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## ACRONYMS

Δ	ACTED	Agency for Technical Cooperation and Development
	ADB	Asian Development Bank
	ADPC	Asian Disaster Preparedness Center
	ASDA	Ashoka Social Development Association
	ASEAN	Association of Southeast Asian Nations
	AUC	Apartment Users Committee
	AUSAID	Australian Aid
		•

B

BRACED

Building Resilience and Adaptation to Climate Extremes and Disasters

CAP	Community Action Plans
CBDRM	Community-Based Disaster Risk Management
CBDRR	Community-Based Disaster Risk Reduction
CERF	Central Emergency Response Fund
CF	Community Facilitators
CIA	Community Implementation Agreements
CLAP	Coastal Communities Livelihoods Assistance Programme
CRO	Chief Resilience Officer
CSSP	Coastal Settlements Support Programme
CSSR	Costal Settlements Sustainable Recovery Programme
CWSSR	Community Water Supply and Sanitation Recovery

D	DALMS	Department of Agricultural Land Management and Statistics			
	DFID	Department for International Development			
	DIPECHO	Disaster Preparedness ECHO programme			
	DMTC	Disaster Management Training Centre			
	DRP-CURB	Disaster Response and Preparedness — Resilient Coastal Communities and Urban Risk			
	DRR	Disaster Risk Reduction			
	DRR-SBCC	Disaster Risk Reduction for Safer Burmese Coastal Communities			
	FCHO	English Distantion and			
E	ECHO	European Civil Protection and Humanitarian Aid Operations			
E H	HH				
E H		Humanitarian Aid Operations			
E H	НН	Humanitarian Aid Operations Household			
E H	нн	Humanitarian Aid Operations			





	LAMP	Land Administration and Management Programme	SDG SEEDS	Sustainable Development Goals Sustainable Economic & Environmental
	LIFT	Livelihoods and Food Security Trust Fund		Development Society
М	MCCA	Myanmar Climate Change Alliance	UN-HABITAT	United Nations Human Settlements
	MCCDDM	Myanmar Consortium for Capacity Development for Disaster Management	UN-OCHA	Programme UN Office for the Coordination of
	MCCR	Myanmar Consortium for Community		Humanitarian Affairs
		Resilience	UNEP	UN Environment Programme
	MES	Myanmar Engineering Society	UNICEF	United Nations Children's Fund
			UNISDR	United Nations International Strategy for Disaster Reduction
Ν	NDPCC	National Disaster Preparedness Central	UNDP	United Nations Development Programme
		Committee	URDI	Urban Research and Development Institut
	NGO	Non-Governmental Organization	USAID	United States Agency for International
	NSSA	National Skills Standards Authority		Development
	NZAID	New Zealand Government's International Aid and Development Programme	USD	United States Dollar
			VRC	Village Recovery Committees
0	ODA	Official Development Assistance	VDC	Village Development Committees
	OFDA	Office of U.S. Foreign Disaster Assistance	VSRC	Village Shelter Reconstruction Committee
			VWC	Village Water Committees
D	RSSP	Rakhine Settlements Support Programme		
			WASH	Water, sanitation and hygiene services
_			WFW	Women for the World

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## INTRODUCTION

The United Nations Human Settlements Programme, UN-Habitat, is the United Nations agency for human settlements and is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. UN-Habitat's mandate is further derived from other internationally agreed upon development goals, including the Sustainable Development Goals (SDGs) approved by UN Member States in 2015. The New Urban Agenda approved at Quito in 2016 sets the standards for achieving SDG 11, which calls to "make cities and human settlements inclusive, safe, resilient and sustainable."

UN-Habitat established a presence in Myanmar in the early 1990s through 2004 during which time the agency pioneered introducing community-driven development through its flagship "People's Process", and established the first community-led projects in the Dry Zone, Shan State and the Delta.

UN-Habitat re-established its presence for humanitarian assistance in 2008 after the country was struck by Cyclone Nargis and continued its cooperation with the Government of the Union of Myanmar in reconstruction and rehabilitation, following the principles of building back better by incorporating disaster resilient construction techniques. UN-Habitat continued its work in disaster risk reduction and urban resilience building while embarking into its normative areas of work. In the course of the last decade it has scaled up its projects and programmatic activities in four crucial thematic areas in order to assist the government and the people of Myanmar at a crucial time in their quest for a democratic, worthwhile future. During this period UN-Habitat in Myanmar implemented one of the most diverse programmes, as it has the second largest portfolio in the Asia and Pacific Region after the UN-Habitat Afghanistan Programme.

Myanmar is the largest country in Mainland Southeast Asia with a population of 52 million. It is also one of the least developed countries in Asia, albeit standing on the threshold of fundamental political, economic and social change for a better future. Despite economic growth, issues of equity and poverty continue to be of principal concern.

As a small agency with global responsibilities, UN-Habitat continually needs to find ways of maximising its impact; its resources must be focused, and policy, principles and approaches must be strategic to help Myanmar people in their quest for better lives. Its success over the past decade is principally because of its adherence to its works based on needs and priorities of people and government of Myanmar. All programmes and projects of UN-Habitat in Myanmar have been aligned with the priorities of the government and hence supported by targeting funding by numerous donors.

