban fishing communities, many of which occupy illegal squatter tenements in coastal exclusion zones, experience social marginalisation and discrimination. Lack of a strong diversified livelihoods base intensifies dependence on the over-exploited fisheries sector, increasing the vulnerability of households to shocks and income fluctuations and further compromising the long-term sustainability of the natural resource base.

Excessive dependence on limited fisheries resources, an over-arching issue affecting all South Asian coastal communities, is a policy concern which pre-dated the tsunami by several years, but prior to 2005 there were few coordinated attempts to address the problem due to a lack of economic and technical resources (IPS 2004, CBSL 1998). After the tsunami, however, the substantial resources available for livelihoods reconstruction provided a rare opportunity to improve rather than restore the status quo by addressing underlying economic and social issues that have contributed to higher-than-average levels of poverty in tsunami-affected areas. Several observers highlighted the importance of understanding the pre-tsunami causes of coastal poverty in order to ‘build back better’ (Steele 2006, Pomeroy et al 2006).

Five years after the tsunami, it is apparent that for the most part, tsunami-affected households in been well-supported in terms of restoring their pre-tsunami positions. With assistance from multiple aid programs the majority have returned to their former livelihoods, while approximately a third have switched to alternative primary IGAs and several have diversified into additional subsidiary IGAs. In terms of minimising disruption to household economies, the process of resettlement has been generally well-managed. For most households, relocation has not increased economic hardship: while there are some concerns regarding infrastructure, zoning regulations and market access for microenterprises within the settlements, there has been little disruption to local labour markets, and fears that fishermen would lose access to their livelihoods have not materialised.

However, in terms of improving rather than restoring the status quo, interventions have been less successful. In one of the case study locations an extensive urban development and infrastructure program has broadened the range of livelihood options and provided a strong basis for regional growth. Elsewhere however interventions have focused primarily on fisheries and marginal microenterprises, with relatively little attention to improving infrastructure, encouraging labour mobility, addressing social and gender discrimination, investing in education and training and other reforms which are required...
to integrate coastal communities into national and regional development processes. Poverty reduction strategies based on self-reliance are unlikely to have much effect in the absence of sound social and physical infrastructure. In each of the case study locations, access to economic opportunities outside the fisheries sector is limited by social and spatial impediments to integration with regional and national markets. Investments in infrastructure and human capital and targeted business support are essential for diversified pro-poor local growth, and policies aimed at removing obstacles to labour mobility, both in-country and internationally, will enable workers to go where their skills are most valued.

**Methodology**

Household demographic and labour force profiles were obtained via a survey administered by trained fieldworkers to 641 randomly selected households in the four locations between January and June 2008 (see Map 1, Table 1). The survey sought detailed information on the labour force status and livelihood activities of each adult household member. Interviews were conducted with the household head where practicable, or with another adult household member. Households in all locations responded with interest to the survey process, and all respondents who were contacted agreed to participate. Respondents were asked to describe their cash and in-kind sources in the twelve months prior to the survey. Many found it difficult to attribute cash values to in-kind income, so instead they were asked the estimate how much of their monthly requirements for fish, vegetables and firewood were met through in-kind sources. A cash value was then assigned based on average per capita expenditure on the category in question, derived from national household income and expenditure surveys in each country (DCS 2007a, NSSO 2007). Estimated income from all sources was averaged over a twelve-month period to take account of seasonal fluctuations.

Obtaining accurate information on income is a complex task, as reliability of data is limited by memory lapses, the difficulty of estimating average income from activities such as fishing where earnings fluctuate on a daily basis, the widespread tendency of microenterprise operators to equate gross income with net profit, and the inclination of some respondents to understate their income. For these reasons, rather than relying solely on recollected estimates, the researchers obtained corroborative data from respondents on correlates of income such as the number of hours worked and ownership of household and business assets, and consulted official data sources which provide reliable information on common sources of income such as daily wage rates in the informal sector and welfare transfers (NSSO 2008, CBSL 2008). Where inconsistencies between respondent estimates and corroborative data could not be resolved after re-checking with respondents, the households in question were omitted from the income analysis.

**Table 1: Livelihoods survey sample**

<table>
<thead>
<tr>
<th>Location</th>
<th>Household surveys (N=641)</th>
<th>Unstructured interviews (N=112)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seenigama</td>
<td>95</td>
<td>39</td>
</tr>
<tr>
<td>Hambantota</td>
<td>255</td>
<td>41</td>
</tr>
<tr>
<td>Thirukovil</td>
<td>98</td>
<td>30</td>
</tr>
<tr>
<td>Chennai</td>
<td>193</td>
<td>24</td>
</tr>
</tbody>
</table>
The survey was followed by unstructured interviews with 112 households, conducted during 2008 and 2009 by the lead researcher with an interpreter. Households were purposively selected for follow-up interviews with the aim of covering a broad cross-section with respect to demographic and socio-economic status and livelihood activities. The unstructured interviews sought more detailed information on household livelihood strategies, with a specific focus on household asset bases (capital assets, skills and access to infrastructure and finance), indicators of microenterprise activity such as daily output, sales and operating costs, the competitive and regulatory environment and respondents’ views on the quality and sustainability of their IGAs. In addition, respondent data was supplemented by on-site observations of IGAs and unstructured interviews with community leaders, government officials and aid agency staff.

Map 1: The survey locations
The survey locations

There were marked differences between locations in occupational profiles and average household incomes, reflecting their diversity with respect to demography, urbanisation, economic development and integration with regional markets. The brief descriptions of the survey sites in this section provide a summary outline of their diverse characteristics.

Seenigama

The village of Seenigama, which consists of 350 families, is located on the outskirts of the tourist town of Hikkaduwa, in a densely populated region stretching 100 kilometres along Sri Lanka’s southwest coast. Among the Sri Lankan survey sites, Seenigama is the most advantageously positioned in terms of access to regional and national labour markets, as it is connected by road and rail to major employment centres including the national capital Colombo, the district capital Galle (Sri Lanka’s third largest city) and the Koggala Export Processing Zone (EPZ), which employs around 10,000 manufacturing workers. The districts of Galle, Colombo and Kalutara, which together account for a quarter of Sri Lanka’s jobs, are within daily commuting distance.

Map 2: Galle District

Although Seenigama is among the wealthiest of the case study locations on average, household incomes are highly polarised. At the upper end of the income spectrum, comprising about 20 per cent of the sample, were households engaged in formal sector employment, high-earning business activities or employment abroad. In both Seenigama and Hambantota, public investments in supply chain infrastructure and harbour facilities for deep-sea vessels have improved the overall efficiency of the fisheries sector and
provided some fishermen with relatively high-earning employment in offshore fisheries. At the lower end, about 40 per cent of households relied on intermittent labouring work and marginal microenterprises. The post-tsunami enforcement of a ban on coral mining, a traditional industry which before the tsunami employed up to half of Seenigama’s male population, has imposed hardships on low-income families. Many former coral miners, who are predominantly middle-aged men with little formal education, have been unable to find regular alternative jobs.

New Town

The New Town resettlement project is located three kilometres north of the small regional town of Hambantota, in Sri Lanka’s southeast. Since 2005, Hambantota town and the surrounding region has been transformed by rapid urbanisation and infrastructure development linked to the Greater Hambantota project, a plan to create a major regional city and a new international shipping port in the south. Several other large capital projects are scheduled or underway, including an industrial park for export-oriented manufacturing enterprises, an international airport, gas refinery, power plant, government office complex, international sports stadium and convention centre and a four-lane highway and railroad linking Hambantota with Colombo and the southwestern population centres. The proposed route will, when completed, substantially reduce the six-hour road journey to Colombo, increase non-local traffic volumes and improve access to distant markets.

Map 3: Hambantota District

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1 When Hambantota town was identified as the site for a second port in 2002, the Urban Development Authority, recognising that the existing township lacked the population and facilities to support the proposed port development, produced a detailed town plan which set aside areas for commercial and industrial development and created a new residential suburb north of the town. The development plan, initially shelved due to lack of funds, was revived following the partial destruction of the town by the tsunami and the securing of finance for the port project from the Chinese government.
The port development is a major stimulus to the regional economy, providing an administrative and transport hub for industrial and agricultural exports from the central, southern and eastern provinces, and projected to generate 40,000 future jobs in transport, manufacturing and commerce in the Hambantota area (Wijewardena 2008). Many of these jobs will be in medium and large-scale formal sector enterprises, where pay and conditions are generally superior to those available in the informal sector. The expansion of commerce and manufacturing industries, particularly in the export-oriented garment sector, will provide a much-needed source of regular employment for women.

Designed to accommodate the dual objectives of post-tsunami resettlement and the residential requirements of the new city, New Town is Sri Lanka’s largest resettlement project, with 2,330 houses completed. The region has capacity to accommodate further population growth, with land available for up to 10,000 additional dwellings in New Town and other nearby state-owned land suitable for residential development (PIA 2006).

Among the four case study locations, New Town ranked highest on average household income, reflecting the relative strength and diversity of the local labour market. The housing and port developments have increased demand for skilled and unskilled male labour, helping to facilitate movement out of fisheries. With a timeframe of up to 12 years for some projects, infrastructure building will continue to generate employment in the medium term, although the share of the construction sector, the largest source of wage employment at the time of the survey, will eventually decrease with the completion of the planned projects. As in Seenigama, proximity to the district capital means that the public sector, a source of high-value employment which was uninterrupted by the tsunami, is a relatively large contributor to the local economy. About 15 per cent of respondents held regular positions in the civil service, the education sector or in a local state-owned salt production plant. Demand for local goods and services generated by a relatively large and prosperous local population supports a range of small business activities.

**Thirukovil**

The Mandanai and Kudilnilam settlements, with 265 and 164 households respectively, are adjacent settlements three kilometres from the town of Thirukovil in the district of Ampara on Sri Lanka’s eastern coast. Located in a sparsely populated region 30 kilometres from regional urban centres and twelve hours by road from the national capital, Thirukovil was the most geographically isolated of the survey sites.

The district of Ampara sustained the most damage from the tsunami, accounting for a third of Sri Lankan fatalities and widening pre-existing developmental disparities associated with more than two decades of civil conflict. Post-tsunami infrastructure programs and the progressive easing of security conditions since 2007 have strengthened the economic outlook for the district, but like other northeastern districts, Ampara continues to lag behind the rest of the country in the availability and quality of transport, power, and telecommunications infrastructure. As geographic isolation, poor infrastructure and an unfavourable security environment have historically curtailed private investment, the district’s non-farm sector is under-developed.

The regional towns of Ampara, Kalmunai, Sammanthurai and Akkaraipattu are experiencing a surge in construction and commercial activity which commenced after the tsunami and has accelerated since the end of the civil conflict in mid-2009. Within the district, access to regional and national markets has been much improved by a regional road-building program that commenced after the tsunami. Within the
settlement locations however transport linkages remain poor, limiting access to regional labour markets. Small local markets and geographic isolation impose severe constraints on poverty-clearing microenterprise development, and households remain heavily dependent on fisheries, smallholder agriculture and subsistence-based self-employment. Although the civil conflict has ended, ethnic and linguistic barriers persist. In Thirrukovil, the linguistic and ethnic divide which separates Sri Lanka’s Tamil-speaking northeast from the Sinhala-speaking southwest restricts labour mobility outside Tamil-speaking areas. Moreover, tensions between Tamils and Muslims within the district restrict access to jobs in Muslim towns.

Map 4: Ampara District
Chennai

The VOC Nagar and Thilagar Nagar settlements, comprising 960 and 432 units respectively, are adjacent compounds of apartment blocks in a mixed industrial and residential suburb of Chennai, India’s fourth largest city. The occupants were drawn from six nearby coastal shanty communities. While their initial relocation to temporary shelters on the outskirts of Chennai 20 kilometers from their original locations caused severe disruption to livelihood activities, more than 83 per cent of households have resumed their former primary occupations following permanent resettlement, with the majority of men returning to fisheries and labouring work on construction sites and in the transport and storage industries connected with the Chennai port and wholesale and retail markets.

Map 5: Chennai Greater Metropolitan Area
With a population of 7 million, Chennai is India’s fourth largest city and the commercial hub of the country’s rapidly growing southern region. Its diversified economy includes trade, transport and storage industries associated with the Port of Chennai, India’s second largest container port, and a manufacturing sector which accounts for a third of national output in vehicles and automotive components, more than 50 per cent of leather exports and a substantial share of electronics component production.

In addition, Chennai has become a rapidly growing hub for knowledge-based industries including banking, information technology and healthcare. It is responsible for 14 per cent of computer software exports, making it India’s second largest software exporter after Bangalore, and a number of transnational companies have located their call centres and back-office operations there. With several world class health care facilities, it is emerging as a regional leader in private healthcare, accounting for more than a third of India’s international medical tourism industry.

