

Rebuilding after the tsunami: how to get it right

January 2005



Coastal Zone means that area lying within a limit of three hundred metres landwards of the Mean High Water line and a limit of two kilometres seawards of the Mean Low Water line and in the case of rivers, streams, lagoons or any other body of water connected to the sea either permanently or periodically, the landward boundary shall extend to a limit of two kilometres measured perpendicular to the straight base line drawn between the natural entrance points thereof and shall include the waters of such rivers, streams, lagoons or any other body of water so connected to the sea.

Development Activity means any activity likely to alter the physical nature of the Coastal Zone in any way and includes the construction of buildings and works, the deposit of wastes or other material from outfalls, vessels or by any other means, the removal of sand, coral, shells, natural vegetation, seagrass or other substances, dredging and filling, land reclamation and mining or drilling for minerals, but does not include fishing.

Beach means a gently sloping area of unconsolidated material, typically sand, that extends landward from the mean high water mark to the area where there is a marked change in material or natural physiographic form. In cases where there is no marked change in the material or natural physiographic form, the beach will be deemed to extend to a distance of 20 metres landward from mean high water level, or to a level of 2.5 metres above mean high water level, whichever is less.

Coast Conservation Act

‘There can be no prescriptive rights pertaining to the beach – the beach is available and accessible to all citizens of Sri Lanka equally and irrevocably’

Common Law of Sri Lanka



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On the 26th of December 2004, South and South East Asian countries were hit by a tsunami, caused by an earthquake off the coast of the Indonesian island of Sumatra.

The Tsunami has killed over 150,000 people in the region and over 35,000 in Sri Lanka alone.

The tsunami is the worst natural disaster to affect Sri Lanka in living memory. It has given rise to a massive humanitarian crisis and is causing untold suffering to millions of people.

In total it has been estimated that up to one million people have been affected by the tsunami. This represents 5% of Sri Lanka's entire population.

The tsunami destroyed homes and offices, shops, hospitals, schools, roads, railways and other infrastructure. As a result hundreds of thousands of people found themselves without food and health care because of the breakdown in infrastructure.

Almost a million people from 200,000 families have been displaced, according to figures received so far at the Centre for National Operations set-up by President Chandrika Bandaranaike Kumaratunga. In response, almost 800 camps and 250 school buildings are being used to house the displaced persons temporarily.

There is an urgent need to rebuild Sri Lanka's shattered infrastructure. The most urgent priority is to re-house the hundreds of thousands of people who have had their homes destroyed completely. They have lost all of their possessions and much of their means of livelihood. For many, a home represents an investment of a lifetime. Under current circumstances, building a new home can be little more than a dream to them.

We currently face a unique opportunity to rebuild our housing and other social infrastructure, and to make a positive step in improving the welfare of Sri Lanka's coastal population.

However, the government needs to have a firm plan in place for this reconstruction, especially with regard to zoning in coastal areas. It is senseless, and may be self-defeating, to initiate a massive housing scheme without a definitive plan. This plan must be in place before reconstruction begins.



Guiding principles

Although the need to rehabilitate coastal infrastructure after the tsunami has been prompted by the worst possible circumstances, it is clear that the rebuilding process has every potential to effect significant improvements in the social, economic and environmental welfare of Sri Lanka's coastal population.

At the same time rebuilding can make a substantial contribution to long-term development in the coastal zone and in the country as a whole. It provides the opportunity to rectify many of the mistakes that were made — and were in some cases allowed or even encouraged to happen — in the past. Rebuilding in the right way could also help to minimise the likelihood of such devastating impacts arising from natural and human-induced disasters in the future.

However none of these goals will be achieved unless rebuilding is undertaken properly, and according to sound principles and practices. Otherwise we run the risk of continuing to undermine an already weak economy, and destabilising still further the livelihoods of a population who have already suffered unduly.

There are, therefore, a number of serious and urgent concerns that must lie at the core of efforts to rebuild after the tsunami.

