

FAST FACTS

The Republic of Maldives

- Population: 289,480 (Census 2004)
- 1,192 islands grouped into 26 atolls extending over 900km
- 199 inhabited islands
- Main income earners: tourism, fishing and small-scale agriculture
- Nearly 60% of the population live on an island of less than 1,000 people

Post-tsunami Maldives

- 82 dead, 1,313 injured, 26 missing (presumed dead)
- 53 islands severely devastated, 13 islands totally evacuated
- Displaced and homeless on 26 Dec 2004 : 29,577 (currently 11,232, as of 31 Oct 2005)
- 1/3 of the population severely affected by the tsunami, losing their homes, water, food supplies and livelihoods
- The tsunami caused an estimated US\$ 472 million worth of damage to the islands, US\$ 64.8 million of which was damages to the housing sector. This accounts for about 62% of the country's GDP

(Source: Government of Maldives & "Tsunami: Impact and Recovery" by World Bank / Asian Development Bank / UN system)

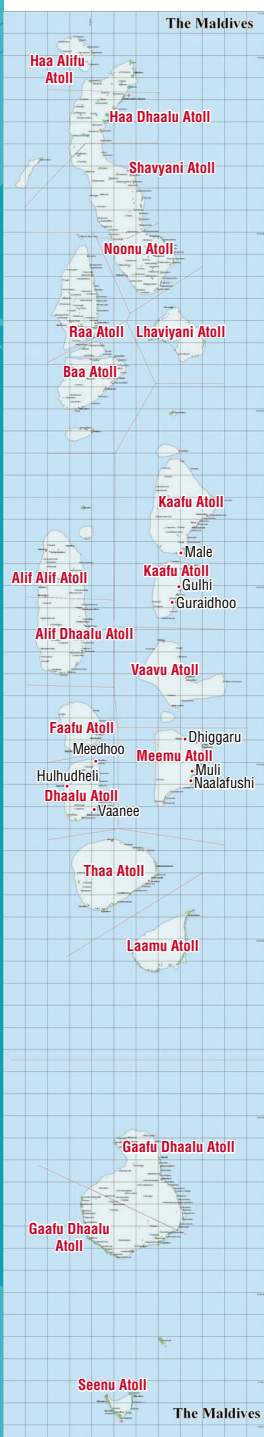
MALDIVES PARADISE RECOVERING

UN-HABITAT Post-Tsunami Reconstruction Effort in the Maldives

Island of Vane in Dhaalu Atoll, where Shelter Recovery is funded by the People's Republic of China.

"Mine was the first house to be repaired in Naalafushi. I carted building material from the warehouse to the site and worked alongside the construction workers. I also helped out at other construction sites. The money I earned is less than what I normally earn but I see it as my contribution to the community"

Syed Hussain, Naalafushi



Maldives, a small state of coral islands strung across the Indian Ocean, has quietly achieved impressive economic progress over the past decade. Before 26 December 2004, the country was also lauded for its achievements in spreading literacy, lowering its under-five mortality rate and for making safe water available to almost all its citizens. Ironically, the country was set to graduate from the UN's 'least developed' status just before the tsunami hit. The tsunami may have put development back by decades. One of the most vulnerable countries in the world, Maldivian islands are typically less than one square kilometre in size and have an average elevation of just 1.8 meters above sea level. The tsunami inundated the entire country, washing away homes and vital infrastructure such as wharves, fish processing facilities, hospitals and schools. Despite an impressive record in tackling poverty, the tsunami caused and continues to cause suffering for ordinary people in the islands, many of whom were already living a subsistence lifestyle.

While the impact of the disaster was not as acute as in Indonesia and Sri Lanka, the entire population of Maldives was affected in some way or another. Almost all inhabited islands had their already precarious water supplies contaminated by sea water; many people lost their means of making money, either because their fishing equipment was washed away, their business was damaged or the land for crops was ruined; and much of the infrastructure that is vital for small island economies, such as jetties and harbours, was destroyed. However in the eyes of the Maldivian people, rebuilding and repairing of homes continues to be their greatest need and number one priority. The magnitude of work involved in shelter recovery far outstrips the needs of any other sector. In a country with tiny, sparsely-populated, scattered islands, island communities pay heavily for their isolation. Building is a costly business, as all materials must be imported from abroad. Amidst frequent monsoon storms, delivery of essential shipments can quickly become a logistical nightmare. The scale of devastation wrought by the tsunami is unprecedented and has created a demand far in excess of national construction capacity.

Yet slowly, many island communities are getting back on their feet. How recovery takes place is as important as what is achieved in physical or monetary terms. Recovery, for Maldives, means not only repair and rehabilitation but an opportunity to restore lost development momentum; to build back better; to create skills and jobs; and to empower people to manage their personal and community lives as they so desire. UN-HABITAT in partnership with UNDP is part of the massive effort to rebuild homes, revitalise communities and help the island economies to bounce back.