Despite a range of government-led equal opportunity initiatives aimed at addressing caste discrimination, caste continues play a key role in defining labour market opportunities in India. The Adi Dravida caste, to which most of the settlement residents belong, is registered as a scheduled caste under the Constitution of India. Its people, like those of other scheduled castes, experience pervasive social and economic exclusion which restricts their occupational mobility and access to education and health services. Therefore, with the exception of a small number of young secondary school graduates who have obtained low-level public sector employment under equal opportunity provisions, participation in the formal sector and in Chennai’s high-value emerging labour markets is effectively closed to the settlement households.

Household income and livelihood strategies

Comparison of the sample with national data sets indicates that households in the settlement programs are poorer than average, with median household incomes ranging from slightly below to well below regional and national measures, and correspondingly higher poverty headcounts (Table 2). In New Town, the wealthiest of the case study locations, the median household income was 7 per cent below that of the Southern Province as a whole, while households in Seenigama were on average 15 per cent poorer than others in the region. Households in the Thirrukovil settlements were significantly poorer on average than others in the Eastern Province, and were more than twice as likely as other Sri Lankan households to be in poverty. Although definitive data is not available, the available evidence indicates that poverty in the northeast is well above the national average due to conflict-related destruction and displacement and the tsunami, which affected the Eastern Province more severely than other areas (World Bank 2007). Similarly, households in the Chennai settlements had significantly lower incomes and higher poverty incidence than other Chennai households.

Following poverty assessment practice in India and Sri Lanka, poverty headcounts in the case study locations were calculated by multiplying the per capita poverty line by household size and totalling the number of individuals in households below the poverty line (Table 4). As a benchmark poverty line in Hambantota and Seenigama, we used the relevant 2008 district poverty lines set by the Department of Census and

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2 It should be noted that the per capita poverty line does not take into account household economies of scale and age- and gender-related variations in individual requirements, and may therefore overestimate poverty incidence in large households (World Bank 2007).
Statistics (DCS 2010). The DCS poverty line denotes the monthly per capita expenditure required for a minimum daily nutritional threshold and non-food survival essentials excluding consumer durables but including housing, clothing, fuel, health, education and transport. In Thirrukovil we used the national poverty line as the DCS does not provide a benchmark poverty line for Ampara district. In the Chennai settlements we used the all-India poverty line devised by Guruswamy and Abraham (2006). As the Guruswamy and Abraham measure represents food and essential non-food expenditures it is a more realistic poverty indicator than the official GoI poverty line of INR547, which takes into account food consumption only. For the purposes of this report, notional household poverty lines were set at SLR11,400 and INR3,360. These benchmarks represent the approximate per capita poverty line for a family of four, the median household size in all locations.

Table 2: Household income and poverty headcounts: comparison of survey locations with regional and national data.

<table>
<thead>
<tr>
<th>Location</th>
<th>Poverty headcount</th>
<th>Median monthly household income*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td>22.2</td>
<td>16,494</td>
</tr>
<tr>
<td>Southern Province</td>
<td>28.0</td>
<td>16,798</td>
</tr>
<tr>
<td>New Town</td>
<td>29.7</td>
<td>15,600</td>
</tr>
<tr>
<td>Seenigama</td>
<td>37.2</td>
<td>14,324</td>
</tr>
<tr>
<td>Eastern Province</td>
<td>..</td>
<td>14,200</td>
</tr>
<tr>
<td>Thirrukovil</td>
<td>53.1</td>
<td>12,104</td>
</tr>
<tr>
<td>India</td>
<td>28.3</td>
<td>..</td>
</tr>
<tr>
<td>Urban Tamil Nadu</td>
<td>34.2</td>
<td>4,428**</td>
</tr>
<tr>
<td>Chennai settlements</td>
<td>54.9</td>
<td>3,400</td>
</tr>
</tbody>
</table>

* Throughout this report currency values are specified in Sri Lankan rupees and Indian rupees. The respective AUD exchange rates, averaged over the survey period (January to June 2008), were INR38.5 and SLR98.7.

** Refers to household consumption expenditure.


Table 3: Poverty headcounts in the case study locations (per cent)

<table>
<thead>
<tr>
<th>Poverty status</th>
<th>New Town (N=942)*</th>
<th>Seenigama (N=360)</th>
<th>Thirrukovil (N=403)</th>
<th>Chennai (N=736)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme-poor (&lt;67% of poverty line)</td>
<td>12.7</td>
<td>7.5</td>
<td>14.6</td>
<td>23.3</td>
</tr>
<tr>
<td>Poor (67-100% of poverty line)</td>
<td>17.0</td>
<td>29.7</td>
<td>41.9</td>
<td>31.6</td>
</tr>
<tr>
<td>Near-poor (100-150% of poverty line)</td>
<td>18.5</td>
<td>22.8</td>
<td>22.8</td>
<td>17.6</td>
</tr>
<tr>
<td>Non-poor (&gt;150% of poverty line)</td>
<td>51.8</td>
<td>40.0</td>
<td>20.6</td>
<td>27.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.1</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Poverty incidence</td>
<td>29.7</td>
<td>37.2</td>
<td>56.5</td>
<td>54.9</td>
</tr>
<tr>
<td>Per capita poverty line *</td>
<td>2,742</td>
<td>2,926</td>
<td>2,845</td>
<td>840</td>
</tr>
</tbody>
</table>

* Number of individuals

We constructed four household income categories: two below the poverty line and two above it, as described in Table 3. In extreme-poor and poor households, incomes are insufficient to support consumption at levels necessary for sustainable well-being. The majority of extreme-poor households were either economically inactive or disadvantaged in the labour market by age, disability or female-headedness. Poor households were
characterised by high reliance on unskilled informal sector activities and (in Sri Lanka) subsistence production. In near-poor households, incomes are sufficient averaged over a twelve month period to finance basic needs with small margins for modest discretionary expenditure. However, because of the importance of seasonal primary industries, some near-poor households experience income fluctuations, which are most pronounced among farmers and fishermen but also affect the non-farm sector via the impact of seasonality on demand. In near-poor households consumption levels often fall below the poverty line during lean seasons, particularly among fishermen, who are over-represented among the near-poor. Non-poor households typically derive their incomes from one or more high-earning activities and were within the top half of the national income distribution in both countries.

Occupational profiles and diversification

Of the 641 households which participated in the survey, 5 per cent were economically inactive and relied entirely on transfers in the form of pensions, state welfare payments or assistance from neighbours or relatives. The remaining 95 per cent had engaged in one or more labour market activities in the twelve months prior to the survey, for which they received income in the form of salaries and wages, microenterprise earnings, in-kind production or remittances. A total of 1,211 IGAs were sampled (Table 4).

Labour force profiles in the case study locations were characteristic of low-income populations in developing countries, with a generally low skills base and high reliance on the informal sector. Overall, around 6 per cent of the sample IGAs were salaried professional and administrative positions, and a further 9 per cent were skilled manual jobs or self-employment activities that require well-developed business skills. The remainder consisted of semi-skilled and unskilled work in farming and fisheries (40 per cent) and the non-farm sector (46 per cent). The Seenigama and New Town households recorded relatively high proportions of professional and skilled jobs, at approximately 20 per cent of total IGAs in each location, while lower rates were recorded in Thirrukovil (9 per cent) and Chennai (6 per cent).

Income diversification, which mitigates risk arising from the failure of a single income source and supports basic needs when no single activity provides a sufficient income, was an important livelihood strategy in all of the case study locations. Following resettlement, more than a third of the case study households adapted their livelihood strategies by switching to a new primary activity, adding a new job to the household portfolio, or both (Table 5). In Seenigama, the closure of the coral mining industry resulted in an unusually high rate of switching into new primary IGAs in the construction and fisheries sectors. Commonly cited factors in the decision to change or diversify included the loss of an income earner in the tsunami, the high replacement cost of lost business assets, declining incomes from coastal fisheries, the emergence of new opportunities in construction and infrastructure building, and participation in livelihoods assistance programs which provided training and assets for new activities.

Employment growth has been concentrated at the low-value end of the income spectrum, in marginal microenterprises and casual unskilled labouring work jobs. These activities are characterised by low productivity, low incomes, poor working conditions, under-employment and job insecurity. The majority of additional income sources were subsidiary self-employment ventures operated by female household members, often assisted by an NGO-led livelihood program. In addition, the post-tsunami expansion of the infrastructure and construction-related sectors created off-season work for farm labourers and fishermen. Larger, more secure and sustainable jobs remain scarce.
Table 4: Occupational profile by location

<table>
<thead>
<tr>
<th>Professional, administrative and technical employment</th>
<th>New Town</th>
<th>Seenigama</th>
<th>Thirukovil</th>
<th>Chennai</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager/administrative worker</td>
<td>23</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>Teacher</td>
<td>13</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>Military service</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Accountant</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Nurse</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Engineer</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Skilled manual wage employment</td>
<td>28</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>Mason</td>
<td>10</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Carpenter</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Electrician</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Plumber</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Mechanic</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Painter</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Welder</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Unskilled/semi-skilled wage employment</td>
<td>113</td>
<td>57</td>
<td>50</td>
<td>139</td>
<td>359</td>
</tr>
<tr>
<td>Labourer</td>
<td>50</td>
<td>21</td>
<td>43</td>
<td>61</td>
<td>175</td>
</tr>
<tr>
<td>Driver (truck or bus)</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>31</td>
<td>44</td>
</tr>
<tr>
<td>Factory worker</td>
<td>14</td>
<td>10</td>
<td>-</td>
<td>18</td>
<td>42</td>
</tr>
<tr>
<td>Shop assistant</td>
<td>9</td>
<td>9</td>
<td>1</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>Housemaid</td>
<td>15</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Clerical assistant/ office peon</td>
<td>11</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Security guard</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Hotel/restaurant worker</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Self-employment</td>
<td>228</td>
<td>84</td>
<td>86</td>
<td>69</td>
<td>467</td>
</tr>
<tr>
<td>Home gardener</td>
<td>58</td>
<td>3</td>
<td>20</td>
<td>-</td>
<td>81</td>
</tr>
<tr>
<td>Petty trade*</td>
<td>25</td>
<td>8</td>
<td>11</td>
<td>43</td>
<td>87</td>
</tr>
<tr>
<td>Animal husbandry worker</td>
<td>15</td>
<td>10</td>
<td>23</td>
<td>-</td>
<td>48</td>
</tr>
<tr>
<td>Tailor</td>
<td>23</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Food producer (meals and snacks)</td>
<td>19</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>39</td>
</tr>
<tr>
<td>Coir producer</td>
<td>15</td>
<td>20</td>
<td>-</td>
<td>2</td>
<td>37</td>
</tr>
<tr>
<td>Firewood collector</td>
<td>15</td>
<td>5</td>
<td>17</td>
<td>-</td>
<td>37</td>
</tr>
<tr>
<td>Paddy cultivator</td>
<td>17</td>
<td>2</td>
<td>5</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>Auto-rickshaw driver</td>
<td>7</td>
<td>7</td>
<td>-</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Brick-maker</td>
<td>10</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>Building contractor</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Mechanical workshop</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Carpenter workshop</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Trade (small business level)</td>
<td>14</td>
<td>8</td>
<td>-</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Fisheries employment</td>
<td>82</td>
<td>29</td>
<td>51</td>
<td>88</td>
<td>250</td>
</tr>
<tr>
<td>Offshore</td>
<td>20</td>
<td>8</td>
<td>-</td>
<td>55</td>
<td>83</td>
</tr>
<tr>
<td>Coastal</td>
<td>52</td>
<td>21</td>
<td>12</td>
<td>33</td>
<td>118</td>
</tr>
<tr>
<td>Inland</td>
<td>10</td>
<td>-</td>
<td>39</td>
<td>-</td>
<td>49</td>
</tr>
<tr>
<td>total IGAs</td>
<td>497</td>
<td>201</td>
<td>205</td>
<td>308</td>
<td>1211</td>
</tr>
</tbody>
</table>
In households which relied on unskilled informal sector activities for their livelihoods, two or three income sources were typically needed to clear the poverty line for a family of four (SLR. As the returns from wage labour are usually higher than those from self-employment, males tended to take labouring jobs when work was available, resorting to self-employment during lean periods, while women worked in subsistence production and other small home-based microenterprises. Households without an able-bodied male were severely disadvantaged in Sri Lankan and Indian labour markets. The highest rates of poverty were found in households where opportunities were constrained by gender, age or disability. In the Thirrukovil settlements, a number of female-headed households were reported to have left their allocated houses to return to their original land, due to a lack of local IGAs for women.