- **We want to improve on the past.** Undertaking the process of rebuilding must be driven by the goal of bettering, and ensuring the future security of, the status and welfare of all sectors of the coastal population, their living conditions, livelihoods and environment.
- **We need to take a long-term perspective.** Anything that is undertaken as part of the rebuilding process should not only aim to meet people's needs today. It is also an investment which takes account of people's changing requirements and aspirations in coming years.
- **We are responding to much more than just the current disaster.** It is necessary to look to the environment and conditions which people will face in the future — and the risks and uncertainty inherent to this. There must be recognition of the need to adapt and respond to changing environmental and physical conditions in the coastal zone, and to factor disaster preparedness into how we plan and operate. This includes taking account of the likelihood of natural hazards such as floods, storms and cyclones occurring, as well as human-induced risks associated with processes of climate change, environmental degradation, oil spills and marine and coastal pollution.
- **We live in diverse communities, in which all people must be accorded sufficient rights.** Social equity, including non-discrimination in access to adequate living conditions and means of livelihood, is a basic right for all sectors of the population.
- **The environment is an integral part of our infrastructure and our future.** People's future security and welfare depend to a large extent on a stable and well-maintained environment. Environmental sustainability is an indispensable component of the rebuilding process.
- **Successful rebuilding requires consensus on key issues.** A number of principles and concerns transcend political affiliations and personal interests. This includes issues relating to re-establishing the rule of law and strengthening the institutions that uphold it, and ensuring that all parties make a stated and written commitment to conform to these basic tenets.



Land use issues

In the past, we faced a situation where land use restrictions and regulations were weakly — if at all — enforced, leading to ad hoc, unplanned and illegal settlement patterns. To a large extent this was encouraged or motivated by the expectation of political and personal gains. As we have recently seen, such a short-term development imperative has devastating implications for both our current and future security. These mistakes cannot be allowed to happen again. Proper coastal zone management, involving a clear land use policy and plan, must drive the process of rebuilding.

- The shoreline and immediate coastal zone are inappropriate — and dangerous — areas for human settlement. The location of housing must be carefully planned in accordance with internationally accepted safe norms, in line with the provisions of the Coast Conservation Act No. 57 of 1981 which defines the extent of the Coastal Zone as “...lying within a limit of three hundred metres landward of the Mean High Water Line...”.
- Sri Lanka remains a densely populated country, and land pressure is particularly intense in the Coastal Zone. Rebuilding should be based on the principle of minimum land use. As articulated below, the most land-efficient method of rebuilding will be to construct multi-storey apartment blocks.
- While unused land is at a premium in the Coastal Zone, rebuilding is a priority. This should take place outside the Coastal Zone. Vacant public land in suitable locations can be used for housing construction. Costing should be at market rates. However it is also inevitable that rebuilding will take place on land that is privately held. Wherever possible land should be procured from willing sellers, on a voluntary basis and at market rates, but it should be recognised that compulsory purchase may also be necessary as a matter of urgency to prevent rampant speculation.
- Proper land use planning means integrating environmental concerns into housing construction. This is also integral to ensuring pleasant and adequate human living conditions. Housing units should be located with due regard to minimising negative environmental impacts, and construction must be carried out according to appropriate environmental safeguards and impact assessment procedures.
- Socio-economic considerations form a central consideration in proper land use planning. The current composition of communities, and their former location and interactions, must be borne in mind when houses are located, constructed and allocated. In order to avoid destroying the already weakened social fabric of coastal communities, key considerations include ensuring the proximity of settlements to people’s means of livelihoods, reflecting long-established settlement patterns, and maintaining community diversity and interactions. Particular attention should be paid in the rehousing process to the needs of disadvantaged and marginalised communities, especially the poor, landless and women-headed households.



Design and construction

Many buildings in Sri Lanka, including public housing schemes as well as private residences, are poorly designed and built. The implications of this are apparent when we consider the level of impact caused by the tsunami. Some of this devastation could have been avoided, or at least mitigated, had buildings been well-constructed. It is clear that the rebuilding process must aim for secure, stable and sustainable housing for all, according to best practices in housing design and construction.

