

## **Annex VIII: LIVELIHOOD**

### **A. Introduction**

1. The objective of livelihood restoration and improvement in the context of the tsunami disaster is to restore “local economies”, generate employment/ wage labor through public employment programs executed in coordination with post-tsunami reconstruction work, enhance skills and technology to upgrade and diversify means of livelihood, and support vulnerable groups (widows, orphans, and disabled). The scope of livelihood restoration extends to households affected by the tsunami either directly or indirectly<sup>31</sup>.

2. This annex tries to capture the income and wage loss of directly and indirectly affected households by drawing on the data and strategy of the environment and social impact assessments as well as sector assessments, particularly of fisheries, agriculture and livestock. Data is severely limited, and the impact of the tsunami on the livelihoods of poor and low-income households remains largely unreported. Accordingly, the figures provided here are best estimates based on field observations in Tamil Nadu, Kerala, Andhra Pradesh discussions with government, civil society and community representatives, and disaggregation of state or district averages wherever available. Since livelihoods are mostly in the private domain and spread over a large number of households and enterprises, the assessment of loss and damage would need to be confirmed through household and enterprise surveys. Damages incurred by enterprises relating to tourism and forestry have not been assessed.

### **B. Damage Overview**

3. The major livelihood activities in the coastal areas are fishing, agriculture, livestock and non-farm activities. While fishing is the most obvious and noticeable livelihood on the coast, all other livelihoods could actually employ as many or more people than fishing. The indirect damage takes the form of loss of market demand for enterprises and individuals working in the directly affected area or in the vicinity, leading in turn to job losses. For example, the drastic reduction in the fish catch in the immediate aftermath of the tsunami will have impacts on fish preparation and processing, storage and trade extending well beyond the immediate impact area.

4. It is estimated that 645,000 families (about 3.2 million persons) are directly and indirectly affected in the states of Tamil Nadu, Kerala and Andhra Pradesh, and the union territory of Pondicherry. Of this total, about one-third are directly linked to fisheries, about one-fourth to micro-enterprises, and the remaining are wage earners with seasonal employment or are engaged in intermittent activities. Based on the scope of livelihood discussed in this annex, Table 1 below gives the broad livelihood patterns and damages.

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<sup>31</sup> “It has been estimated for every person who goes out to the sea, there may be up to four persons employed in allied land based activities” quote from International Fund for Agricultural Development, *India: Rural Poverty among Coastal Fisheries: Profile and Possible Interventions*, Report No.1447, October 2003, p.39.

**Table 1. Estimated Breakup of Livelihood Pattern, Damages, and Wage Losses**

	Kerala	Tamil Nadu	Andhra Pradesh	Pondicherry	Total
<b>I. Breakup of Livelihood Patterns</b>					
Fisherfolk	42,700	120,000	48,000	10,000	220,700
Microenterprises	15,000	90,000	35,000	3,000	143,000
Agriculture and Livestock	6,500	29,000	700	1,330	37,530
Others	20,800	161,000	46,300	15,600	243,700
Total Affected Livelihoods	85,000	400,000	130,000	29,930	644,930
<b>II. Damages (Assets) \$ million</b>					
Fisherfolk	11.7	184.2	11.9	21.8	229.6
Microenterprises	2.1	12.6	4.9	0.4	20.0
Agriculture and Livestock	3.4	9.3	0.5	1.0	14.0
Total Damages	17.2	206.1	17.3	23.2	263.8
<b>III. Wage Losses (per month) \$ million</b>					
Fisherfolk	3.5	8.0	3.0	1.0	15.0
Microenterprises	0.5	3.0	1.0	0.0	4.5
Agriculture and Livestock	0.2	1.0	0.0	0.0	1.0
Others	1.0	5.0	1.5	0.5	8.0
Total Wage Losses (per month)	5.2	17.0	5.5	1.5	28.5

Note: Number of affected households includes directly and indirectly affected households

Wage losses have been estimated for all categories using income or wage approximations.

5. As is evident from Table 1, (as more than 30% are in that category) the disaster has hit hardest those that were already poor and other informal traders and micro-enterprises. Nearly two-fifths to half the population in the affected areas may have been under the poverty line and about a third would be from the scheduled castes or scheduled tribes, who are heavily represented among the poor. The broad pattern of losses is described below.