Table 5: Households reporting post-tsunami changes in livelihood activities (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Hambantota</th>
<th>Seenigama</th>
<th>Thirukovil</th>
<th>VOC and Thilagar Nagar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switched primary activity</td>
<td>21.6</td>
<td>45.3</td>
<td>9.2</td>
<td>16.6</td>
</tr>
<tr>
<td>Increased the number of activities</td>
<td>23.5</td>
<td>36.8</td>
<td>17.3</td>
<td>25.9</td>
</tr>
<tr>
<td>Total reporting post-tsunami change</td>
<td>36.9</td>
<td>61.1</td>
<td>24.5</td>
<td>32.1</td>
</tr>
<tr>
<td>No change</td>
<td>63.1</td>
<td>38.9</td>
<td>75.5</td>
<td>67.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The public sector

Nationally, a third of Sri Lankan workers and a tenth of Indian workers are in public employment or work in large factories or other formal sector establishments, where pay and conditions are protected by legislation, rates of pay are higher than in comparable informal sector jobs and workers have job security and access to retirement benefits. In both countries the largest formal sector employer is the government, which through the civil service, statutory authorities and state-owned enterprises accounts for 18 per cent of jobs in Sri Lanka and about 6 per cent of jobs in India (NSSO 2008, CBSL 2008).

The public sector is a relatively privileged employment enclave which accounted for more than 10 per cent of jobs in Seenigama and New Town but a much smaller percentage in Thirrukovil and Chennai (see Table 4 above). Employment with a government agency was one of the few income sources not disrupted by the tsunami, as the government continued to pay workers’ salaries even when their jobs had temporarily disappeared. All administrative, clerical and professional-grade public sector employees had formal status, while low-grade manual workers such as security guards, drivers and labourers in the state-owned Lanka Salt Corporation, an important employer in New Town, were employed on an informal basis and therefore lacked the tenure and pension entitlements of formal employees. However, most low-grade workers were full-time employees who reported having been in their jobs for several years, indicating that even when informal, a public sector job provides a measure of *de facto* income security not available to other informal sector workers. Hence, no household in receipt of a public sector salary was below the poverty line.

Geographic isolation and social disadvantage are barriers to public sector entry. In Sri Lanka, where government agencies are overwhelmingly concentrated in the national capital and in regional towns which act as district hubs for public administration, proximity to regional centres (and, in the case of Seenigama, to Colombo) contributed
to relatively high rates of public sector employment among the Seenigama and New Town populations. Low adult educational attainment restricts access to entry-level government jobs, which typically require secondary school completion as a minimum qualification. Public sector recruitment in Sri Lanka is governed by informal political connections, effectively denying entry to socially marginalised low-income households (while at the same time encouraging unproductive ‘queueing’ for government jobs among high school graduates in less-poor families). In India, caste-based discrimination constitutes a significant disadvantage in urban labour markets (Madheswaran et al 2010) and was clearly a factor in the Chennai settlements, where the only public sector employees were a handful of young high school graduates who had obtained employment under the reservation system which sets aside a proportion of government jobs for members of scheduled castes.

**Overseas employment**

In both India and Sri Lanka, overseas labour markets are a significant and growing contributor to the economy. In India, the world’s largest net remittance recipient, remittances from an estimated 20 million expatriate workers exceeded $50 billion in 2008, contributing 4.5 per cent of GDP. In Sri Lanka, where remittances contribute more than 7 per cent of GDP, labour migration has become an economic mainstay both for the national economy and for rural households in a weak domestic labour market. An estimated 1.6 million Sri Lankans were working abroad in 2007, representing close to a fifth of the labour force (SLBFE 2007, CBSL 2008).

In the Arab Gulf states, the principal destination region for Sri Lankan and Indian labour migrants, workers are employed on contracts ranging from two to five years and are paid far more than they can expect to earn locally. Approximately a third of the sample migrants were female domestic workers in private households, who in 2008 earned around $US200 per month. The remaining two thirds were males employed in construction and infrastructure, where wages varied from $US200-250 for labourers to up to $US1,000 for certain categories of skilled workers. Close to a fifth of the skilled manual workers enumerated in the sample were employed abroad, reflecting the large returns to skills available in foreign labour markets. Consistent with their higher earnings, the median value of remittances from male workers was around SLR25,000 while women remitted an average of SLR15,000.

There was considerable variation between the locations in overseas migration patterns. With strong demand for Muslim workers from employers in the Middle East, Hambantota with its high Muslim population is one of Sri Lanka’s principal migrant-sending regions. The highest migration rates were recorded in New Town, where 15 per cent of respondent households received remittances, followed by Seenigama (10 per cent). Only two of the sample households in the Thirukkovil settlements reported receiving remittances; however, local community leaders reported that between 5 and 10 per cent of households had sent workers abroad, suggesting that remittance recipients may have been under-represented in the sample. None of the Chennai respondents reported receiving migrant remittances, a finding which, given the marginalisation of the scheduled castes in Indian labour markets, may be linked to their limited access to the informal information and social networks that play an important role in facilitating migration.
Fisheries

The fisheries sector, traditionally a major coastal employer, remains a key source of household income in all of the case study locations, accounts for approximately a quarter of IGAs in Chennai and Thirrukovil, and about 15 per cent in New Town and Seenigama. Although the relative importance of fisheries in the household economy has declined somewhat with diversification into microenterprises and casual wage employment it remains the primary activity in most households which engage in it. The highest rates of participation were found in Thirrukovil, where 52 per cent of households were engaged in fisheries, followed by Chennai (46 per cent), New Town (32 per cent) and Seenigama (31 per cent).

In both countries, the marine fisheries resource base consists of two subsectors: a coastal zone bounded by the edge of the continental shelf, and the deep-sea offshore zone. Additionally, Sri Lanka has a smaller inland sector comprising aquaculture production and capture fisheries in rivers, dams and coastal lagoons. Offshore production has grown strongly in Sri Lanka, increasing from less than 10 per cent in 1990 to 37 per cent in 2006 (FAO 2007a). Coastal fisheries remains the dominant subsector in both countries, accounting for the majority of jobs and contributing an estimated 54 per cent of fish production in Sri Lanka and 62 per cent in India. There are concerns regarding the sustainability of coastal fisheries, as production is close to capacity in both countries, particularly in Tamil Nadu. For fishermen, reduced per capita catches have been offset to some extent by rising fish prices; however, most observers concur that current levels of coastal fisheries employment are unsustainable (FAO 2007b, Neiland et al 2006, Salagrama et al 2008), a perception widely shared by the households participating in this research.

Offshore fishing, the fastest growing subsector, is less heavily exploited, with production levels below maximum sustainable yields. Offshore fisheries workers typically spend 15 days or more at sea in a high-earning but hazardous occupation which requires a high degree of physical fitness (Table 6). Whereas the fibreglass boats used by inshore fishermen can be launched from unserviced beach sites, the larger ‘multi-day’ boats (MDBs) used in offshore fishing require more advanced landing infrastructure; hence, growth in offshore fisheries has been assisted by post-tsunami reconstruction programs which have increased access to landing facilities for multi-day boats. In New Town and Seenigama, there has been a transfer of employment from coastal fishing into the more productive offshore sector, with several fishermen having taken jobs as crew members on multi-day boats following the construction of new harbours in nearby Hambantota and Ambalangoda. In Ampara district the offshore fisheries industry is limited by the absence of anchorages for multi-day boats at any point along the district’s 100 kilometre coastline. Hence, none of the Thirrukovil fishermen were employed offshore.

Table 6: Fisheries sub-sectors: median earnings

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Sri Lanka (SLR)</th>
<th>Chennai (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore</td>
<td>31,474</td>
<td>3,580</td>
</tr>
<tr>
<td>Inshore</td>
<td>11,967</td>
<td>2,100</td>
</tr>
<tr>
<td>Inland</td>
<td>7,490</td>
<td>-</td>
</tr>
</tbody>
</table>
In the Thirrukovil and Hambantota regions, fishing in coastal lagoons is undertaken during the monsoon and post-monsoonal seasons when water is available. Earnings are low and seasonal, and with minimal inputs consisting of a hand net and wooden canoe, start-up costs are low. Many lagoon workers are older fishermen who have traded off the higher earnings of marine fishing for less hazardous and physically demanding inland work. In New Town, lagoon fishing was typically a subsidiary activity in households which derived their primary incomes from other sources. In Thirrukovil, it occupied a more central role in the household economy: the majority of lagoon fishers were part-time labourers who resorted to fishing when other work was not available, and it was often the only source of cash income during periods of job scarcity.

Although average earnings from inshore fisheries barely clear the poverty line in Sri Lanka, it remains a high-earning occupation relative to other unskilled IGAs and there is little evidence of a decline in inshore fisheries employment. However, fishermen's earnings are coming under increased pressure from declining catches and increased costs. More than 80 per cent of inshore fishermen reported that their incomes had fallen since the tsunami. In Seenigama, the transfer of many former coral miners into fisheries increased pressure on the resource base, while in New Town, the shipping port development resulted in the closure of traditional fishing grounds around the Hambantota port. In both areas, dwindling inshore stocks have forced fishermen further from the shore, thereby increasing fuel costs. In all locations except Seenigama, coastal households were relocated 3 or more kilometres inland. Although no households reported leaving the fisheries sector as a result of relocation, a number of fishermen reported having to spend additional money on secure storage of nets and boats.

In both countries, boat replacement programs implemented by numerous government and donor agencies played an essential role in the restoration of fisheries livelihoods, but there have been significant and widely reported flaws in the management of the process (de Silva 2009, FAO 2007a, Neiland et al 2006). Among the problems identified by researchers were oversupply of replacement boats leading to intensified pressure on fisheries resources, the poor quality of replacement vessels, and targeting errors which caused a large proportion of those who had lost boats to miss out on replacements, while others were issued two or three boats, often by different agencies which were unaware of each other’s activities.

In Sri Lanka, boat replacement programs were largely responsible for increasing the size of the fishing fleet by approximately a third, significantly intensifying the coastal fishing effort (Table 7). Our research found evidence of significant flaws in targeting and management and the quality of the replacement assets. Several respondents reported that they had not been issued a replacement boat or had received a boat which became unseaworthy after a few months. In some cases boats were issued to individuals who had not owned a boat prior to the tsunami. Mistargeting was reported in all locations but was most severe in Thirrukovil, where only one boat-owner received a serviceable replacement. In one of the Sri Lankan survey sites a local government official, subsequently transferred, was widely reported to have demanded payments to register individuals on the list of those eligible for new boats. Although few former boat-owners left the fisheries sector altogether, the loss of a boat forced some into lower-paid work as crew members on single-day boats, while others continued to work as self-employed fishermen by hiring a boat on a daily basis.
Table 7: Number of registered fishing boats by type, Sri Lanka 2004-2007

<table>
<thead>
<tr>
<th>Type</th>
<th>2004</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-day boats (offshore)</td>
<td>1581</td>
<td>2618</td>
</tr>
<tr>
<td>Outboard motor boats (inshore)</td>
<td>12233</td>
<td>19869</td>
</tr>
<tr>
<td>Non-motorised traditional vessels (inland and inshore)</td>
<td>16312</td>
<td>19214</td>
</tr>
<tr>
<td>Other n.e.s.</td>
<td>1493</td>
<td>1157</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31619</td>
<td>42678</td>
</tr>
</tbody>
</table>

Source: MFAR 2007

Informal sector wage employment

Next to the fisheries sector, construction and infrastructure building was the largest employer of males. Construction workers were stratified on the basis of skill levels, with significant earnings differentials between unskilled and skilled workers (Table 8). At the bottom of the pyramid were unskilled labourers, who perform menial but physically demanding tasks such as rock-breaking and lifting. Some labourers are attached on a regular basis to a single employer, but most hire themselves out on a daily basis through informal social and family networks or by reporting to local labour pools where workers are selected by construction contractors according to their daily requirements. At the next level were skilled manual workers such as masons, carpenters and plumbers. A few had received formal training in their trades but in most cases skills were passed from father to son, or through informal apprenticeship arrangements where a young man joins a master tradesman as a labourer and learns the necessary skills over several years. Unlike unskilled labourers, who are hired on a daily basis, tradesmen are usually hired for the duration of a project. At the top of the pyramid were contractors, who bid for building contracts and employ construction gangs. Unlike tradesmen, who occupied an unclear boundary between self-employment and wage employment, contractors were self-employed businessmen with high endowments of skills, capital and business contracts which placed them among the most successful small business operators.

Table 8: Construction occupations: median earnings*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of workers</th>
<th>Median daily rate</th>
<th>Median monthly earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sri Lanka (SLR)</td>
<td>India (INR)</td>
</tr>
<tr>
<td>Unskilled labourer</td>
<td>104</td>
<td>625</td>
<td>75</td>
</tr>
<tr>
<td>Skilled manual worker</td>
<td>40</td>
<td>931</td>
<td>150</td>
</tr>
<tr>
<td>Building contractor</td>
<td>4</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

* Excludes workers employed abroad

** Net profit

During 2005 and 2006, post-tsunami housing programs generated a temporary employment boom for construction workers in the Sri Lankan case study sites, providing an important source of transitional income for males who had lost access to their former livelihoods. Demand for skilled workers has remained strong in all locations, and the majority of tradesmen work on a full-time or near full-time basis, moving between consecutive temporary jobs. However, the re-employment of unskilled workers has presented a problem following the completion of post-tsunami housing programs. In
New Town, infrastructure projects connected with the Greater Hambantota development and port have absorbed many excess construction workers, and are expected to continue to generate labour demand for some years. In Thirrukovil and Seenigama, however, while road-building and other local infrastructure projects continue to provide some employment, the supply of unskilled males exceeds demand. Farm labour during the paddy planting and harvesting seasons, traditionally a major employer of unskilled males, was a significant source of wage employment in Thirrukovil and for poorer families in New Town, who supplemented work in the construction sector with seasonal farm labour. However wage employment in the paddy sector has declined with the increased use of mechanised harvesting techniques and is unlikely to provide a significant source of employment in the long-term.