During the era of rapid political, economic, administrative and social reforms over the last several years, UN-Habitat made a conscious choice in all its programmes and projects to include policy reform, capacity building and implementation of activities to improve the living conditions of the most vulnerable people across the country.

UN-Habitat in Myanmar has attained a large number of notable achievements in Policy and Strategy formulation, Capacity Building Support and knowledge and technology transfer in several normative and operational activities focusing on the four thematic areas of i) Participatory urban planning, management and governance; ii) Improving human settlements and rebuilding communities; iii) Land administration and management and pro-poor housing; and iv) Environment, disaster risk reduction, resilience building and climate change.

As part of normative activities, the agency is providing crucial technical assistance on issues related to the Habitat Agenda to its partners in Myanmar including the Ministry of Construction, Ministry of Social Welfare, Relief and Resettlement, Ministry of Natural Resources and Environmental Conservation, and of Ministry Agriculture, Livestock and Irrigation.

Principal achievements in policy and strategic work are the development of Housing Policy Framework, National Housing Policy and Strategy, National Urban Policy Framework, Myanmar Climate Change Policy, Strategy and Master Plan, Myanmar National Building Codes, to name a few.

Establishment of the Urban Research and Development Institute (URDI), Urban Resources Centre, Training and Capacity Building for Urban Transformation; and assistance in making Disaster Management Training Centre functional in its primary stage are some of its major works to mention here under its capacity-building assistance.

Similarly, its hallmark community-driven development projects through the People's Process have given in particular a new lease for a healthy and productive life to over 1.2 million people by assisting the communities in improving their water supply and sanitation, infrastructure, health and nutrition as well as post disaster reconstruction and rehabilitation of housing.

UN-Habitat has also implemented a major pilot project on Land Administration and Management with the aim of enhancing land tenure security to the farmer. UN-Habitat sees land registration, updating land records and providing land tenure security as the main entry point to much needed land reform in Myanmar. Modernisation of the land administration and management system can be up-scaled to national level, building upon the work of the splendidly concluded pilot project.

UN-Habitat has implemented a total of 33 projects in 62 townships and 7 cities/towns across the country in the last 10 years, with a portfolio of US\$ 62 million. UN-Habitat continued to prevail as one of the agencies with its visible foot print due to its ability to deliver its commitment to the people and government of Myanmar and to the satisfaction of the donor that funded the projects. With the publication of this compilation of programmes and projects, UN-Habitat aims to share its contribution and achievements with a wider audience.

UN-Habitat in Myanmar has been able to undertake a great deal of tasks and achieve commendable results in demanding conditions largely due to the dedication of its diligent staff cadre numbering only a few internationals working in close concert with the majority national staff in several hundreds. Currently, it has ongoing partnerships with 4 major ministers in the aforementioned thematic areas of work in Myanmar.

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UN-HABITAT **10 years in Myanma**r

UN-Habitat is the United Nations programme working towards a better urban future. Its mission is to promote socially

and environmentally sustainable human settlements development and the achievement of adequate shelter for all.



Shelter Cluster Coordination: Laying the Foundation UN-HABITAT

UN-Habitat returned to Myanmar in 2008, motivated by the compelling need to respond to the devastating damage caused by cyclone Nargis.

In natural disasters of such proportions, immediate humanitarian relief is the greatest priority. The shelter component, even though urgent responses are needed from the outset, becomes the main focus only after immediate rescue and relief are over. Post-Nargis, the Shelter Cluster Coordinator role was assumed by UN-Habitat, meaning it had the responsibility to coordinate the work of all the agencies in this sector, national and international NGOs, as well as coordinating, collaborating and communicating with the government.

After cyclone Nargis, the shelter sector involved relatively few agencies, most of them without relevant implementation capacity. This was a double-edged sword, making coordination less complex, while imposing great difficulties on prioritisation and equity.

Due to the controversial nature of Myanmar's regime at the time, many donor governments supported the humanitarian effort, but then drastically reduced funding for sustainable shelter. The limited funding was insufficient to cover many constraints, such as the absence of early recovery shelter options, which meant half a million people were living in entirely inadequate shelters as the monsoon approached. The Shelter Cluster had to revert back to 'emergency mode', so as to ensure shelter materials would reach the most vulnerable.

#### The Shelter Cluster had to revert back to 'emergency mode', so as **to ensure shelter materials would reach the most vulnerable**.

Shelter construction standards developed by the Cluster were important to enforce. However, as they cannot be imposed on the individual humanitarian actors, it was fundamental that the relevant donors influence their implementing partners to abide by them. On the other hand, variability and equity must be taken into account, resulting in the necessity of having a range of packages available depending on damage level, location, and socio-familial needs.

For the coordination effort, UN-Habitat needed to collect data from stakeholders, relying heavily on direct reporting from implementing partners, although the data collection, analysis and sharing grid should have been wider. This limitation was due to inaccurate information from the government at that point in time, the only entity that had the necessary resources to frequently collect large amounts of data in logistically difficult locations.