One year after the tsunami, a girl in Guraidhoo, one of the hardest-hit islands.

Community-led, Community-managed

The UNDP / UN-HABITAT Shelter Recovery Programme is helping rebuild or repair over 3,000 homes on 59 affected islands, by providing people with the funds and technical guidance they require. Adaptability to local concerns and ensuring community ownership lie at the heart of the programme approach. On each island, communities began by collectively deciding which people needed help to repair or rebuild their houses. Technical surveys gave cost estimates to damages; consultation with each eligible householder finalised individual entitlements. The signing of Community Grant Agreements transfers cash grants as the means for householders to organise the repairs and reconstruction themselves. Communities are supported with technical oversight and advice on sound construction practices, and organising the procurement and transport of tools and building supplies for new houses. The expected end result is not only more satisfied families, but also a legacy of strong communities capable of achieving their own development needs in the future. In the long-run, the programme hopes to establish a flexible replicable model that can be adequately adapted throughout the diverse island settlements nationwide.



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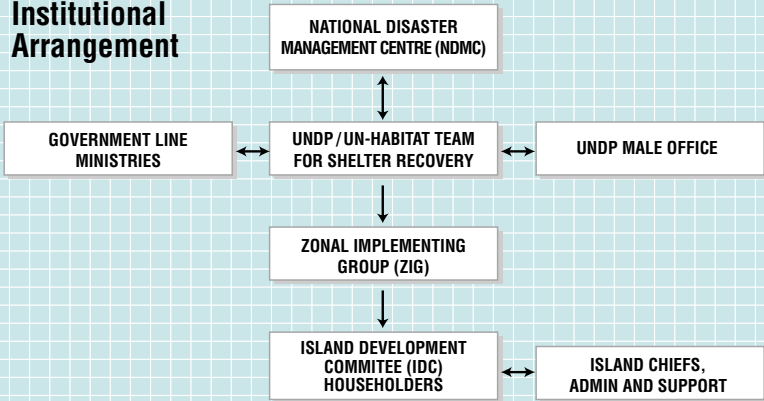
Meeting with the women's development committee

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Vital Statistics

- Technical damage surveys have been carried out: 48 (out of 59) islands
- Community Grant Agreements signed : US\$ 4,222,376 (44 islands)
- Funds Disbursements : US\$ 986,735 (25 islands)
- Construction materials/tools/equipment sent out : 11 islands
- Construction work plans completed : 28 islands
- Ongoing work : 778 repair projects, 48 reconstruction projects
- Work progress : 100% (82 houses); 50% - 90% (670 houses); 30% - 50% (74 houses) and 10% - 30% (74 houses)

Institutional Arrangement



Local problems, local solutions

Starting with the skills already present, each island has assembled a core team to work for shelter activities. Experienced local construction supervisors have been appointed to help their neighbours repair and rebuild houses. Where new houses are under construction, a stock controller has been selected to look after community building materials. These staff provide day to day technical and organisational advice to the communities, assisting them with procurement of material, transportation, quality assurance, and oversight of the use of funds and materials and monitoring progress. UNDP/UN-HABITAT is working to compliment existing skills and abilities by arranging training for staff where it is needed.

The Island Development Committees (IDCs), headed on every island by the Island Chief, have committed to take custody of householder grants via a Community Grant Agreement. As the official institution on each island, the IDC operates a programme bank account, takes care of fund distribution, and monitors the use of grants. Project sites spread over a large number of scattered islands require adaptable and pragmatic oversight. The Shelter Recovery's 'arm' in the field is the Zonal Implementing Group or (ZIG) - local consultancy firms who play a critical role in mediating between the donor agencies, local authorities and the communities. Three regional supervisors constantly move around island construction sites backing up the ZIG's, advising householders and checking on progress and quality standards.

Putting people at the centre of the recovery process

Maldives is only slowly emerging from decades of paternalistic governance. Decentralisation is now high on the President's agenda. But for the first time, through the Shelter Recovery Programme, islanders have a unique and exciting opportunity to ground local decision-making in a vital practical outcome. Partnering the people in this huge undertaking is a complex task. The tsunami shattered not only buildings, but also the confidence and resilience of island communities in its

path. To succeed, the type of physical rehabilitation islanders desired first requires a carefully laid out, social foundation. Consequently, much time has been invested in direct consultation, organisation and helping to forge the close co-operation required on each island. One of the most important links forged at island level has been the interaction between government appointed island authorities, and affected householders. The IDCs are key allies in this effort, with membership that is about 40% elected, and 60% appointed by the Government. In the shelter work, the IDC helps identify concerns, set priorities, and build a consensus on implementing action plans. But the vested interest in getting the job done – and done well - does not lie in the IDC. Householders themselves are at the centre of the reconstruction process.