Intermittent returns and the low social status of manual work make labouring an undesirable option for better-off households. In Sri Lanka, though not in India, a labourer’s wage is sufficient on a full-time basis to clear the poverty line for a family of four. A large proportion of unskilled day labourers were unable to secure full-time work: overall, 40 per cent of labourers worked less than 35 hours in their job in the week prior to the survey, including 19 per cent who worked less than 20 hours. Therefore, while the daily earnings of labourers were about a third less than those of skilled workers, they earned only half as much on a monthly basis, since they worked fewer days. The Chennai data point to a similar association between low skills and underemployment, although the findings must be treated with caution due to the small number of skilled construction workers sampled (Table 7).

In the Chennai settlements, wage workers were employed in roughly equal numbers in construction, manufacturing and in the transport and storage industries associated with the Chennai port and wholesale markets. In the Sri Lankan locations, wage employment opportunities outside the construction industry were limited by the small size of the rural non-farm sector. Seenigama had the highest proportion of wage employment in manufacturing, trade and services, which together accounted for 13 per cent of IGAs. Many of these jobs were located in the Koggala industrial zone and in Colombo, reflecting the importance of transport networks which provide access to regional labour markets. At the time of the survey, the contribution of non-micro manufacturing and trade enterprises to employment in New Town was relatively small, at around 6 per cent; however, this proportion is expected to expand with increased private investment attracted by the port development and associated infrastructure projects. In Thirrukovil, where the civil conflict has imposed an additional constraint on non-farm development, only two workers were employed in non-farm SMEs: one as a shop assistant in the Thirrukovil town centre, and one as a bus driver.

**Self-employment**

After fisheries, non-farm microenterprises were the primary focus of post-tsunami livelihood interventions. As a result of these interventions, there was a significant post-tsunami increase in the number of households engaging in self-employment in the case study locations, from approximately a third before the tsunami to two thirds at the time of the survey, including 20 per cent which earned their primary incomes from microenterprises.

There was significant diversity between the sample microenterprises. Approximately 17 per cent were small businesses which generated net profits sufficient to clear the poverty line for a family of four. These high-earning microenterprises in the sample were more stable and durable than others, and employed significantly larger inputs of labour
and capital. They included mechanical and carpentry workshops, building contractors, retail trade conducted from permanent shops situated on a main road or town centre and trade in profitable niches such as fisheries wholesaling. The remaining enterprises, representing more than 80 per cent of the sample, were marginal self-employment activities which earned incomes well below the poverty line. Some activities in this category were under-performing businesses which had potential for poverty-clearing growth but were constrained by lack of finance or experience. Most however were in occupations or locations where earnings potential was restricted by intense competition and production constraints, with extremely limited prospects for generating poverty-clearing incomes. The most commonly reported low-value occupations were semi-subsistence activities such as poultry-rearing, home garden cultivation and collection and sale of firewood, petty trade operations such as mobile house-to-house vending and small kiosks operated from the owner’s home, and traditional cottage industries such as sweet-making, coir production and tailoring. In most households low-earning enterprises were subsidiary activities which played an important role in supplementing other income sources, smoothing income during lean periods and, in the case of subsistence-based activities, contributing directly to food security, but were not sufficient by themselves to enable poverty exit.

Many low-value occupations were traditional cottage industries in direct competition with larger firms that employ more efficient production processes at a cost and scale well beyond the capacity of micro-level producers. Seenigama coir producers, for example, who manufacture rope from coconut husks using hand-operated looms, were unable to compete with local small and medium enterprises (SMEs) which made higher-quality products using industrial machinery. Home-based tailoring, a common activity in all locations, was not competitive with cheaper factory-made products. Hence, tailors were restricted to alterations and made-to-order garments, a miniscule trade which typically provided less than five hours’ employment per week.

Table 9: Selected microenterprise occupations: median income

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Median income (Sri Lanka)</th>
<th>Median income (India)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home gardener</td>
<td>1,340</td>
<td>-</td>
</tr>
<tr>
<td>Coir producer</td>
<td>1,714</td>
<td>-</td>
</tr>
<tr>
<td>Tailor</td>
<td>3,867</td>
<td>1,254</td>
</tr>
<tr>
<td>Food production and sale</td>
<td>5,750</td>
<td>2,357</td>
</tr>
<tr>
<td>Petty trade</td>
<td>5,000</td>
<td>-</td>
</tr>
<tr>
<td>Trade (small business)</td>
<td>22,500</td>
<td>4,500</td>
</tr>
</tbody>
</table>

In Sri Lanka, nearly half of the sample microenterprises were subsistence-based activities such as smallholder paddy cultivation, home gardening, small-scale dairy farming, poultry rearing and firewood collection, in which most output was kept for home consumption. Home garden production was the largest and most widespread source of subsistence income. The New Town and Thirrukovil settlements provided plots of sufficient size to enable cultivation of coconuts and vegetables, a new activity for many coastal households which prior to the tsunami had not engaged in cultivation due to lack of suitable land. As a means of providing food security, animal husbandry and home garden cultivation were strongly promoted by several NGO-led programs which provided training and supplied seeds, animals, compost bins and other inputs. Home garden production was limited by the lack of a reliable water supply in Mandanai and by the small size of housing plots in Seenigama, but was popular in New Town and
Kudilnilam, where approximately a quarter of households operated home gardens. In addition, approximately 5 per cent of households in Thirrukovil and New Town cultivated small plots of paddy, which enabled them to meet most of their household rice requirements. The poor and near-poor were more likely to engage in subsistence production than extreme-poor households, where age or ill-health tended to restrict economic activity, or non-poor households, which met their food needs in the cash economy and were in a position to value leisure over low-earning manual work.

Whereas unfavourable market conditions impose an upper limit on earnings in low-value occupations, high-end enterprises typically operate without excessive pressure from competitors, and those in emerging sectors such as electrical repairs, motor mechanics and telecommunications have considerable potential for further growth. The majority operated continuously and provided a regular income stream: nearly all employed one person full-time throughout the year, and around half employed non-family members. By contrast, low-value microenterprises made little contribution to job growth outside the household: most employed a single person part-time, and some were intermittent operations that closed during periods of low demand. More than half were open for less than 35 hours in the week prior to the survey, including 21 per cent which were open less than 20 hours. The labour input in semi-subsistence activities was even smaller, averaging less than 10 hours per week. Whereas low-value activities were characterised by short life spans, most high-end enterprises were longstanding family businesses which were rebuilt by their owners after the tsunami. Their owners were better endowed with technical and entrepreneurial skills, extended business and social networks and stronger asset bases which provide a cushion against shocks and downturns.

The size and quality of local markets was an important factor in microenterprise performance. Unlike farmers and fishermen, who for the most part are linked to well-organised supply chains, non-farm microenterprises lack the economies of scale and business networks required to access urban and export markets, and therefore sell their products locally. Where local incomes are low, the scope for microenterprise diversity is limited, since demand for goods traded in the cash economy is limited to basic needs which cannot be met from home production. Hence, microenterprises in poor communities tend to cluster in low-value semi-subsistence production and trade in staples such as firewood and foodstuffs. As these activities require few skills and can be commenced with minimal working capital investments, barriers to entry are low. Weak demand, a narrow range of viable occupations and low barriers to entry combine to create excessive competition in local markets, with further downward pressure on earnings.

The size and strength of the microenterprise sector varied across the case study locations, reflecting disparities in household income, risk tolerance and markets. Occupational diversity and microenterprise incomes were highest in New Town and Seenigama, where higher rates of employment overseas and in the formal sector created relatively prosperous local customer bases. High local population densities and proximity to major transport routes and local towns provided a further impetus to demand, and in addition, a relatively large proportion of households possessed the human and physical capital resources needed for higher-risk projects. Even in these locations, however, poverty-clearing incomes were found in only a quarter to a fifth of activities.
The least propitious conditions were found in the Thirrukovil and Chennai settlements. In Thirrukovil geographic isolation, low population density and low household asset bases created a formidably difficult environment for microenterprise development. During 2008 mobility in the Thirrokovil region was heavily constrained by the civil conflict, which prevented local microenterprises from trading their products in local towns. Although the security environment has eased since May 2009, markets outside the immediate vicinity remain difficult to access due to poor roads and limited transport facilities. Therefore, with the exception of a handful of production and trade enterprises, most of which were marginal part-time operations, self-employment was confined to subsistence activities.

In Chennai, with the exception of a few long-standing fish trading activities centred around the port, microenterprise customer bases were confined within the settlement boundaries. Access to markets outside the compounds was constrained both by caste discrimination and social conflict arising from the perceived threat to pre-existing businesses presented by an influx of new activities. Since the settlement communities were new arrivals in a heavily populated area, established local businesses resisted attempts to enter their markets, and mobile traders reported being threatened with violence when they attempted to ply their trades outside the settlement compounds.
Modernising the fisheries sector

The tsunami caused massive damage to infrastructure and destroyed an estimated three quarters of the fishing fleet in affected areas, resulting in a sharp fall in output in 2005. Since then the fisheries sector has recovered strongly in both Tamil Nadu and Sri Lanka, returning to pre-tsunami levels by 2007. Longer-term trends indicate that in both countries fisheries has performed poorly in comparison with non-farm economic sectors. Its share of GDP, never large, has declined over the last decade to 1.5 per cent in Sri Lanka and less than 1 per cent in India, although it remains a significant employer of coastal populations, directly employing an estimated 231,000 in Tamil Nadu and 150,000 in Sri Lanka.

Coastal fisheries show clear evidence of over-exploitation in both countries, with both an increase in total marine fish landings and a simultaneous decline in the catch per unit of output. In Tamil Nadu, where annual inshore catches have fluctuated at around 380,000 tonnes since the early 1990s, production has reached or exceeded the estimated maximum sustainable yield of 369,000 tonnes, with signs that over-exploitation may have depleted some fish stocks to the extent that the natural recovery mechanism, which operates once fishing pressures are reduced, may no longer function properly (Neiland et al 2006). In Sri Lanka, comparisons are complicated by the omission of the northeast from production statistics until recently, but the available data suggest that a similar levelling-out of coastal production has occurred since 2000 (CBSL various years). Further evidence of over-exploitation is provided by reports of declining catches in localised areas, decreasing fish sizes and the disappearance of certain commonly harvested species (Maldeniya et al 2006, FAO 2007b). These findings were supported by respondents in all case study locations, who reported declines in inshore fish stocks, stating that they have to go further from the shore to catch fish.

While fisheries resources and ecosystems were not significantly impacted by the tsunami, they are under pressure from unsustainable fishing practices. Livelihood programs in fisheries communities must address underlying resource management issues which pre-date the tsunami by many years. Institutional strengthening for improved resource management, regulation and monitoring is urgently needed. In the coastal sub-sector, where a post-tsunami increase in fishing effort has placed additional stress on the resource base, current levels of employment are unsustainable. Hence, there is a need to encourage alternative and adjunct activities for coastal fishers through land-based value-adding activities and the less heavily exploited offshore sector, which has potential for further growth.

Control and compliance

Post-tsunami increases in the fishing effort and the widespread use of destructive fishing methods have been poorly regulated, contributing to over-exploitation. There is a need to strengthen regulatory frameworks and improve institutional capabilities in control and surveillance in coastal fisheries. With a few exceptions, fisheries resources in both countries operate largely under free and open access conditions. Regulatory frameworks exist but their adequacy is in doubt, due to the lack of an evidence base in the form of recent stock assessments and the slow response of regulation to technological change. Both countries have developed input controls such as restrictions on certain fishing methods, but international experience indicates that in the absence of effective output
controls, input restrictions are of limited value due to enforcement difficulties and the ability of fishers to stay one step ahead of regulators by switching to unregulated methods.

Tamil Nadu fisheries operate under an open access policy with one notable exception represented by the annual 45-day closed season on mechanised boat fishing, implemented in all coastal Indian states since 2000. It has resulted in a significant reduction in the overall fishing effort and has been hailed as a turning point in government fisheries policy, from an approach based purely on development to one of resource management (Bavinck et al. 2008). Compliance is high, due in part to a widespread recognition by the industry that action was needed to protect the resource base.