- While cost-efficiency considerations are essential to the rebuilding process, they should in no way compromise the quality of housing that is built. We should not aim to repeat previous poor construction practices, but rather to better the standard of housing, improve living standards, and enhance access to affordable and adequate housing among all sectors of the population.
- The most appropriate housing plan in terms of minimum land use, social, financial and environmental terms, is the construction of multi-storey apartment blocks. To facilitate timely and cost-effective construction, as well as to allow for flexibility in meeting future needs, housing units should be based on a uniform design which can be easily replicated across multiple sites and is flexible to adaptation according to location, number of dwellings and community priorities.
- That housing units should be cost-effective, durable and easy to maintain, should form a guiding principle in housing design.
- Building design should rely on appropriate, and yet high quality, technology and materials. While taking international standards and best practices into account, the specific conditions and requirements of Sri Lanka should guide the choice of construction materials and technology. Labour intensive techniques, in which Sri Lanka is a global leader, and the use of local materials, should where appropriate be used as suitable methods for construction, in the interests of cost-effectiveness, as well as because they provide an opportunity to stimulate local economy and employment.
- While housing is an immediate priority, the adequate provision of other basic services forms an integral component of restoring adequate human settlement and living standards. Alongside residential units, it is necessary to plan for and ensure the delivery of adequate and accessible water supply, sanitation, healthcare and educational services. At the same time sufficient amenities must be designed and provided which will maintain, and even improve, social and community interactions. While some of this infrastructure already exists, other parts will have to be rebuilt, newly constructed or upgraded in the light of changed settlement patterns. A comprehensive needs assessment must be carried out, and sufficient services and infrastructure provided and made accessible to all sectors of the population.
- Natural ecosystems must also be appropriately rehabilitated and restored alongside physical infrastructure and housing. This involves the proper clearance and disposal of wastes generated by the tsunami, their recycling and use for reconstruction where possible, as well as the rehabilitation of coastal forests, wetlands, mangroves and other ecosystems.



- Environmental best practices and eco-friendly principles provide a mechanism both for minimising current and future construction costs, as well as for ensuring an adequate standard of living for residents. Factors to be considered in housing design include the use of appropriate and alternative energy sources such as biogas and solar, water use efficiency and non-environmentally destructive materials and construction practices.
- Environmental and socio-economic monitoring plans should be set in place so as to be able to gauge the impacts and success of the rebuilding process, and to allow for additional future actions to be undertaken in response to changing needs and circumstances and to mitigate unforeseen impacts. Environmental and socio-economic monitoring should be carried out according to internationally accepted procedures and best-practices, in conformity with the laws and norms of Sri Lanka.



Legal, institutional and policy concerns

Sri Lanka has a comprehensive legal, policy and institutional framework relating to coastal zone management and development. In the past, many of the required laws and regulations were not followed or enforced, and there were overlapping and sometimes contradictory institutional jurisdictions. Political interference was widespread, as was the misuse or non-use of discretionary powers leading to a breakdown in the Rule of Law. The weakening of the capacity and authority of institutions contributed greatly to the establishment of unsafe and illegal settlements which have been devastated by the tsunami. Re-establishing the rule of law and strengthening the institutions that uphold it thus form an integral part of the rebuilding process.

- There is currently a dangerous belief among some decision-makers that the emergency situation warrants suspending or negating existing laws. In no way should this be allowed to happen. Rather, it is essential that existing laws relating to Coastal Zone development be strictly and fairly enforced. These include the Coast Conservation Act, No. 57 of 1981 as amended, the National Environmental Act, No. 47 of 1980 as amended. Other laws dealing with the environment such as the Fauna and Flora Protection Ordinance as amended and laws relating to urban planning such as the Urban Development Act, of 1980 should be strictly enforced. Any new laws should only serve to strengthen the provisions of these Acts.
- Moreover, there must be a stated commitment among all stakeholders to enforce and uphold the laws governing Coastal Zone development and conservation. Consensus and intent to comply must be sought from government policy-makers and planners, relevant non-governmental agencies, the private sector and the affected communities. Key areas include issues relating to how construction is planned and implemented, and on avoiding the return of households and businesses to illegal locations and settlements.
- Ensuring law enforcement and proper procedures requires a considerable level of coordination across different sectors and stakeholders. Multiple institutions are involved in Coastal Zone reconstruction and development. An effective coordinating body needs to be set up to manage this process of inter-sectoral coordination and dialogue, with the backing of all political parties.
- Key policy gaps remain relating to Coastal Zone management and post-tsunami rebuilding, and should be addressed either through the modification of existing policies or the formulation of new ones. Immediate priorities include a land use policy, and strategies relating to disaster preparedness and adaptation.
- Before communities are relocated to new housing, due and careful attention must be paid to defining mutual rights and obligations. Most importantly this should include consideration of the rights of occupants over property, tenancy and security of tenure, and limitations on the sub-letting and transfer of property by the allocated owner or tenant.