One of the Programme's most exciting innovations is the creation of the householders' committee. Technically titled the Shelter Recovery Committee, it was set up to ensure that householders are represented in the project activities and are able to foreground community concerns before the IDC. The Committee is also in charge of working with the ZIG to resolve any disputes in the survey process; to share project information with the householders; and to work with the construction supervisor in deciding which houses take priority in the work plan. The Government of Maldives provided the design for the new houses, but the householders are selecting the local builders who will buy the raw material and carry out the work. Currently, the householder committees exist only on those islands where the householders expressed a wish to set up such a forum.



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Turning a new leaf

Fisherman Mohammed Raooff's hopes were washed away when the tsunami crashed into his island. But the days of grieving have given way to new pride and new responsibilities. The spurt in construction activities in Muli is helping local construction workers upgrade their skills, points out Muli resident Raooff, now working as a construction supervisor. "I have worked as an unskilled labourer at construction sites earlier. But while building my own house, I learnt many new things - about the need to put in more columns, more safety features. We no longer use dead coral and lime as construction material. The new house will be stronger because they are made out of cement, sand and aggregates," he says.

Traditional methods of building in Maldives do not produce houses that withstand the test of time. Typically, foundations are weak; concrete is mixed badly; and it is common for cracks to appear in newly constructed houses within a matter of months. In fact, much of the tsunami damage could have been avoided had houses been better built to start with. Widespread structural weakness means that damages have escalated on the islands since the tsunami, with implications for costs and time involved in repairs. The Shelter Programme has helped popularise the idea of "building back better", which means leaving people not only with a new house – but a better house than they had before – as well as the skills to build and construct housing.

Seven key ways of building-back-better

1. Government of Maldives / UNDP / UN-HABITAT shelter design places the foundation well below the ground so that it rests on stronger soil strata. In addition, because of the loose sandy nature of the ground, foundation width is increased and reinforced with light steel to evenly spread the weight.
2. The sturdiness of homes is improved by incorporating a light reinforced concrete frame consisting of columns and ring beam at eaves level.
3. Native plants planted around the island provide a natural primary boundary from tsunami or tidal surge. In addition, plants and trees around the houses provide shade, reduce temperature and provide seasonal fruits.
4. Household rainwater harvesting and storage systems are provided to each house. Rainwater overflow from household systems is diverted to wells to recharge the groundwater.
5. Water-tight septic tanks at each house are linked to a small-bore effluent discharge system. To avoid the growing problem of groundwater contamination, final discharge is to deep water off-shore. "Gray water" is disposed by-passes the septic tank so that it does not hamper the sludge digestion process.
6. The use of coral for wall materials and aggregate is discontinued. Imported river sand and aggregates are specified for wall and concrete constructions.
7. As part of a general waste management improvement programme, organic content and the fertility of soil is being improved through the composting of household and other organic waste.



Traditional house in Maldives

© Paridekha Chatterjee



Block-making, Kaafu Guraidhoo

© UNDP / UN-HABITAT



Construction of the emergency shelter, Kaafu Guraidhoo

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Revisiting the Community

Dhiggaru Island is famous throughout Maldives for its delicious *rihaakuru* or fish paste. But these days, it has another claim to fame. The remote island in Meemu atoll, about 118 km from Male, is part of a UNDP/UN-HABITAT programme supported by the Bush/Clinton Tsunami Relief Foundation through the Adopt-an-Island initiative. The foundation is set to bring over US\$ 1 million worth of aid to this tsunami-ravaged island of 1,200 people. The first grant agreement has already been signed with 14 reconstructions and 5 repairs planned in the first stage. "It is an exciting experience," exclaims boatman Abdul Ghaffoor, a Dhiggaru resident and president of the local shelter recovery committee that participated in the damage assessments. This committee of householders, voted and selected by the community, ensures that householders are fully involved in decision-making. The Dhiggaru islanders have collectively decided that 13 homeless families will be first on the priority list for the first group of houses for reconstruction.

Mrs. Anna Tibaijuka, Under-Secretary-General of the United Nations and

Executive Director of UN-HABITAT in October 2005 visited Maldives where UNDP and UN-HABITAT are jointly rebuilding homes on affected islands in the Indian Ocean archipelago devastated by last December's tsunami. Mrs. Tibaijuka travelled to Meemu Atoll and met with the Atoll Chief and 5 island chiefs in Muli, the Atoll capital. She planted a tree and laid a brick to symbolise a new beginning for these islands. Mrs. Tibaijuka acknowledged the good progress and emphasised the importance of rebuilding homes in economically viable areas. In her view, a home is the first critical piece of helping restore people's livelihoods. This is especially true in the Maldives, where many people have home-based businesses that were washed away by tsunami.