In Sri Lanka, regulations are ineffective in practice due to weak enforcement. Fishing is prohibited in rockeries and other areas designated as breeding grounds, and size restrictions apply to certain species such as lobster. Input restrictions cover the use of destructive fishing methods such as purse-seining, which has been prohibited since 1994 but continues illegally. Coastal fishermen are required to register their boats with the Department of Fisheries and Aquatic Resources (DFAR) and obtain licences which are classified according to the fishing method used. However, the licensing system is not used to restrict open access: in general, any fisher who applies for a licence receives one. In addition there is widespread evasion of licensing requirements due to limited enforcement capacity. For instance, responsibility for the major fishing harbours of Hambantota and Kirinda and the 50 kilometre stretch of coastline between them is shared between two DFAR inspectors, who conduct inspections together due to the risk of violence. As they are not provided with a boat, they are unable to monitor fishing locations or the types of nets being used at sea. With fines of less than $100 for offences such as fishing without a licence, failure to register a boat and harvesting underweight lobsters, district DFAR staff argued strongly that penalties are too light to be an effective deterrent.

Participatory resource management

Both Sri Lanka and India have a long tradition of informal community-based management systems which controlled access to local fisheries resources and arbitrated disputes. Customary management systems have become largely obsolete with the expansion in the number of fishers, entry of non-traditional players and modernisation of technologies and marketing arrangements. Some studies suggest that the post-tsunami provision of boats to non-fishers may have contributed to the weakening of traditional fisheries management systems (FAO 2007a), although it is also clear that they were in decline well before the tsunami (Alexander 1995).

To some extent, local Fisheries Cooperative Societies (FCSs) in Sri Lanka and in India, caste panchayats and self-help groups have taken on the management responsibilities formerly undertaken by community-based systems. Control of coastal fisheries is reported to be stronger in regions where an active FCS is operating (FAO 2007a). Fishermen’s organisations have the potential to assist fishers and fisheries management in a number of ways, strengthening fishermen’s bargaining power with buyers, providing a collective voice for articulating fishermen’s issues and problems to government agencies, transmitting information training and resources such as credit, and providing a mechanism for community-based resource monitoring. However, many FCSs have
small active membership bases and are subject to political interference, limiting their representation of all sections of the fisheries community and hence ability to regulate effectively and impartially. A recent DFAR survey DFAR found that only 536 of Sri Lanka’s 924 FCSs were active (FAO 2007a). Of the five FCSs had coverage of the survey locations (three in New Town and one each in Seenigama and Thirrokovil), four inactive at the time of the survey.

International experience has shown not only that the involvement of fisheries workers as active stakeholders strengthens resource management, but that top-down management without stakeholder ownership is difficult to apply, particularly in remote areas where government enforcement mechanisms are weak. As resource users, fishermen have an interest in promoting sustainable management, and with appropriate empowerment can be effective stewards of local resources. Their knowledge of local conditions should be utilised in making decisions relating to the timing, intensity and quantity of fishing in a particular location or of a particular species, and assessing solutions to problems.

Stock assessment

Fisheries management for sustainability requires reliable information on stock sizes and dynamics, fishing effort and the impact of various fishing methods. At present, data collection is inadequate for assessment purposes. In Sri Lanka, data collection is severely under-resourced, with only 12 permanent data collectors assigned to cover the whole coastline. Sampling is confined to major landing sites used primarily by MDBs, resulting in significant under-reporting of coastal fisheries activity, as most coastal fishing boats operate from unserviced beach sites. The principal methods of collecting data on fishing effort and the status of individual species and general stocks are audits of the catch at landing points and interviews with boat captains. Catch audits at landing sites may not accurately represent the actual catch due to practices of discarding unwanted fish, using part of the catch as bait and partial transshipment of the catch at sea. Without written records, interviews with captains after a long trip may be unreliable sources of information. Options for improvements include employment of additional data collection staff, introduction of simplified captain’s logbooks in a format capable of being used by fishermen, expansion of the geographical sampling coverage, and fishing community participation in the data collection, with appropriate training.

Fishing methods

Coastal fisheries and certain ocean fish species are under threat from unsustainable fishing practices such as the use of small-mesh nets to harvest smaller fish including juveniles, and bottom-set nets which damage the marine environment. Gill-netting, a technology widely used by coastal and offshore fishers, results in high incidental catches of dolphin, turtle and other species. In addition, as gillnets cannot take fish from deeper layers of water, their use leads to excessive harvesting of surface species while commercially valuable deepwater fish remain under-exploited. There is no export market for fish caught by gillnet as they deteriorate quickly after being caught. Long-line fishing, a more targeted and sustainable technology, which is potentially more profitable than gill-netting as it brings the catch to shore in better condition and is exportable, attracting higher producer prices. However, long-line technology is not widely used as it requires training and relatively large capital investments.
Offshore fisheries

Although definitive data is not available, harvesting in offshore territorial waters in both Sri Lanka and Tamil Nadu is generally held to be within the sustainable range. At 113,000 tonnes in 2007, ocean fish landings in Sri Lanka were below the estimated offshore resource potential of 150,000 tonnes (Wickramasinghe et al 2008). In Tamil Nadu, offshore production of 109,000 tonnes in 2003-04 was well below the estimated sustainable yield of 350,000 tonnes (Neiland et al 2006). There is some evidence of depletion of certain deep-sea species such as yellow-fin tuna, indicating an urgent need for reliable stock assessments (Dissanayake 2005, Neiland et al 2006).

With fewer than 3,000 vessels nationally, a shortage of multi-day boats (MDBs) is a major constraint on the expansion of offshore fisheries in Sri Lanka. With improved access to docking facilities provided by post-tsunami reconstruction programs, there is significant potential for further fleet expansion. In addition, productivity is limited by the generally poor quality of the MDB fleet. Many vessel owners are reluctant to invest in improved quality and equipment. Most MDBs are elderly second hand vessels imported from other Asian countries. They are generally slow and lack modern technologies commonly used in commercial fisheries such as long-line deck equipment and GPS navigation. Many boats lack standard safety features such as life jackets and fire extinguishers. Most lack refrigeration and store the catch in insulated holds packed with ice, a method which contributes to high rates of spoilage as boats typically stay at sea for more than two weeks at a time.

Improving awareness of new offshore fishing technologies through information and extension is a priority. In 2008 the National Aquatic Resources Research and Development Agency began to use satellite data to provide forecasts for the offshore fleet on fish distribution patterns, thereby potentially saving time spent searching for fish, reducing costs and increasing catches. However, fishermen’s understanding of the service remains limited. In a promising recent development, the Sri Lankan Board of Investment has collaborated with NARA to organise a series of lectures and practical demonstrations which target MDB owners and skippers and cover satellite-based forecasting, quality control, navigation techniques and modern equipment. One-day programs have been conducted in several locations in the Western and Southern Provinces.

Unlike the inshore fleet, where restoration has been heavily supported by aid programs, the rapid post-tsunami growth of the multi-day fleet has been driven primarily by the private sector with little aid assistance. Despite evidence of a high return on capital, MDB investors have limited access to credit. The SME sector, to which MDB investors belong, is poorly served by existing credit markets due to the high cost and limited availability of commercial bank finance, particularly in rural areas, while donor-supported microfinance programs have focused primarily on the microenterprise sector. The GoSL has introduced a low-interest loan scheme to be administered by state-owned commercial banks, based on a borrower contribution of 25 per cent of the loan value. While evaluation of the government loan scheme is premature, state-led programs have a poor track record, with problems of limited outreach and poor credit discipline. Access to credit for the purchase and upgrade of MDBs could be strengthened through donor partnerships with private commercial banks or established microfinance agencies.

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3 A recent analysis that MDP owners can recoup their investment within five to six years (FAO 2007a).
Fisheries infrastructure

In both countries there has been considerable investment in restoring and modernising fisheries infrastructure. In Sri Lanka, where ten of the country’s twelve fisheries harbours were extensively damaged, harbour facilities have been fully restored and improved. An additional three harbours have been completed, and two are currently construction. Although Ampara district is closer to the productive Bay of Bengal fishery than either the southern and western districts, there are at present no anchorages for multi-day boats at any point along the district’s 100 kilometre coastline. Hence, boats anchor a few hundred meters from the landing site and use smaller vessels to transfer their cargoes to shore. During monsoonal periods, when boats require a safe anchorage, catches are landed at ports in neighbouring districts. Lack of suitable docking facilities is a contributing factor in under-investment in offshore fisheries in Ampara district, where only 11 MDBs were registered in 2007 (CIDA 2007). In an encouraging sign that the government is beginning to address regional disparities in the distribution of post-tsunami infrastructure investment, a port development currently under construction at Oluvil, 20 kilometres north of Thirrukovil, includes berths for more than 250 MDBs. The Oluvil development, a 42 million euro project funded and constructed by the Danish government, is scheduled for completion in October 2010. However, additional MDB docking facilities at other points along the coast are needed to create offshore jobs in geographically dispersed locations and bring the district into line with southern and western regions in terms of infrastructure development. A recent study of the Ampara fisheries sector recommended the sites of Sainthamaruthu and Potthuvil as suitable locations for further development, as both are significant centres of fishing activity and contain port facilities with capacity for expansion (CIDA 2007).

Supply chain management

The Sri Lankan and Chennai marine fisheries serve domestic and export markets, with the domestic component attracting around 75 per cent of production in Sri Lanka and 85 per cent in Chennai. There is little on-site value addition through processing activities such as drying, freezing or canning. The wholesale trade in each port is dominated by a small number of local businessmen who provide credit to fishermen for fuel and gear, purchase the catch at the landing point and on-sell to local retailers, wholesale markets and exporters. In Sri Lanka, the reconstruction process has resulted in some significant modernisations including ice plants and road improvements which protect the cold chain by reducing transport times between the landing port and Colombo-based wholesale markets and exporters. However, on-board catch management remains generally poor, leading to high rates of spoilage. Local fisheries department officials in Hambantota estimated that as a result of poor on-board handling, about 20 per cent of the offshore catch is thrown away or sold locally at a lower price as it does not meet the requirement of exporters for whole undamaged fish. In Chennai, Hambantota and Seenigama, fishermen were for the most part connected to urban and export markets by well-organised supply chains. In Thirrukovil a larger proportion of the catch is sold locally due to distance from the Colombo wholesale markets and the lack of a central landing site to provide a focal point for fishermen and traders. In addition a lack of refrigerated storage facilities at landing points compels fishermen to sell their catch as quickly as possible, reducing their bargaining power.
Improving infrastructure

Physical infrastructure affects profitability, technological advancement and market access. Transport and telecommunications services reduce transaction costs and improve access to inputs, markets and information. Electrification facilitates technological innovations such as refrigeration and power tools, thereby improving productivity and product quality. At the household level, electricity, safe water and sanitation, telecommunications and transport services increase productive capacity by improving health status, enabling use of labour-saving household appliances and reducing time spent on nonproductive activities such as the collection of water and travel by foot.

Industry surveys consistently identify inadequate infrastructure as a major impediment to rural business growth in Sri Lanka (see for example World Bank 2004, 2007). The country’s arterial roads are narrow and congested and rural road density and public transport services by road and rail are inadequate. The national electricity supply is generally reliable but can fail to meet peak demand during dry seasons, and 17 per cent of households remain unconnected to the national grid. Although access to telephone services has improved vastly with the broad-based take-up of mobile technology, with an increase from 53.6 to 85.0 in telephone density per 100 persons between 2007 and 2009, internet connectivity remains limited by high costs and lack of local media outlets (CBSL 2008). There are substantial gaps in infrastructure access and quality between rural and urban areas, and between the northeast, which received very little investment throughout the 30-year civil conflict, and the rest of the country.

Water

The Seenigama and New Town settlements receive a generally reliable supply of pipe-borne mains water, although some New Town respondents reported erratic supplies during the annual dry season. In the Thirrukovil settlements, households for the last four years have collected their water from central storage tanks filled twice weekly by the local council. As the tank supply was not sufficient to meet the needs of all households, people would form a queue on water delivery days. Female-headed households and those furthest from storage tanks were particularly disadvantaged in terms of ability to obtain an adequate supply. Works have commenced for the installation of pipe-borne supplies in the Thirrukovil settlements, and a small number of households have acquired mains connections. However, the capacity of the new facility to supply the settlements is in doubt, as plans to draw the water from a nearby irrigation reservoir have led to protests from local farmers which remained unresolved at the time of the survey. In the Chennai settlements, women queue outside the apartment blocks to collect water from hand pumps which are open for a few hours each morning. A lack of readily accessible water results in time-consuming collection processes and limits the scope for home gardening, food processing and other microenterprises in which water is a significant input.