## SHELTER CLUSTER COORDINATION: LAYING THE FOUNDATION

BUDGET

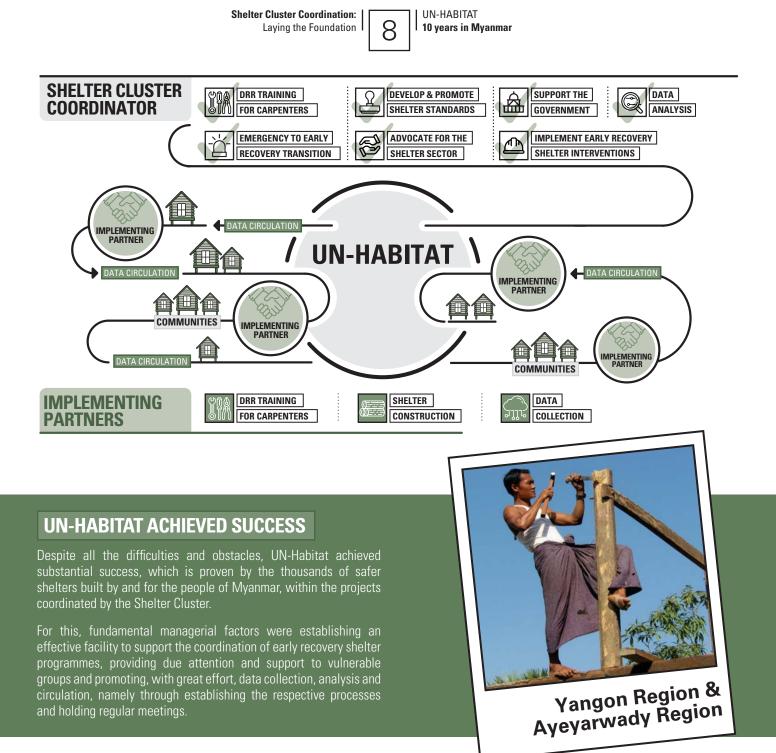


#### **LOCATION**

Areas affected by Cyclone Nargis -Yangon and Ayeyarwady Divisions DURATION

August 2008 - June 2009





In regards to ensuring safe shelter construction, the more theoretical half was communicating recovery needs and progress, and developing construction standards, with the practical half being the training of local carpenters and masons in Disaster Risk Reduction techniques, which was provided in over 100 villages across the affected area. Technical Working Groups were at the base of this experience and knowledge transfer effort.

These sorts of activities require much reflection on human security, as complex emergencies and natural disasters increasingly impact settlements. Oftentimes, disaster and response approaches rely heavily on the provision of short term emergency aid, creating high levels of dependency and thereby undermining traditional coping mechanisms and self-recovery mechanisms. As agencies broaden their efforts, there is the risk that their very intervention actually reduces the communities' future capacity to cope with and respond to crisis.

Subsequently, it is crucial to promote capacity among communities and agencies to upkeep the communities' self-recovery capacities. This results in developing awareness that mitigation is a vital step for overcoming disasters, otherwise the norm will be a cyclical relationship between disasters and dependency on external humanitarian aid. Mitigation includes a diverse range of sustained actions that reduce the impact of both man-made and natural disasters. Therefore, strategies must be outlined long before disasters occur and against a backdrop of mitigation measures, approaching recovery from a broad standpoint, with a long-term perspective of sustainable development.

The driver to do this tends to belong to the international community, since the government concerned is often overwhelmed by the rescue and response needs created by the disaster. As the communities often have limited knowledge and awareness of the risks they face and the available response mechanisms, they will rarely be the driver.

On the other hand, communities are perhaps the most important and significant first responders. By improving civil societies and local authorities' understanding of the issues, their ability to respond more effectively to disasters will be greatly increased. As a result, there will be measurable improvements, such as less loss of lives, livestock, homes and other infrastructure. Additionally, awareness-raising and training activities provide many opportunities for developing the capacity of women and for drawing out skills and experience that often remain untapped.



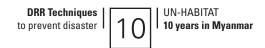
A new Disaster Risk Reduction (DRR) shelter built with bamboo and local materials is situated next to a school built with concrete foundation, corrugated iron and sawn timber structure. On June 12th, 2009, a storm struck the village with winds of 50 km/h, causing the collapse of the school, but leaving the DRR shelter intact. This was possible thanks to the work of UN-Habitat, which enabled communities in Myanmar, to provide DRR techniques for housing construction.

Cyclone Nargis, which struck Myanmar on 2 May 2008, warned of the need for taking measures to help prevent and reduce disaster risk. The experience and knowledge gained from Cyclone Nargis is expected to mobilise efforts and develop skills to reduce the consequences of disasters in Myanmar. It is imperative to make communities safer and better prepared to face a possible new disaster. Post-cyclone recovery work is seen as an opportunity to adopt DRR building techniques in areas affected by cyclones. UN-Habitat has strongly supported the principle of 'building back safer'. Its vast experience and expertise, acquired in post-conflict and post-disaster contexts, notably in Sri Lanka, Afghanistan, Maldives, Indonesia, Somalia and Pakistan, now aim to equip communities with skills for safe reconstruction. For this, UN-Habitat has successfully involved communities to reduce disaster risk through community and artisan training.