Financial aspects

While pressure on scarce government budgets and insufficient financial resources are a longstanding problem for Sri Lanka, there also remain issues relating to indiscriminate inflows of funds and investment, unclear or inappropriate budgeting priorities, and a lack of accountability and transparency in financial dealings. Both domestic and foreign spending has often failed to translate into the gains and impacts that have been projected for the intended beneficiaries. It is mandatory that the financial resources invested in the rebuilding process, which will come from multiple sources both domestic and international, be used effectively and honestly to the ends that are intended.

- A proper and accurate costing has to be carried out before rebuilding commences. It is of paramount importance that investment needs, and the methods used to calculate them, are known and publicised, so that funding needs can be properly defined and adequate financial resources mobilised.
- Financial procedures should be open, transparent, accountable and cost-effective for all of the budgets and expenditures, including those related to the contracting and bidding process and those associated with the process of construction itself.
- Rebuilding will require a substantial commitment from public and private, domestic and foreign donors. A comprehensive financing strategy must as a matter of urgency be formulated. Funding should be as flexible as possible, and come from multiple sources. Where foreign assistance is sought this should wherever possible be negotiated on grant, not loan terms. At all stages the financial process must be transparent and accountable to all donors and stakeholders, including the general public and beneficiary communities.
- In order to engender a sense of responsibility, stake and ownership among the families and individuals who have been allocated new housing, a mechanism for cost-sharing or cost-recovery should be investigated. This must however be designed to avoid compromising poor and disadvantaged communities, should not undermine equal access to acceptable housing and services for all sectors of the population, and must be based on people's ability to pay. Any cost-recovery or cost-sharing strategy should be implemented over the long-term, recognising that all sectors of affected communities are currently economically marginalised and financially weakened by the tsunami.



Managing the process

In the past there have been instances where a clear lack of consensus on key issues was evident, planning and policy-making processes were weak and unclear, and political agendas and personal interests unduly influenced decisions. Weak governance and decision-making structures did not put anyone in a situation where they were well-equipped to withstand the impacts of the tsunami — in material, social, political or economic terms. It is clear that successful rebuilding after the tsunami, including achieving the desired improvements in social, economic and environmental welfare, depend on managing the process of decision-making, planning and implementation in ways which will uphold the public interest and manifest good governance procedures.

- Under the overall guidance and responsibility of a single coordinating body, effective consultation and communication will be key elements in the decision-making process. Careful attention must be paid to involving key stakeholders (including the multiple sectors involved in coastal reconstruction, as well as representatives from affected communities) in formulating priorities and making decisions about rebuilding, and in communicating these decisions and their rationale to the general public.
- The process of planning and undertaking rebuilding must be informed by appropriate information and data, and be based on accepted principles and procedures. This relates particularly to the phasing and siting of housing developments, and subsequent allocation of housing units. Such decisions must be based on sound and credible information on the number of affected families, their location and needs. Proper procedures should be openly and widely communicated, and clearly adhered to.
- The process of rebuilding involves an important element of awareness and outreach. Education of both decision-makers and the general public on key elements of the process itself, as well as on legal and technical aspects, will be key to its success, acceptance and ultimate sustainability.

EFL calls upon the Government of Sri Lanka to make an immediate statement of intent, which outlines how they propose to deal with the issues that are laid out in this document.

EFL urges all those involved in helping to rebuild after the tsunami to forge a consensus on these issues among the decision makers, both in the government and in the opposition.

If we do not get it right, there is a real and urgent danger that many of the mistakes that were made in the past will be repeated, undermining still further the already weakened lives and livelihoods of the coastal population.

In the light of the lessons learned from the tsunami, in the wake of the devastation we face, and in the interests of our future prospects for development and growth, this is a risk that we simply cannot afford to bear.

Environmental Foundation Ltd (EFL) is a non-profit public interest law group, whose mission is the conservation and enhancement of the natural environment through legal means.

Since 1981 EFL has established itself as a driving force in promoting environmental justice for the people of Sri Lanka, particularly poor and disadvantaged communities, through the provision of mediation, representation and advocacy services, and legal and scientific support, in environmental matters.



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