Electricity

In Seenigama, New Town and Chennai, nearly all households were connected to their respective national electricity grids, and at the time of the survey works were underway to install cables to the Thirrukovil settlements. On completion, the settlements will have significantly better access to electricity than other villages in the Thirrukovil region, where household electrification rates are around 25 per cent (CIDA 2007). While the quality of supply is generally sufficient for household purposes, it does not meet the needs of many rural businesses. Small and medium business owners in Hambantota and Ampara district reported that frequent outages and voltage fluctuations resulted in
unexpected downtimes, affecting their ability to deliver orders, and in some cases had caused damage to equipment. In addition, there are concerns regarding the economic sustainability of Sri Lanka’s power sector. At the household level, the beneficial effects of improved physical outreach have been offset to some extent by high and rising costs. Electricity prices are higher in Sri Lanka than in other South Asian countries, and a further upward revision in tariffs in 2008 has had a noticeable effect on demand: electricity sales, which had grown by an average of 7 per cent annually in the recent past, increased by just 1.7 per cent in 2008 and 0.3 per cent in 2009 (CBSL 2009). Despite the increases, tariff revenue is not sufficient to cover the costs of power generation. As there is no room for further tariff increases without compromising both competitiveness and welfare, there is an urgent need for investment in more efficient and lower-cost power generation methods.

**Telecommunications**

Although none of the case study communities have fixed-line household telephone connections, all are in areas covered by mobile telecommunications networks. Telephone services are broadly accessible and affordable, due to a thriving market in secondhand handsets and the widespread use of pre-paid services, which extend access to low-income households by eliminating the need to demonstrate creditworthiness prior to sign-up and enabling users to control costs, including using the network to receive rather than make calls when funds are low. Access to the internet is considerably more restricted. Illiteracy and lack of technical skills, commonly cited factors in the digital divide in developing countries, are significant constraints in the Chennai settlements but are less important in the Sri Lankan survey locations, where most young people are literate and possess some computer skills. However, access is restricted by unreliable power supplies, the high set-up and ongoing costs of internet connections and lack of public internet facilities.

**Transport**

Where distance and poor transport networks restrict access to jobs and business opportunities in towns and cities, people are poorer. Among infrastructure services transportation is the single most important determinant of rural business performance, affecting the availability and cost of inputs, quality of linkages with non-local markets and competitiveness with urban enterprises. Access to jobs and markets outside the immediate locality expands the range of livelihood opportunities and generates additional demand for local microenterprise products. Numerous Sri Lankan studies associate poverty with geographic isolation (World Bank 2003, 2004, 2007). Using an accessibility index based on the populations of the surrounding cities and towns, inversely weighted by the travel time to each town, a recent World Bank study concluded that the probability of a household being poor falls by around 3 per cent with a unit increase in the accessibility index for the district in which the household is located. A similar correlation existed at the national level, with a strong correlation between poverty and average travel time to Colombo (World Bank 2007).

Key transport and market access indicators for each of the settlements are described in Table 10. Chennai settlements are situated within the city’s generally well-maintained metropolitan road network. In Sri Lanka, the main transport routes connecting Seenigama and Hambantota with the surrounding districts have undergone major improvements and regional road quality in these locations is generally good, although
congestion, pollution and high accident rates in the Western Province create a significant bottleneck for traffic in and out of Colombo. A planned extension of the Southern Expressway project, a four-lane highway currently under construction, will further reduce travel times between Hambantota and Colombo. The quality of internal roads within the settlements was variable: in New Town and the village of Mandanai in Thirrukovil, internal roads are not paved and become muddy and prone to potholes during the rainy season, rendering them inaccessible to vehicular traffic. In Seenigama and the Thirrukovil settlements, narrow internal roads prevent access by large vehicles, a significant constraint for local businesses in obtaining supplies.

Until recently, travel within and from Ampara district was severely restricted not only by poor roads and lack of public transport but also by road closures and long delays at military checkpoints. While security-related restrictions on mobility have eased since mid-2009, the district continues to lag behind the rest of the country in transport infrastructure, with a road density of 3.0 kilometres per 1,000 persons, in comparison with a national average of 5.5 kilometres. Since the tsunami however there has been considerable investment in road improvements in Ampara district, notably in the two arterial roads connecting the district capital with Colombo and with the paddy marketing centre of Polonnaruwa to the north. The combined effects of road rehabilitation and the relaxation of security restrictions have reduced travel times to Colombo from 12-16 hours to 8-10 hours, and travel times to Hambantota have also been substantially reduced, strengthening the region's connection with a future export hub and metropolitan centre. In addition, local farmers and Ministry of Agriculture officials reported an increase in paddy producer prices in 2009 which they attributed to reduced transport costs and increased bargaining power resulting from an increase in the number of wholesale traders operating in the region. The rehabilitation of the coastal route between Sainthamaruthu and Pottuvil, extensively damaged by the tsunami (see Map 4 above), is proceeding, albeit slowly, and when completed will bring a number of benefits to the region, improving the fisheries supply chain and access to jobs in the northern urban centres and the tourist resort town of Arugum Bay.

Table 10: The case study locations: transport and market access

<table>
<thead>
<tr>
<th></th>
<th>New Town</th>
<th>Seenigama</th>
<th>Thirrukovil</th>
<th>VOC and Thilagar Nagar</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of households in settlement</td>
<td>2,200</td>
<td>153</td>
<td>429*</td>
<td>1,392</td>
</tr>
<tr>
<td>Average distance from main road (km)</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Quality of public transport</td>
<td>Medium</td>
<td>Good</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>Distance from regional centre (population &gt;10,000 km)</td>
<td>0</td>
<td>2</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Distance from district capital (km)</td>
<td>4</td>
<td>10</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Distance from national capital (km)</td>
<td>250</td>
<td>90</td>
<td>400</td>
<td>n.a.</td>
</tr>
<tr>
<td>Average travel time to national capital (hours)</td>
<td>6</td>
<td>2.5</td>
<td>8-10</td>
<td>n.a.</td>
</tr>
<tr>
<td>District population (’000)</td>
<td>558</td>
<td>1,063</td>
<td>624</td>
<td>7,000</td>
</tr>
<tr>
<td>District population per km2</td>
<td>214</td>
<td>644</td>
<td>145</td>
<td>24,231**</td>
</tr>
<tr>
<td>Road density, 2005 (Province) (km/km2)</td>
<td>0.58</td>
<td>0.58</td>
<td>0.28</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

* Combined total for Mandanai and Kudilnilam

** Chennai metropolitan region

Chennai and Seenigama are the most advantageously positioned with respect to public transport, with ready access to bus services and, in the case of Seenigama, a rail link to Colombo in the north and the regional city of Galle to the south (see Map 2 above). An hourly bus service links New Town with Hambantota, where a central bus station provides regular services to Colombo and other regional destinations. The Thirrukovil settlements were the least well-served, with a single daily bus service to the coastal road three kilometres away, and infrequent bus services to other regional centres. There are significant concerns regarding the safety and efficiency of Sri Lanka’s ageing transport infrastructure, which has deteriorated over the years as a result of under-investment. Bus transportation is slow, overcrowded and accident-prone, while in the rail sector, 75 per cent of the country’s 98 engines are more than 30 years old and are subject to frequent breakdowns (CBSL 2008).

Nevertheless, the household survey data indicate that Seenigama benefits considerably from transport linkages with regional job centres: close to 40 per cent of jobs held by Seenigama respondents, excluding overseas jobs, were located more than 5 kilometres from home, including 8 per cent who commuted to Colombo. By contrast, only 11 per cent of in-country jobs held by New Town households were located more than 5 kilometres from home, including 3 per cent in Colombo. In the Thirrukovil settlements, with the exception of a handful of labourers who worked on intermittent daily jobs in the town of Akkaraipattu 15 kilometres to the north, all income-generating activities were located within a 5 kilometre radius. In Chennai, despite ready access to public transportation, only 15 per cent of jobs were located more than 5 kilometres from home, a finding which is likely attributable to the concentration of fisheries, transport and manufacturing jobs in the north Chennai area and the presence of caste-based restrictions on occupational mobility outside these sectors.

**Regionalised manufacturing**

In all survey sites, there was a notable lack of formal private sector employment: fewer than 5 per cent of respondents were employed in privately owned factories, offices or banks. Manufacturing is a fast-growing sector in both India and Sri Lanka, and factory regionalisation offers significant potential for rural employment generation. However, although the GoSL has in the past endeavoured to promote rural industry development via tax incentives and other subsidies, regionalisation initiatives have had limited success because they have failed to address deficiencies in transport, communications and power infrastructure, cited as the principal constraints on rural operations by medium and large manufacturing establishments (World Bank 2004). Consequently, manufacturing remains concentrated in export processing zones (EPZs) in the metropolitan western province, which continues to account most new factory openings and more than two thirds of manufacturing jobs, (see Table 11 below).

**Table 11: Manufacturing enterprises in Sri Lanka: Geographic distribution by province**

<table>
<thead>
<tr>
<th>Province</th>
<th>Western</th>
<th>Southern</th>
<th>Eastern</th>
<th>All Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establishments with 25 or more persons engaged</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of establishments</td>
<td>2,111</td>
<td>342</td>
<td>26</td>
<td>3,715</td>
</tr>
<tr>
<td>No. of employees</td>
<td>575,276</td>
<td>54,541</td>
<td>6,632</td>
<td>832,353</td>
</tr>
<tr>
<td><strong>Establishments with 5-25 persons engaged (SMEs)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of establishments</td>
<td>5,125</td>
<td>994</td>
<td>687</td>
<td>12,997</td>
</tr>
<tr>
<td>No. of employees</td>
<td>41,423</td>
<td>9,370</td>
<td>4,736</td>
<td>107,144</td>
</tr>
</tbody>
</table>

Source: DCS 2009b
The garment industry, which represents over 40 per cent of Sri Lankan manufacturing output, is a significant employer of female labour, offering pay and conditions which compare well with the alternative IGAs available to rural women. For a number of reasons however, predominantly the social stigmatisation of young unmarried women who leave home for employment, urban garment producers have historically found it difficult to attract workers, resulting in the payment of wage premiums to rural migrants. Manufacturers have become increasingly aware of the advantages of regionalisation in the form of reduced labour costs and abundant supply. Moreover, the end of the civil conflict has substantially reduced the risks of regionalisation, and in addition, the opening of the Hambantota port will relieve shipping congestion at the Colombo port and reduce transportation costs from southern, eastern and central districts. To take advantage of these developments, there is a case to be made for the creation of specialised regional business and industrial zones with access to the advanced infrastructure facilities required by large-scale manufacturers, located to minimise interference with ecological and tourism values. The Koggala industrial zone in the south, which employs approximately 10,000 rural workers, is one such example.

Social exclusion

For centuries, social discrimination based on caste has been a defining feature of Indian society. Although caste practices have waned over recent decades and there have been some notable individual success stories, these are the exception rather than the rule. There is extensive evidence that caste remains a major determinant of access to employment and social services (Thorat and Newman 2010). In the Chennai settlements, where most case study households are members of the scheduled castes, social and economic discrimination restricts access to jobs and business opportunities offered by the large and rapidly growing urban economy. A combination of caste discrimination and intense business competition has exacerbated social tensions between the settlement population and neighbouring communities, preventing microenterprises from trading outside the settlement boundaries.

In Ampara district, although the civil conflict has ended, ethnic and linguistic barriers persist. In Thirrupukoil, the linguistic and ethnic divide which separates the Tamil-speaking northeast from the Sinhala-speaking southwest restricts labour mobility outside Tamil-speaking areas. Moreover, the ongoing spatial segregation of Tamil, Sinhalese and Muslim communities within the district, and mutual suspicions between them, restrict the access of the Tamil-speaking Thirrupukoil populations to jobs and markets in the Muslim-dominated northern towns and the Sinhalese-dominated district capital.

Women's economic opportunities are limited by social constraints on their mobility and the types of work they are allowed to do, a consistent finding across all locations. Without able-bodied male workers, female-headed households are more likely than others to be poor, with a poverty incidence of 56 per cent in comparison with just under 40 per cent for the sample as a whole. In the Thirrupukoil settlements several female-headed households were reported to have left their newly assigned houses the return to their original land due to the lack of locally available IGAs.

The survey found marked gender disparities in wage employment. Women occupied fewer than 15 per cent of jobs, and earned on average 40 per cent less than men. With the exception of a handful who held jobs as teachers and in the civil service, female wage earners were clustered in the retail and manufacturing sectors. Because gender wage differentials and lack of employment opportunities lower the opportunity cost of
women’s work, the lowest-value microenterprises tend to be allocated to female family members rather than to men, who can usually earn higher incomes from wage labour. Hence, marginal self-employment ventures were usually operated by women (and were by far the largest sector of female employment), while larger businesses were nearly always operated by men. Women were clustered in tailoring, animal husbandry, coir production and home-based trading activities; while higher-earning occupations such as wholesale and mobile trade, carpentry, mechanical repairs and taxi- and tractor-driving were reserved for men. In occupations such as brick-making, where both men and women were found, men’s enterprises were larger and more diverse.

In addition to being segregated in low-value occupations, women’s microenterprise earnings are constrained by limitations on their mobility and their responsibility for dependent family members. These factors tend to restrict women to home-based activities which can be combined with caring and housework tasks. Home-based enterprises face market disadvantages relative to businesses located in local commercial centres, and their customers tend to be female neighbours whose purchasing power is limited. Furthermore, as women have primary responsibility for the provision of day-to-day household requirements, they tend to spend what funds they have on consumption rather than investment. They are less likely to re-invest profits in their enterprises and more likely to select low-value working capital investments which require minimal skills, can accommodate fluctuations resulting from other demands on their time and money, and involve a subsistence component which allows them to combine income generation with food provisioning.