UN-Habitat, in collaboration with UNDP, intervened in disaster risk reduction in 5 townships in response to post-Nargis. The project "Community-Based Disaster Risk Reduction in the Cyclone Nargis affected areas of Myanmar" aimed to prepare and empower the community to address potential disasters and integrate efforts to adopt DRR techniques in settlements' recovery activities. On the other hand, UN-Habitat, together with UNDP, sought to create knowledge networks and partnerships, and generate awareness.



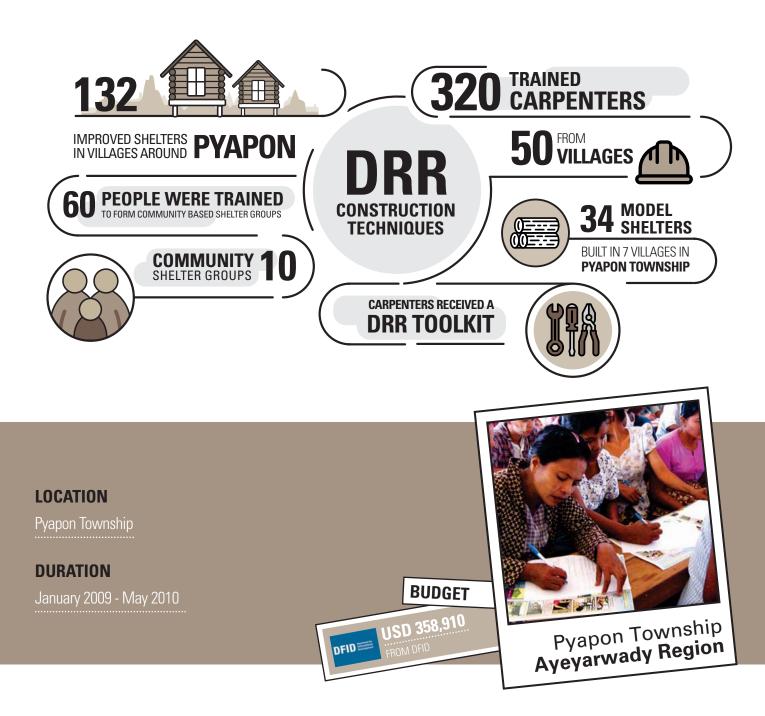
## **COMMUNITY-BASED DISASTER RISK REDUCTION** IN THE CYCLONE NARGIS AFFECTED AREAS OF MYANMAR

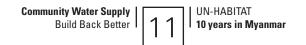


The pilot phase of this project started on January 1st, 2009, at Pyapon Township in the Ayeyarwady Division, and was intended to test the strategy of training communities affected by Cyclone Nargis in DRR techniques. This first phase of project implementation allowed 20 carpenters from 10 villages to be trained in DRR construction techniques and trained 30 villagers as Community Shelter Group members. The training of carpenters consisted of 1 day of training in the classroom and 4 days of job training, which resulted in the construction of 4 model shelters in DRR. Each trainee received a carpenter kit, through which existing homes were also upgraded. Finally, a Training Manual was prepared for Carpenters and for Community Shelter Groups. These ones have received training in various subjects, namely promotion of safe shelter (DRR); beneficiary selection; proposal writing; community contracting oversight; transparent material procurement; cash management; and complaints handling. The training of communities in financial controls and project management practices allows them to take responsibility for their own situations and ask for grants to improve it.

#### THE TRAINING OF COMMUNITIES IN FINANCIAL CONTROLS AND PROJECT MANAGEMENT PRACTICES ALLOWS THEM TO TAKE RESPONSIBILITY FOR THEIR OWN SITUATIONS AND ASK FOR GRANTS TO IMPROVE IT.

In total, the project was implemented in 4 phases, with the following results: 320 carpenters from 50 villages were trained and 34 model shelters were built in 7 villages in Pyapon Township. The carpenters received a DRR toolkit to support the implementation of long-term changes in their own communities. About 60 people were trained to form community-based shelter groups, to encourage community participation in DRR. With that, 10 Community Shelter Groups have been trained and, with help of trained carpenters, successfully improved 132 shelters in villages around Pyapon.

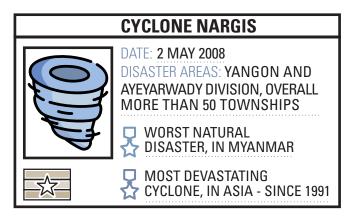




## BUILD BACK BETTER

Cyclone Nargis, which occurred on 2 May 2008, was the worst natural disaster in Myanmar's history and the most devastating cyclone to hit Asia since 1991. Overall, more than 50 townships were affected; the Delta region was severely affected. About 2.4 million people were severely affected by the cyclone and the impact of damage and loss of shelter, livelihoods, and water and sanitation was vast, with a total amount estimated at US\$ 4 billion.