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Power of Partnerships

The tsunami not only brought with it tragedy on an almost unprecedented scale - but also an unprecedented outpouring of solidarity. Within days of the tsunami, hundreds of millions of dollars were pledged by international organisations, NGOs, governments - and even private individuals hoping to make a difference. One such example is the generous donation of \$50,000 raised by Japanese citizens mainly from Fukuoka, Japan. The money has been allocated to fund the construction of a temporary shelter and Women's Development Committee centre on the island of Guraidhoo.



Construction of the temporary shelter / WDC centre, Guraidhoo

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Guraidhoo's tent dwellers look forward to home and hope

In Guraidhoo, T-shirts and the wood carvings are on sale. Only the boatloads of souvenir-hunters from nearby luxury resorts are missing. A year after the tsunami, many families in this small island continue to live in tents. *"The winds are strong, the tents leak and we are surviving on the rice, flour, cooking oil and sugar - the government gives us"* says a distraught Zamira Ismail, a resident of Guraidhoo. The gigantic waves robbed the mother of four of her home, damaged her shop, and placed her in the community of tent-dwellers. But amid the despair, there is a glimmering of hope. UN-HABITAT has delivered the final installment of building material for a transitional shelter. And work has started on the building that will temporarily house nine homeless families. Once these families settle in their permanent houses, these nine shelters will be used by the Island Women's Development Committee (WDC). *"The WDC plans to start courses to equip women to earn some money, like running a pharmacy or grocery store."* says Shima Hassan, president of the Guraidhoo WDC. Almost all the women in the island were either part of the tourist economy or the garments business. Both are in a state of limbo and women desperately need to do something to get back on their feet, adds Maryam Najeeba, another member of the Guraidhoo WDC and an employee of the Island Office.



Shima Hassan, president of the Guraidhoo WDC, showing construction of the new WDC office.

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Tsunami recovery initiatives in Maldives have sparked new alliances with some unlikely partners. On the island of Naalafushi, one of the most severely affected islands about 150 km south of Male, Banyan Tree Resorts teamed up with UNDP/UN-HABITAT to rebuild homes damaged by the tsunami. In this ground-breaking initiative, Banyan Tree, a private company, deployed its own staff from the resort to work in shifts alongside the local community at Naalafushi. A local skilled foreman, hired fulltime to supervise, brought much energy and motivation to the site, and proved a talented team-builder. The Shelter Recovery Programme bought and delivered materials, and paid the bills. This successful collaboration helped to completely repair 73 houses and reconstruct 3 new ones on the island, in just 4 months after the tsunami.

Challenges & the way ahead

A home is the first step towards regaining livelihood and a secure future. As homes are repaired and rebuilt, island communities inch closer to recovery. But key challenges remain on ground. The pace of recovery continues to be hamstrung by the shortage of local technical experts. However, training in sound construction practices is paying off, and a layer of skilled expertise is gradually being built up at island level - a significant investment for the future of this environmentally vulnerable nation. Reliance on local builders does restrict the speed of work. But on a number of islands, Shelter Recovery Committees have taken the initiative to recruit extra builders from nearby islands and atolls. More communities may choose to do the same in the coming months. On several islands, householders have even banded together to form community construction groups to carry out the work using tools and the basic training they received recently.

Despite these promising developments in the islands, securing adequate funds for shelter reconstruction continues to remain a key challenge. The People's Republic of China has provided half a million US dollars to two remote islands in the Maldives that were devastated by last year's tsunami is good news. The money is being used to rebuild and repair housing damaged on the islands of Dhaalu Vaanee and Dhaalu Meedhoo, both about 150 km from the capital Male. Similarly, the contribution from the Government of New Zealand of about US\$ 376,000 is assisting the island community of Dhaalu Hulhudheli in essential shelter restoration. The EU and ECHO have both donated significant amounts of money, and through UNDP's 'Adopt an Island' initiative the national governments of Australia, Norway, France and Belgium have all committed much-needed cash for shelter activities. However the magnitude of the shortfall stands at a daunting US\$8 million. Rebuilding houses, lives and communities successfully will require long-term commitment from donors, the UN, NGOs and the Government of Maldives. The approach advocated by the Shelter Recovery Programme has the potential for far reaching consequences. If it can be widely applied in shelter reconstruction, this will foster community institutions able to take Maldives on the development track it aspires. Ali Moosa, a householder on the island of Gulhi in Kaafu Atoll sums it up nicely. Relaxing in his newly repaired kitchen, he remarks *"Morale was low after the tsunami. I never thought my children would be able to grow up in a proper house. But the arrival of Shelter Recovery Programme has brought us hope. Now we have a home we have built ourselves - and one we can be proud of. And lots of plans for the future."*

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