**Education and vocational training**

Household heads in the Sri Lankan settlement programs were well below the national average in terms of educational attainment, with primary school completion rates of 49 per cent in Seenigama, 55 per cent in Thirrukovil and 62 per cent in New Town, in comparison with 69 per cent nationally. Children and young adults had higher average educational attainments than their parents, a consistent finding across the Sri Lankan locations, where 36 per cent of males and 38 per cent of females aged 16-25 were engaged upper secondary or post-secondary study. The level of educational attainment in the Chennai settlements was significantly lower: fewer than 15 per cent of household heads had more than six years of formal education, well below the urban Tamil Nadu primary school completion rate of 60 per cent. Moreover, there was little generational difference in education participation: only 14 per cent of males and 4 per cent of females aged 16-25 were engaged in study. This finding is consistent with other research which links urban primary school retention rates to caste status via several mechanisms including discriminatory behaviour by teachers, labour demands on children, lack of parental motivation and parental inability to negotiate the administrative requirements of the school system (Desai, Adams and Dubey 2010, Nambissan 2010).

All children in the settlements have access to primary and secondary schooling, including those in Thirrukovil, where the daily bus service was times to coincide with school hours. However, the quality of their education is affected by regional staff shortages and disparities in facilities between urban and rural areas, and between the southwest and northeast. In 2006, the most recent year for which census data is available, the ratio of pupils to graduate teachers in Ampara district was 84, well above the national ratio (56) and the corresponding ratios for Hambantota and Galle districts (47 and 57 respectively) (DCS 2006). In addition, the northeast lags behind other regions in access to facilities such as classrooms, desks and computers. Similarly, there is a pronounced rural/urban
dividing in access to vocational education. As the highest-quality private sector colleges are
concentrated in Colombo, charge high fees and require high prerequisite skills in English
and IT, they are generally not accessible to those with limited educational attainment and
financial means.

Sri Lanka has been hailed for its success in providing widespread access and high
rates of gender equity in primary and secondary schooling. There are however
growing concerns regarding the quality of Sri Lanka’s public education. The education
system is under-funded, with expenditure rates of 2-3 percent of GDP since the 1990s,
in comparison with a 3.5 per cent average across South Asia. There is evidence of
widespread maladministration in the school system, including politicisation of resource
allocation and teacher recruitment, use of bribes and political connections to facilitate
enrolment in ‘good’ schools, poor financial management and lack of facilities including
textbooks (Transparency International Sri Lanka 2009). Teachers in Sri Lanka are paid
half or less than teachers in India, Bangladesh and Thailand, and in recent years their
salaries have declined in real terms. Low salaries and appointments based on political
connections rather than merit have adversely affected staff morale and quality, resulting
in widespread absenteeism and difficulty in attracting and retaining qualified teachers
in poor or remote regions, where vacancies are often filled by non-teaching staff or
volunteers. Although public education is nominally free, costly private extra-curricular
tuition is a de facto requirement for most students hoping to progress to higher secondary
education and beyond.

There are acute shortages of suitably trained teachers in key subject areas. Approximately
three quarters of secondary schools lack staff and facilities for the teaching of computer
skills and science to A-level standards. Fluency in English is at a premium in the labour
market, particularly in the corporate and tourism sectors, and is a compulsory subject
in the secondary school curriculum; however, rates of English proficiency among
designated English teachers are low. A government policy that the Sinhala language
be taught in all Tamil schools and Tamil in Sinhalese schools, potentially an important
contributor to cultural harmony, peace-building and labour mobility, has not been
implemented in most schools due to a lack of teachers.

There is widespread consensus that the Sri Lankan education system is failing to match
market needs. Due to outdated curricula and lack of human and physical resources in
training institutions, young people lack skills needed for the modern workplace, leading
to complaints by Sri Lankan employers that the education system is failing to produce
job-ready graduates. Pass rates for O-level (Year 11) and A-Level (Year 12) are low, at 53
and 62 per cent respectively in 2009. At around 11 per cent of the relevant age group,
university enrolments are at the South Asian average. Due in part to the reluctance of
secondary and tertiary graduates to engage in low-status manual work, they are more
than twice as likely as non-graduates to be unemployed (DCS 2009a). The mismatch
between educational outcomes, graduate expectations and the needs of the labour
market increases socially destabilising youth unemployment and under-employment,
while at the same time limiting international competitiveness and deterring investment
in modern sectors.

It is estimated that an additional 7 per cent of the relevant age group are attending
technical and vocational training in more than 2,000 specialised programs and colleges
operated by the government, private sector and NGOs. These institutions vary widely,
ranging from a relatively small number of high-quality private sector providers whose
graduates are competitive both locally and overseas, to a much larger number of
mediocre institutions whose certifications have limited value in the job market. There is no evidence that graduates of vocational training programs are more employable than secondary school and university graduates (IPS 2007). In Seenigama and Kudinilam, young people had access to NGO-led training in English, accounting and computer training. Students and NGO staff reported that while the extra tuition provided by these classes assisted students to pass their A-levels, the minimum requirement for entry to university and base-level public sector jobs, they did not teach to the degree or diploma levels required by employers and did not therefore provide a direct route to employment.

**Microenterprise and small business development**

Self-employment supported by microfinance has long been a key component of poverty reduction policy in India and Sri Lanka. The largest microfinance institutions (MFIs) have significant outreach, servicing 60 million clients in India and close to one million in Sri Lanka in 2007 (Daley-Harris 2009). In addition, hundreds of smaller NGOs and cooperative societies provide microfinance services. In Sri Lanka, research prior to the tsunami found that over 80 per cent of local government divisions, excluding the northeast, had access to three or more MFIs (Tilakaratna, Wickramasinghe and Kumara 2005). From 2005, a combination of official development assistance channelled through apex agencies and independent programs initiated by international NGOs supported a massive expansion in microcredit in tsunami-affected areas (Srinivasan 2008). At the time of the survey households in New Town and Seenigama had access to several MFIs, and an NGO-led microfinance program was operating in the Thirrukovil settlements. Outreach was more restricted in the Chennai settlements, where a handful of women’s self help groups supported by a local NGO offered small working capital loans to their members.

**Low-value microenterprises**

During the initial post-tsunami relief stage, many households received cash and in-kind grants of equipment and supplies for starting or re-starting microenterprises. By 2007 most grant schemes had been phased out and microcredit became the most common form of microenterprise assistance accessed by households. Most MFIs operated minimalist programs which, following the model pioneered by the Grameen Bank in Bangladesh, provided loans on the basis of peer group guarantees, offering little guidance in enterprise selection or development and taking little account of market conditions or the capacity and experience of borrowers. Relatively few respondents reported receiving training or marketing assistance.

Aid agency staff interviewed for this research reported that project selection was driven by borrowers, and in providing credit for these activities they were simply responding to demand. This approach, which underpins many participatory poverty reduction programs, assumes that borrowers know what is best for them in terms of the local economic environment and opportunities and therefore need little assistance on loan use or business development. However, where understanding of the business environment is limited by a lack of education and information, minimalist credit may not serve the best interests of borrowers. Outcomes in the case study locations cast doubt on the assumption that low-income microenterprise owners have a good understanding of conditions even in the restricted local environments in which they operate. In all locations, MFI portfolios were dominated by a small number of low-value occupations
such as coir production, tailoring and animal husbandry, in which poorer borrowers were concentrated. In explaining why they selected their IGAs, most respondents stated that they were copying what others were doing.

Minimalist programs which encourage new starts in crowded markets run the risk of displacing some producers in favour of others, reducing profit margins and increasing social conflict. In Chennai, NGO-supported women’s self help groups provided loans for microenterprise start-ups in overcrowded markets, creating tensions with communities outside the settlements. In Mandanai, a village of 265 households in which local demand was sufficient to support perhaps a single grocery kiosk, there were five such businesses, each selling an identical array of goods and each with earnings well below the poverty line. Intense competition was found to encourage unsustainable business practices: in all locations, petty traders reported that as their competitors made a practice of extending credit to their customers, they felt compelled to do so as well, often at significant cost to their businesses.

In the Sri Lankan locations, overcrowding was exacerbated by poorly planned asset replacement programs implemented by a variety of agencies with little inter-agency coordination and overlapping target groups. Many programs did not distinguish between pre-existing enterprises and new entrants, and distributed equipment to all who applied. The cumulative effect was that at a time of severe pressure on demand, more households than ever were in possession of sewing machines and coir looms, including many who had never previously engaged in these occupations. In several households visited by the researchers the donated equipment was lying idle, as respondents reported having closed their businesses due to lack of customers.

**Small businesses**

In general, high-end enterprises were poorly served by both microenterprise development programs and formal credit markets. Non-financial business assistance for this segment was available only in Hambantota, where the local chamber of commerce, supported by a range of national and international agencies, provides highly professional information, advocacy, training and advice to its membership base of small and medium businesses. While the non-poor were not specifically excluded from microfinance programs, MFIs focused primarily on low-income target groups, and many higher-income borrowers reported that loan size limits, short-term repayment schedules and meeting attendance requirements were poorly adapted to their needs. Banks on the other hand typically required loan collateral in the form of a freehold land title, a significant obstacle in the settlements, where households were granted limited titles which are scheduled to convert to full freehold 7-10 years from the date of occupation. The non-transferable interim titles are not regarded by banks as acceptable collateral.

**Emerging sectors**

Recent developments in Sri Lanka present opportunities for small business growth in new sectors. A revival in tourism, kept well below its potential since the 1980s by the civil conflict, is expected in the post-2009 era. Emerging middle classes, both domestically and in the Asia region, constitute a new and fast-growing market segment whose preferences are not necessarily met by tourist facilities catering to the traditional Western market. The growth of private vehicle registrations offers scope for components suppliers and repair businesses and roadside traders. In the rural economy, international migration has increased demand for non-traditional goods and services such as telecommunications.
centres, video rentals and repair of imported electrical appliances. Where adequately supported by infrastructure, the post-conflict opening of the northeast will provide access to new markets and expand fisheries and farm production, generating local growth. Improved transport linkages will facilitate sub-contracting arrangements between large manufacturing firms and smaller producers, although as microenterprises may have difficulty in meeting the volume and quality requirements of industrial customers, the input supply industry tends to favour SMEs rather than micro-level firms.

MFIs have a potentially important role in promoting optimum project selection by providing finance, information, training and technical assistance for new activities in emerging sectors. Support should be based on a careful analysis of supply and demand conditions, with a focus on restricting new starts in crowded markets and targeting enterprises with poverty clearing potential. Factors to be considered include the competitive environment, access to markets, supplies and infrastructure, capital and skills requirements and in the longer term, access to equipment repair and replacement facilities. Business development services should focus on the most capable entrepreneurs, who in many cases they will be drawn from the ranks of the non-poor. As investments in emerging sectors typically require high levels of entrepreneurial ability and risk tolerance and may generate little or no return in the early stages while markets are developed and fixed capital loans are repaid, they may be unsuitable for low-income households.

Settlement planning and zoning

As most of the sample enterprises operated in the informal sector of the economy, they were not subject to taxation, business licensing and labour regulations which affect larger firms. However, they were affected by planning, zoning and traffic control regulations. Since the tsunami local authorities have begun to enforce regulatory restrictions, previously ignored, on development along the southwestern coastal road in the Seenigama area. As location on a major transport route can sustain a variety of roadside trade and other small business activities, the zoning restrictions are an impediment to microenterprise development. While a case can be made on public amenity and environmental grounds for protecting the ecologically sensitive sea side of the road, there seems little justification for prohibiting building on the land side.

As part of the Greater Hambantota development, the arterial road has been diverted to bypass the old town of Hambantota, and regional government offices and banks are to be relocated from the old town centre to a newly built commercial and administrative complex in New Town. These processes have resulted in the displacement of some businesses and partial loss of markets for others, particularly those located in and around the old town centre. While most business owners have been told by government agencies that they will be allocated new premises, they have not received compensation for the disruption to their businesses in the interim, and lack certainty regarding the timing and conditions of their relocation.

In a context of widespread underemployment and poverty, regulations should strike an appropriate balance between public amenity and economic considerations. Initial zoning regulations prohibited all forms of commercial activity in the New Town residential precinct. Bans on retail trade and some home-based production activities were subsequently lifted, but prohibitions on livestock and the use of mechanical equipment remain in force. These restrictions, which are characteristic of planning guidelines in developed rather than developing countries, are inconsistent with prevailing regulations and practice in Sri Lankan cities and towns. In the Chennai settlements, the Tamil Nadu
Slum Clearance Board has prohibited street trading on the grounds that it constitutes a public nuisance. A small number of sheds intended for retail trade were built in the settlement compounds, but remain unoccupied as the down payment required to lease a shop, at INR20,000 ($520), represents several months’ income at the poverty line. Local traders continue to use traditional handcarts and temporary constructions which can be dismantled quickly in case of a police raid.