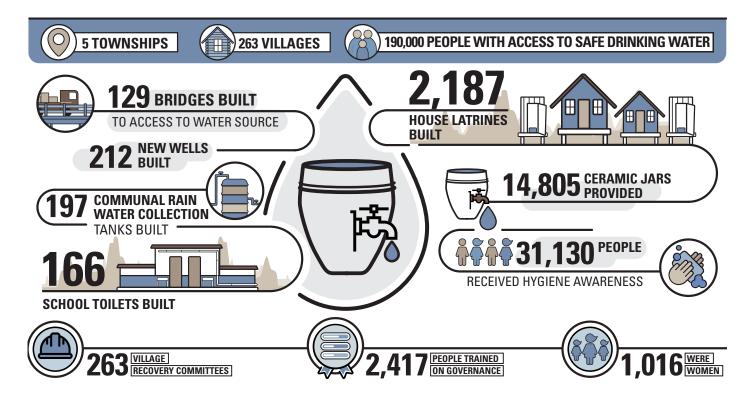
Before Cyclone Nargis, water supply for rural communities consisted mainly of domestic rainwater tanks, community rainwater ponds, open wells, tube wells, and rivers. Ponds and domestic rainwater harvesting systems were most affected by the disaster, damaging about 13% of ponds in Yangon and up to 43% of ponds in the Ayeyarwady Division. In addition, open defecation and excreta disposal with direct drop latrines, without pits, had serious consequences, contaminating the waters and advancing the spread of diseases. Approximately 1.8 million people were severely affected and they needed to improve their water supply and sanitation facilities.



#### THE COMMUNITY WATER SUPPLY AND SANITATION RECOVERY (CWSSR) PROJECT

The Community Water Supply and Sanitation Recovery (CWSSR) project was implemented by UN-Habitat with a financial support of US\$ 4 million from Official Development Assistance (ODA) of the Government of Japan, in 263 villages across 5 townships – Bogale, Dedaye, Kungyangon, Pyapon, and Kyaiklat - which directly benefitted a population of approximately 190,000. The project intended to improve the health of families in the Delta by providing access to safe drinking water and sanitation facilities, while raising awareness of hygiene and health issues. The guiding principle of the project was to Build Back Better, not only to improve Pre-Nargis standards, but also to empower communities, especially women, to take control of recovery activities through the 'People's Process', a community-driven strategy for communities' mobilisation, leading their own development, ensuring their ownership and sustainability.

Great achievements and breakthroughs have been made, with the progress of the project in place. The number of villages covered (263) exceeded the number of villages initially planned (250), due to the increased needs assessed on the ground. It is important to note that the following were built or renovated under the project: 129 small bridges to access water sources; 236 village ponds; 212 new wells; 197 communal rainwater harvesting tanks; 166 school toilets; 2,187 household latrines; and 14,805 ceramic jars were constructed. Furthermore, 31,130 people received health and hygiene awareness, an action involving more than 100 schools and over 13,000 children. Villagers – men and women – and local artisans benefitted from training, capacity building, knowledge, and skills in the area of water supply, water testing and surveillance, and also in construction techniques relating to sanitation and maintenance of sanitation systems.



Community Water Supply Build Back Better UN-HABITAT 10 years in Myanmar

After the disaster, the people's living conditions significantly improved, thanks to the provision of water supply and sanitation infrastructure in target villages and a higher level of accountability and transparency in local communities. To ensure that all inputs are sustainable, the approach was designed with a mix of traditional and modern technologies to guarantee maximum long-term impacts in the villages.

Local communities were empowered through a regular awareness and mobilisation process. Strengthening local communities, and specially women, further enhanced their confidence and promoted village leadership by encouraging participation and control of reconstruction in their villages. This resulted in the creation of 263 Village Recovery Committees (VRCs), formed by democratic electoral processes, in all villages affected. The total number of VRC members was 2,417, out of which 1,016 (43%) were women, with 521 (41%) holding management positions. Daw Aye Aye Min, treasurer of VRC Kan Chaung Villaye, Pyapon stated: I was selected as treasurer of the VRC through the community meeting facilitated by UN-Habitat. After participating in the community activities, I became energised by knowing that these are valuable and good things to do. I feel very motivated. I gained the trust of the whole community by being part of our collective leadership for village development. As a woman, I feel very happy about taking a key role like this, to have gained the right to do these things and to know that I have the capacity to do it. We now have the full confidence to do things even if UN-Habitat's work phases out. We can apply the skills we learned to our own businesses.

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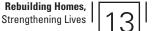




The mobilisation of the community allowed the villages to solve their situation and initiate actions for the development of their communities, with their own initiative and creativity. VRCs have become an effective platform for resolving local conflicts and reaching consensus on any issues related to the project. After the successful formation of VRCs, Community Action Plans (CAPs) were developed which facilitated the identification and prioritisation of community water supply and sanitation infrastructures. Women were actively involved in the preparation of CAPs as well as in identifying local problems and priorities. Project activities were implemented through 1,545 Community Contracts, approved and implemented in the 263 VRCs of the five townships.

The project activities were developed in a more organised, systematic, and responsible manner, through participatory reporting and monitoring systems. It should be noted that all VRCs have reported the funds allocated for their project activities in a very transparent manner to the fellow community members as part of their accountability to the people who elected them.

Through empowerment and community mobilisation, people can organise themselves to act collectively, developing their own recovery plan and strategy, rather than having it be imposed on them from the outside. Local authorities, line agencies, and donors themselves had greater recognition of the 263 VRCs and of project ownership by communities. VRCs in all 5 townships showed interest in continuing the work done to improve their communities. These VRCs are remaining functional in their communities as a main vehicle of organisation and coordination of development work at the local levels.