6. *Fisheries:* This sector provides significant employment opportunities, including the entire gamut of persons employed in net-mending and weaving, supply and repair of fishing equipment and gear, boat building and supply, vessel repair and maintenance, provision of ice, marketing, processing and transport of fish, fish exports, etc. Laborers engaged in boat repair, transport of ice and related activities are likely to have suffered more, having little reserves to fall back upon. Loss of homes, destruction of village infrastructure, and loss of livelihood is compounded by loss of lives. These damages are accentuated by prevailing issues in the fisheries sector that relate to rising input cost, especially fuel, declining profitability of small boat owners, inequitable distribution of the market value of produce, and in some instances depleting fishing stocks. The fisheries sector also remains largely unregulated. While these aspects can only be addressed over the long-term, for the short and medium term, fishing remains the main source of livelihood for the coastal community.

7. *Microenterprises:* A considerable number of affected families were engaged in micro-enterprises that include a broad range of activities requiring small investments primarily in the range of Rs. 5,000 to Rs.10,000. Much like the fisheries sector, involvement of women in microenterprises is quite high<sup>32</sup>. In general, these micro-enterprises cater to the local markets and the lower segments of population both for inputs and outputs. This shows interdependence and vulnerability of these enterprises, and they have been affected severely through loss of equipment and other assets,

<sup>32</sup> Women are mostly involved in fish processing (cleaning, drying, salting, etc) and marketing activities.

loss/damage of plants and shops, loss of employment, etc. Most women in this sector have benefited from the growing network of self help groups (SHGs)

8. *Agriculture and Livestock*: Damage to agriculture and livestock is not that significant and is mostly confined to the immediate vicinity of the coast. Damage includes loss of standing crops, and death or injury to livestock which has a significant impact on the livelihoods of the poor, especially women. In addition, salinity of land and groundwater will have medium to long-term impacts on productivity and profitability of agriculture, horticulture and pasture lands.

9. *Others (including casual labor)*: This group includes wage laborers, seasonal workers and other subsistence activities, This group has a preponderance of scheduled castes, tribes, other backward castes, disabled and vulnerable (orphans, widows, etc.). The poverty incidence in the affected area is much higher than the national or state averages. As a result, damages to this segment are primarily due to loss of employment opportunities and consequently wages. In the event of natural disaster, this group is the most vulnerable. Part of this deep-seated vulnerability is primarily related to the socio-economic structure of the affected areas, ownership of economic assets, land-holding patterns, and lack of skills to benefit from economic opportunities.

### C. **Reconstruction Strategy and Needs**

10. Considering the livelihood patterns as described above, the strategy should include the following elements:

- *Priority for the poor and low income families, especially in “other” category* because of their inability to regain livelihoods without special targeted interventions.
- *Building and strengthening organizations of the poor* such as self-help groups (SHGs) and cooperatives, which are well represented in the affected areas.
- *Building partnerships with the private sector* including non-governmental organizations for diversification of livelihood with focus on sustainable options.

11. In order to meet the immediate livelihood needs, it will be important to implement the strategy in a phased manner over short, medium and long-term.

12. **Short-term Interventions (up to 12 months)**: The short-term objective should be to restore livelihoods of the affected families. Achieving this objective would require:

- Giving the affected communities an opportunity and forum (mainly through SHGs) to decide on their immediate, short and medium-term priorities through a participatory and community driven approach;
- Providing wage earning opportunities through the government’s on-going public employment generation programs, including restoration of tsunami-damaged infrastructure, for which immediate skill building could be provided (such as boat repair, house construction, rebuilding of roads, etc.).
- Commencing replacement of assets keeping in view the supply capacity, impact on prices, and precise identification of the beneficiary. High value assets such as boats and nets should be provided in kind.

- Forming new self-help organizations SHGs (both men and women) and strengthening existing SHGs and cooperatives; providing seed capital to them to facilitate bank linkages; and building skills appropriate for the local economy.
- Providing income transfers and social assistance to vulnerable groups who are not immediately capable of undertaking economic activities.
- Revisiting sector development policies for sustainable livelihoods.

13. **Medium Term (1-3 years):** The medium term phase would emphasize promoting diversified livelihood/ allied activities for youth and women, especially among fisher-folks. The interventions during the medium-term should include:

- Continuing with short-term activities, as required;
- Improving and modernizing facilities and productive infrastructure (such as storage facilities, fish drying and chilling centers, sheds for livestock, etc);
- Upgrading or improving skills to adopt appropriate environmentally sound technologies;
- Reducing vulnerability of poor and low income families through risk mitigation measures such as insurance, targeted social transfers, and development of social protection measures that could be widely adopted.