**Overseas labour markets**

Historically, the majority of Sri Lanka’s migrant workers have been women working as housemaids in the Middle East. Recently however there has been a sharp increase in male labour migration, largely in response to a growth in demand for construction and manufacturing workers in the Arab Gulf states, and at 51 per cent in 2008, male departures exceeded female departures for the first time. To date, the global economic downturn has had a limited impact on Sri Lankan migration. While global remittance flows fell by around 6 per cent in 2009, the decline was concentrated in Eastern Europe and Latin America rather than the South Asia region, which recorded a net increase in remittances of 5 per cent (Ratha, Mohapatra and Silwal 2010). In Sri Lanka there was a 2 per cent decline in migrant departures, from 252,021 in 2008 to 247,119 in 2009. The overall decline was driven largely by a further fall in housemaid migration, suggesting that ongoing demand for male workers in key destinations such as Qatar, Abu Dhabi and Saudi Arabia is offsetting a fall in employment in other destinations such as Dubai (SLBFE 2009).

Although the wages of housemaids abroad compare well with local alternatives available to women, they are paid considerably less than male and skilled migrants and are more at risk than other workers of violations of their labour rights (SLBFE 2008). While recognising that housemaid migration remains an important livelihood option for low-income, unskilled women, the GoSL has actively sought to encourage skilled migration through agreements with migrant-receiving countries such as Malaysia, Japan and South Korea and establishing training programs in exportable skills. The introduction of migration-oriented training in the nursing and hospitality sectors, where female employment is an internationally accepted norm, is a significant first step towards diversifying the hitherto very limited range of overseas options available to women and reducing the gender earnings gap.

There is a need for policies aimed at reducing the costs of migration and strengthening the protection of workers abroad. Many migrant-sending households have inadequate access to finance to cover visa and passport fees, registration with the Foreign Employment Bureau recruitment fees and airfares. In the Thirrukovil settlements, several respondents stated that they wanted to work abroad but were unable to do so as could not raise money for their pre-departure expenses. Male migrants incur higher pre-departure costs than women, and migration to countries outside the Middle East tends to be more expensive. Costs vary widely, from around $400 for a housemaid travelling to the Middle East to more than $3,000 for a male worker travelling to South Korea. Housemaids generally finance their departures with advances from migration agents, which are repaid via direct deductions from their pay. These advances are often undocumented verbal arrangements and are liable to abuse, with evidence of overcharging by agents and the continued withholding of pay by employers after the agent’s debt is cleared (Shaw 2010). Male migrants are usually unable to obtain finance from migration agents, as they are viewed as more likely to leave their jobs. Traditional sources
of finance for the poor, such as informal savings and credit groups, moneylenders and pawnshops operated by commercial banks, are well-suited for small, short-term loans but are not sufficient to cover the full costs of migration. MFIs are reluctant to provide pre-departure loans because of difficulties in enforcing repayment when the borrower is abroad, and the belief of some NGOs that migration should not be supported as it produces harmful effects on family and community welfare.

Violations of labour rights are significant risks for Sri Lankan workers abroad. Housemaids are particularly vulnerable to exploitation because they work in isolated conditions in an unregulated environment without access to information or support networks. While the GoSL cannot intervene directly in labour practices abroad, improved consular services and bilateral agreements covering minimum wages and working conditions provide mechanisms for protecting migrant workers. Improved monitoring and regulation of the migrant recruitment industry in Sri Lanka can reduce employment risk by enforcing the responsibility of agents to screen prospective employers, as well as addressing other issues of concern such as the charging of illegal recruitment fees, theft of wages, misrepresentations to prospective migrants regarding pay and work conditions, and refusal to assist in mediation and repatriation. There is a need for improved access to the Foreign Employment Bureau's process for settling complaints regarding employers and migration agents.

Social security

In both Sri Lanka and India, formal sector workers have access to job security and pensions on retirement. However, informal sector workers lack effective social security mechanisms, increasing their vulnerability to hardship in the event of illness and economic and environmental shocks. Lack of income protection causes significant hardship among older workers in the construction and fisheries sectors, where those aged over 45 face the prospect of reduced wages and unemployment due to the physically demanding nature of the work.

More than 10 per cent of households in the Sri Lankan survey locations and almost a quarter of households in Chennai were in extreme poverty (see Table 3 above), including 5 per cent which had no income source in the labour market due to the age or ill-health of household members. The traumatic effects of the tsunami were profound and long-lasting; three to four years later, more than a quarter of respondents reported that a family member suffered from ongoing tsunami-related disabilities which in some cases had led to a reduction in income generating capacity, but received no ongoing income support after the initial emergency relief phase. Both India and Sri Lanka provide free public health services and most respondents reported having access to treatment for their physical ailments; however psychological trauma, a widespread problem among tsunami survivors, often goes untreated due to the social stigmatisation of mental disorders and lack of treatment facilities. In the absence of effective social security schemes, households with limited income-generating capacity depend on assistance from charitable organisations or from neighbours and relatives who are often poor themselves. Existing state transfer programs are poorly targeted and in the case of Sri Lanka, deliver meagre benefits. About half of the Sri Lankan households received transfers ranging from SLR250-600 per month from the Samurdhi Program, a state-run poverty reduction scheme in which while 44 per cent of the total budget is spent on households in the three highest quintiles. A recent study estimated that a 10 per cent reduction in coverage would result in a 25 per cent increase in average benefits for the remaining households
(World Bank 2007). While there is support in Sri Lankan policy circles for a better targeted scheme that would deliver substantial benefits to the poor rather than negligible payments to many, including those who do not need them, the entrenchment of the Samurdhi scheme as a political patronage resource impedes prospects for reform. In Chennai, all households received a food subsidy worth an average of INR700 per month, available to families resettled by slum clearance programs. Although poorly targeted the food subsidy, unlike the Samurdhi program, makes a considerable contribution to household income.
In all areas, there is a need for policies aimed at improving sustainability in the fisheries sector, improving education and training outcomes, expanding women’s labour market opportunities and providing social security for the elderly and disabled. At the same time, since the composition and severity of constraints varies across locations, interventions should be adapted according to area-specific conditions.

- In Seenigama, policies should focus on the improvement of commuter links with nearby urban centres and retraining of former coral miners.
- In Hambantota, attention should focus on building regional transport linkages and other infrastructure development to consolidate its position as a regional hub, and strategies for linking local microenterprises and small businesses to the growing formal sector.
- In Thirukkovel, a geographically remote and sparsely populated area with limited scope for local business development, strategies should focus on provision of basic infrastructure and the promotion of regional, national and international labour mobility. Substantial public investment in upgrading the region’s dilapidated road network is essential for restoring regional and national linkages and would serve as a visible sign of the government’s commitment to repair the social fabric, severely strained by years of civil war.
- In Thirukkovel and Chennai, there is a need for strategies aimed at breaking down social divisions of language, ethnicity and caste. In Thirukkovel, language barriers and ongoing ethnic tensions limit labour migration outside Tamil-speaking areas, whereas in Chennai, caste discrimination restricts occupational mobility, denying the settlement communities access to the opportunities offered by a large and dynamic urban economy.

Fisheries

- Conduct comprehensive stock and fishing effort assessments for inland, coastal and offshore fisheries in all locations.
- Build capacity of government agencies and increase resources for stock monitoring and assessment. Utilise knowledge of local fishermen in regional stock assessments.
- Based on results of stock assessments, develop appropriate regulatory frameworks.
- Increase staff and resources available to district government agencies for enforcement, including provision of boats for patrolling.
- Conduct capacity-building of local fisheries cooperatives. To reduce risks of political interference and capture by local elites, involve NGOs and local civil society organisations in delivery of training and resources.
- Implement co-management arrangements which involve regional government agencies, NGOs and the fisheries community through representative fishers’ organisations in resource planning, decision-making and management.
- Delegate some compliance functions in coastal fisheries to fishers’ organisations.
which meet pre-established standards of internal governance, capacity and legitimacy within the local fishing community, including the right to issue fines.

• Provide information and education services for MDB owners on technological developments for quality and productivity improvements.

• Investigate potential for credit schemes for MDB purchases and upgrades through partnerships between donors and commercial banks or well-established microfinance agencies, with an emphasis on full cost recovery and credit discipline.

• Construct additional docking and refrigerated storage facilities in Ampara district via the Oluvil port and expansion of existing port facilities at Sainthamaruthu and Potthuvil.

Infrastructure

• Improve output and efficiency in Sri Lanka’s electricity sector, with a focus on expanding hydropower and other low-cost methods of power generation. Improve rural electricity supply with a focus on connecting all households to the national grid and providing high-quality services suitable for business use in towns and on main roads.

• Improve access to internet services via expansion of public internet facilities. Examine feasibility of targeted microfinance and business support for ‘telecommunications shops’ in poorly served areas. Examine options for reducing the set-up and ongoing costs of connecting to internet service providers.

• Improve the efficiency of Sri Lankan public transport services. Increase the frequency of bus services on major routes in Ampara district and provide a regular service connecting the Thirrukovil settlements with the coastal road. Expedite the planned extension of the southern rail link to Hambantota and examine feasibility of extending rail services to Ampara district.

• Continue to improve the road network in Ampara district, with a focus on reducing travel times to Colombo and Hambantota and strengthening internal linkages between remote areas and the district’s northern population centres.

• Improve the quality of internal roads within the settlements with a focus on providing year-round access to business supplies.

• Examine feasibility of establishing an industrial park for large manufacturing enterprises in Ampara district.

Social exclusion

• Caste-based social exclusion in Chennai requires extensive government interventions to enforce anti-discrimination laws and policies in education, social services and the labour market, including affirmative action programs in public sector employment and encouragement of similar programs in the private sector, particularly in emerging industries.
• The Sri Lankan government and international donors should demonstrate a practical commitment to peace-building through public investment and education programs aimed at eliminating the developmental gap that exists between the northeast and southwest, including allocating resources to regional and national NGOs engaged in community reconciliation work.

• As women are often deterred from selecting non-traditional enterprises by sociocultural factors which may be amenable to information and awareness-raising programs, NGOs can be instrumental in mitigating friction within families and communities by promoting positive attitudes towards non-traditional occupations for women.

• Provide support for microfinance and business development services that target female entrepreneurs in high-value occupations.

Education and training

• Increase budget allocations to education. Improve recruitment and management practices in the Sri Lankan school sector, including elimination of regional inequalities in the distribution of resources and teachers. Improve the professionalism and morale of the teaching service by allocating larger resources to teacher training and raising teacher salaries. Limit the use of untrained and volunteer teachers. Provide adequate allowances to encourage teachers to work in remote areas.

• Improve the quality of the curriculum at school and university level. Ensure that schools are adequately resourced to teach English, maths, science and computer skills. Ensure that Sri Lankan schools are adequate resourced to teach both national languages.

• Encourage further private sector and NGO involvement in the vocational training sector, while improving the monitoring and standardisation of vocational training colleges.

• Improve consultation between national education and vocational training authorities and the employers with a view to aligning the curriculum with current and future labour market requirements.

Microenterprise and small business development

• Very small microenterprises promote diversification and support households with limited income generating capacity. Where households are unable or unwilling to engage in riskier, higher-value alternatives, there is a clear justification for supporting low-value microenterprises, especially those which contribute directly to food security. However, development agencies should ration and target their interventions to forestall overcrowding.

• Improve finance and business development services to larger microenterprises and SMEs, which are poorly served by existing arrangements.

• Expedite the granting of full freehold housing and land titles in the settlements to enable small business owners to offer property as collateral for bank loans.

• MFIs should be proactive in targeting and supporting business opportunities in emerging sectors such as tourism.
• Zoning and other regulations should be reviewed with a view to removing constraints on microenterprises and small businesses.

Overseas employment

• Expand vocational training programs which focus on exportable skills.
• Examine options for improving access to pre-departure finance from MFIs and other sources. Where migrants opt for advances from migration agents, rather than using employers as debt collectors consideration could be given to a mandatory requirement for agents to lodge certified loan agreements with a local bank, which would collect instalments on the agent’s behalf by debiting the migrant’s monthly remittances.
• Consider reducing or waiving mandatory registration fees for low-income migrants.
• Improve consular services in migrant-receiving countries by providing dispersed contact points, improved outreach to migrant workers and more and better-trained staff.
• Improve the monitoring and regulation of migration agencies in Sri Lanka.
• Improve access to the dispute resolution process operated by the Sri Lanka Bureau of Foreign Employment.
• Examine feasibility of international migration as a livelihood option in the Chennai settlements and assess requirements for awareness raising, training, finance and other support services.

Social security

• Review existing social insurance schemes with a view to creating better targeted programs that deliver substantial benefits to a few rather than negligible benefits to many.
• Examine feasibility of contributory unemployment insurance schemes for informal sector workers.
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