UN-HABITAT 10 years in Myanmar



## **REBUILDING HOMES**, STRENGTHENING LIVES

Extreme weather events are not a new phenomenon in Myanmar, but they are getting increasingly frequent. Despite having undeniable global consequences, these events bring about especially devastating consequences for a few, more vulnerable countries. Myanmar is one of these countries. Having experienced everything from severe flooding to extreme drought and exposure to strong coastal Cyclones, Myanmar is prone to extreme weather events, some of which have impacted the country in a catastrophic and indelible way. One of these key events was Cyclone Nargis. This high-powered cyclone, with wind speeds of over 200km/hour, hit the country in May of 2008 and caused the worst natural disaster in the recorded history of Myanmar. Nargis killed more than 125,000 people, damaged basic services infrastructures, devastated rice paddies, and ruined crops which were already stored. It also destroyed over 450,000 houses and damaged 350,000 more, leaving thousands of survivors homeless and unprotected.

In the aftermath of the disaster, internal displacement was high, and people looked to temporary settlements as a place of protection. However, when the villagers started making their journeys back home, there were no shelters left and the ones remaining were not habitable.

NARGIS KILLED MORE THAN 125,000 PEOPLE, DAMAGED BASIC SERVICES INFRASTRUCTURES, DEVASTATED RICE PADDIES, AND RUINED CROPS WHICH WERE ALREADY STORED. IT ALSO DESTROYED OVER 450,000 HOUSES AND DAMAGED 350,000 MORE, LEAVING THOUSANDS OF SURVIVORS HOMELESS AND UNPROTECTED.



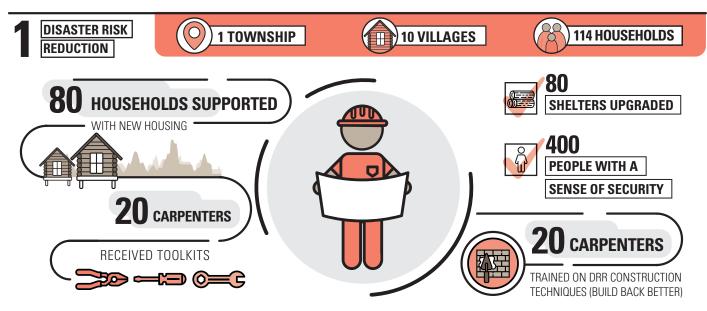


## THE COMMITTEES (...) WERE RESPONSIBLE FOR THE UPGRADE OF 80 SHELTERS, PROVIDING 400 PEOPLE WITH A NEW SENSE OF SAFETY.

The returnees started to rebuild their houses with the limited resources and skill they had. However, they turned out to be substandard which not offer protection and comfort. Many of the houses constructed without supports were inadequate, unsafe and would be unable to provide protection should another disaster of even a much lower magnitude would hit the areas. Since these poorly constructed shelters would not offer much needed protection, this would mean villagers could stand to lose their valuable household assets all over again. UN-Habitat stepped in to support those villages which had taken self-initiatives but were not sound. Wanting to improve the resilience in 10 villages of the Pyapon township, UN-Habitat received support from Rotary International 3045 to make sure people in this area not only had access to better housing, but that they were also able to strengthen their communities through improved carpentry skills and construction. This was achieved via the Shelter Improvement and Disaster Risk Reduction Project, which was implemented by using the People's Process. This process allows beneficiaries to be in the driving seat of the whole process, in this case by establishing Shelter Construction Committees in each village. The committees, comprised of local people and carpenters trained by UN-Habitat, were responsible for the upgrade of 80 demonstration shelters, providing 400 people with a new sense of safety. These were then replicated to a larger number of shelters in the entire village. The project also provided construction materials to ensure adequate coverage and protection from the hazards offered capacity-building training and construction support to carpenters, and provided technical support to introduce disaster risk reduction construction techniques. Carpenters from the 10 villages participated in 5-day workshops which included theoretical and practical modules on the building technique of DRR shelters. In total, these carpenters built 34 demonstration shelters.

However, the real benefit shines on the capacity building, expertise, and skills on Disaster Risk Reduction gained from the implementation of this project. Carpenters and villagers are now able to spread the knowledge by sharing the best practices learned and building sturdy shelters in neighbouring villages, helping make Myanmar's Delta region more resilient. The Carpentry and Masonry training modules were later upgraded to training modules and the course accredited by National Skills Standard Authority. More trainings are being conducted in collaboration with the training centre of Ministry of Construction at Thuwanna, which is producing regular batches of accredited trainees.