14. Based on the above interventions, the estimated needs are in Table 2 below:

**Table 2- Estimated Needs for Livelihood (\$ million)**

	Kerala	Tamil Nadu	Andhra Pradesh	Pondicherry	Total
<b>I. Micro-enterprise Restoration and Development Costs</b>					
<b>Short-term</b>					
SHG Formation, Strengthening, and Seed Capital <sup>1</sup>	1.5	11.0	1.0	0.5	14.0
Skills Training	1.0	7.0	1.0	0.5	9.5
Vulnerable Groups Special Assistance	0.2	9.0	3.0	1.0	13.2
Asset Replacement Cost (only micro-enterprises) <sup>2</sup>	5.5	22.0	5.0	1.4	33.9
<b>Total Short-term</b>	<b>8.2</b>	<b>49.0</b>	<b>10.0</b>	<b>3.4</b>	<b>70.6</b>
<b>Medium-term</b>					
SHG Formation, Strengthening, and Seed Capital	1.0	10.0	1.0	0.4	12.4
Skills Training	1.0	7.0	1.0	0.4	9.4
Vulnerable Groups Special Assistance	2.0	9.0	3.0	1.0	15.0
Risk Mitigation (group insurance premium)	0.0	1.0	0.3	0.0	1.3
Value addition/diversification	5.0	56.0	4.0	5.0	70.0
<b>Total Medium-term</b>	<b>9.0</b>	<b>83.0</b>	<b>9.3</b>	<b>6.8</b>	<b>108.1</b>
<b>Total</b>	<b>17.2</b>	<b>132.0</b>	<b>19.3</b>	<b>10.2</b>	<b>178.7</b>
<b>II. Asset Replacement Costs (others)<sup>3</sup></b>	22.0	268.0	15.0	26.0	331.0
<b>III. Employment generation (six months)<sup>4</sup></b>	8.0	44.0	16.0	4.0	72.0

Note:

<sup>1</sup> Higher units costs are assumed to ensure appropriate quality of SHGs and sustained upgrading of skills and income.

<sup>2</sup> Replacement costs relate to those in the private domain. While agriculture, livestock, and some fisheries activities also qualify as micro-enterprises by asset size, the related asset replacement costs have been taken to separate annexes.

<sup>3</sup> Replacement cost for fisheries, agriculture, and livestock are included in related annexes. However, the value addition/diversification costs are part of the livelihood restoration package.

<sup>4</sup> Most of the employment generation will be covered by ongoing government programs and through the infrastructure reconstruction in affected areas. As such, this cost will be captured under respective allocations.

15. **Long Term.** Beyond the short and medium term livelihood interventions, income expansion and its equitable distribution would require progressive broadening of sustainable economic opportunities in the affected areas. This would require policy and institutional reforms.

#### **D. Institutional and Delivery Options**

16. Considering the extent and severity of damage, pooling of development efforts of stakeholders will be essential for livelihood restoration and development. The success of livelihood restoration and development will depend on the active involvement and participation of affected people to ensure effective utilization of funds, timely delivery, proper targeting and transparency. Within this context, the institutional interventions should depend on the core competencies of the respective agencies. The following should be ensured while designing state specific delivery mechanisms:

- The administration of livelihood restoration and development would require household level assessment, and for this purpose, it is advisable to engage communities and other intermediaries for efficient delivery.
- The formal banking sector will have a crucial role to play in providing services tailored for medium and large enterprises, including those engaged in fisheries, agriculture, etc.(Guidelines for these have already been issued and the banking sector is well equipped to meet the expected demand.
- Government of India has already proposed mechanisms for delivery of grants for asset replacement, especially for the fisheries sector. To ensure equity, such replacement has been proposed for microenterprises in this annex. The delivery of these grants as well as those proposed for vulnerable groups should flow through community based organizations.
- Considering that asset replacement is also proposed for microenterprises along with seed capital for new SHGs, it will be important for banks, cooperatives and other sources (including NGOs) to provide immediate linkages for meeting incremental credit needs. For facilitating this, appropriate modifications need to be made in the relevant guidelines and rules.
- Since upgrading of skills is expected to be provided through a range of specialized agencies (both public and private), it needs to be ensured that these are coordinated, demand driven and related to marketable skills.
- Reducing the vulnerability of poor and low-income families through risk mitigation measures such as insurance, targeted social transfers, and development of social protection measures requires an integrated public-private response.