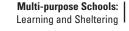


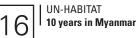


Multi-purpose Schools: Learning and Sheltering

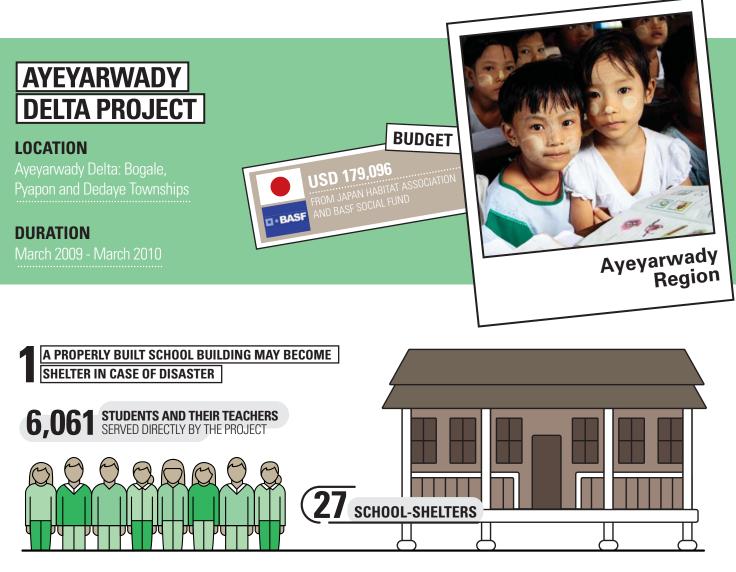


School buildings were a priority, since they are often used for shelter in disaster and post-disaster scenarios, besides the fundamental use.





## **MULTI-PURPOSE SCHOOLS:** LEARNING AND SHELTERING



Cyclone Nargis wreaked havoc on the Ayeyarwady Delta on May 2-3, 2008. Thousands of lives and households were lost, leaving millions of people in desperate straits.

As people returned home, intensive rebuilding was necessary. School buildings were a priority, since they are often used for shelter in disaster and post-disaster scenarios, besides the fundamental use. In order to promote a swift return to normalcy, as well as improving on the pre-disaster conditions, the semi-permanent schools in Ayeyarwady Delta project provided repairing materials, tools, and technical assistance to the neediest villages, many of which extraordinarily isolated, with transport of construction materials taking about 5 hours of travel, through dozens of narrow and shallow rivers that make up the Ayeyarwady Delta riverine network.

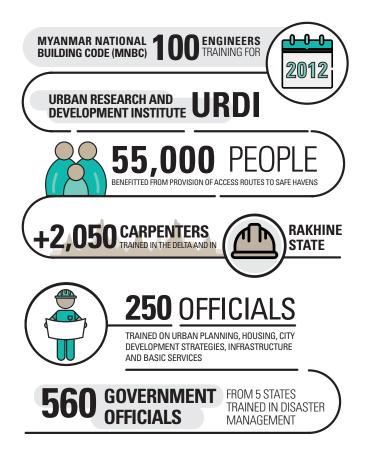
Implementation was done by the People's Process focusing on strong community mobilisation, meaning that disaster-affected communities were given a platform in which to collectively assess their situation, as well as to organise and conduct recovery, employing their own initiative and creativity. This is a highly advantageous approach as it empowers people at various stages, such as project planning, management, and implementation. Furthermore, it ensures the participation of women, leading to a more representative decision-making process. Within the vision of building back better, local carpenters were selected for training in Disaster Risk Reduction techniques, providing all the technical knowledge necessary to build natural disaster resistant schools with materials available in the region, in order to reduce the risks of loss of lives caused by heavy rains, strong storms, and high floods.

In the process of project implementation, contracts were awarded to local workers once communities identified their needs, prioritised their problems, and agreed upon plans for their solutions. These are called community contracts and are highly valuable because they are in line with the holistic collective effort, accentuating project ownership and community confidence. Community contracts allowed the local skilled workers to reconstruct and repair the school buildings in their village.

In the end, the project directly served 6,061 students and their teachers. However, the benefits had a much larger coverage, as the approach was positively affecting the entire community through their increased involvement, which also raised awareness for the importance of project sustainability and maintenance. Myanmar has nearly 2,000 km of beautiful coastal lines. Many of the sandy white beaches, often fringed with palm trees, remain unspoiled by the excesses of tourism that affect other Asian countries and offer viewers a glimpse of idyllic tranquillity by the ocean. But the days are not always as tranquil along Myanmar's coastal line.

These gorgeous 2,000 km of coast are what hundreds of communities' call home. Unfortunately, they are also extremely vulnerable to floods, tsunamis, storm surges, cyclones, and other extreme events. The communities, fragile and often poor, predictably suffer with the country's lack of resilience. When hit by these phenomena, they had little chance to protect themselves and endure the consequences. Cyclone Nargis alone severely affected 2.4 million people in 2008. The impact on damage and loss of shelter, livelihoods, health and water and sanitation was vast. As if the tragedy and loss of life was not enough, the total amount of damage and losses in the Nargis-affected areas was estimated at US\$ 4.057 billion. This would be critical for any country, but it was devastating for a country taking important development steps.

If there was any silver lining to this disaster, it was that Nargis opened the gates to the country and highlighted the need for long-term engagement on community capacity development in the country, focused particularly on integrating Disaster Risk Reduction principles in all development interventions. Thus arose the Disaster Response and Preparedness – Resilient Coastal Communities and Urban Risk (DRP-CURB) programme. DRP-CURB was a milestone agreement signed between the Norwegian Ministry of Foreign Affairs and UN-Habitat for the implementation of inclusive multi-hazard interventions to enhance human safety and security, with the ultimate goal of decreasing the vulnerabilities of coastal and urban communities of Myanmar.



## BEING PREPARED – HOW MYANMAR BUILT RESILIENCE IN THE FACE OF DISASTERS

DRP-CURB focused on three principal disaster types (cyclones and storm surges floods, earthquakes, and fires), and was designed to introduce a culture of prevention and preparedness for potential disaster and for "building back safer". This means building houses which have improved capacity to survive hazards and working with the community to improve their ability to respond to and recover from shocks themselves. Prevention and preparedness are cross-cutting and involve several sectors of society, namely gender-based community response to disasters via training of trainers for mitigation measures; developing policy guidelines on good practices for disaster resilient construction; and creating large-scale awareness through public education in urban and coastal communities.

In the framework of DRP-CURB, UN-Habitat was in charge of analysing the shelter sector needs and funding, strategies and actions plans, which resulted in the development of advocacy notes and strategies for other donors and partners. Through this programme, UN-Habitat managed to broaden its reach on sectors such as Urban Development and Housing, Land-use planning, Climate Change and the Environment. Myanmar National Building Code - the first building code for construction at national level - was also formulated within this programme, and later updated in 2016.

Training-wise, hundreds of participants in local and national government throughout Myanmar received targeted training on key resilience issues, such as sustainable urban management, urban planning, infrastructure, basic services and housing construction practices. UN-Habitat guaranteed that national level workshops took place as a privileged platform to share information on shelter designs that consider locally sourced materials and which integrate both resilience and, at the same time, sensitivity to local customs. To complement this sharing of knowledge and guarantee that the practical component was not discarded, UN-Habitat organised practical trainings on disaster resilient construction methods, aimed at carpenters and artisans. This benefitted them as well as the population at large by creating a more skilled and technically capacitated construction sector in villages and communities all over Myanmar. UN-Habitat also institutionalised the training programme by bringing it under the National Skill Standard Authority, to provide certification and recognition in the ASEAN region. Thousands of carpenters from several different townships have been trained under the framework of this programme.

Under the final phase of the project, UN Habitat provided technical assistance to the Government of Myanmar by researching and developing a wealth of knowledge about housing, including a White Paper on housing policy



in Myanmar, a final housing policy & strategy document, and associated consultation workshops. This white paper contained an unprecedented and detailed review of Myanmar's housing sector, by classifying the existing conditions and estimating future housing needs. It was also one of the building blocks of the National Housing Policy and Strategy, developed in partnership with the Department of Urban and Housing Development, which contains a set of goals and actions which, if followed, allow for the provision of housing for both low and middle-income citizens, in pursuit of achieving affordable housing for all. Another important pillar of UN-Habitat's contribution and partnership with Myanmar's government was the development of National Urban Policy Note, Rapid Urban Diagnostic for establishment of the National Urban Policy Framework. The Government of Myanmar is now developing the Framework into the National Urban Policy. The goal of the National Urban Policy is to manage urbanisation in Myanmar and to provide conditions to implement solid urbanisation plans, in order to properly accommodate for the rapid growth in urban population that will undoubtedly occur over the next decades. Well-planned urbanisation, combined with proper financing and regulation, will help curb the challenges of the unparalleled growth, by strengthening resilience, boosting economic growth, and promoting social inclusion. Both the National Housing Policy and the National Urban Policy Framework benefitted from the involvement of the Urban Research and Development Institute established under this programme, which has become the main focal institution for providing technical advice in urban and housing sectors for Myanmar. URDI and Urban Resource Centre have become a hub of urban knowledge, for the discussion of urban issues in Myanmar.

As in other projects, involving the community was vital for the success of DRP-CURB. Making people own the project and taking development into their own hands is a big key to unlocking success. Knowing this, UN-Habitat established community development committees and conducted participatory action planning in targeted townships. At the same time, UN-Habitat set up grant committees for female-led organisations, aimed at the approval of CBDRR activities in the coastal communities.

Awareness, orientation and training programmes were also designed and delivered to the project's target audience, making sure they became familiar with types of hazards and vulnerability of locations, helping them become better prepared to implement mitigating measures.

Thanks to DRP-CURB, Myanmar residents are able to construct more resilient houses, to better withstand the consequences of disasters while meeting the needs of the households. They are better capacitated to respond to disasters. Carpenters and artisans have the possibility to earn a better income through their skill improvement training, offering expertise and know-how related to resilient and safe construction. Disaster risk preparedness is increasingly becoming a staple of cross-cutting sectors of society – from local government to populations, all over Myanmar's coastal and urban areas, people are placing high value and dedication to being better prepared to face the unpredictable. After all, tomorrow belongs to those who prepare today.

DRB-CURB allowed UN-Habitat and the Government of Myanmar to build on its experience and combine small and big DRR, climate and Urban Resilience programmes in Myanmar.

PREVENTION AND PREPAREDNESS ARE CROSS-CUTTING AND INVOLVE SEVERAL SECTORS OF SOCIETY.

## DISASTER RESPONSE & PREPAREDNESS - RESILIENT COASTAL COMMUNITIES AND URBAN RISK (DRP-CURB) PHASE I-VI

LOCATION

Myanmar coastal line

#### DURATION January 2010 - March 2017





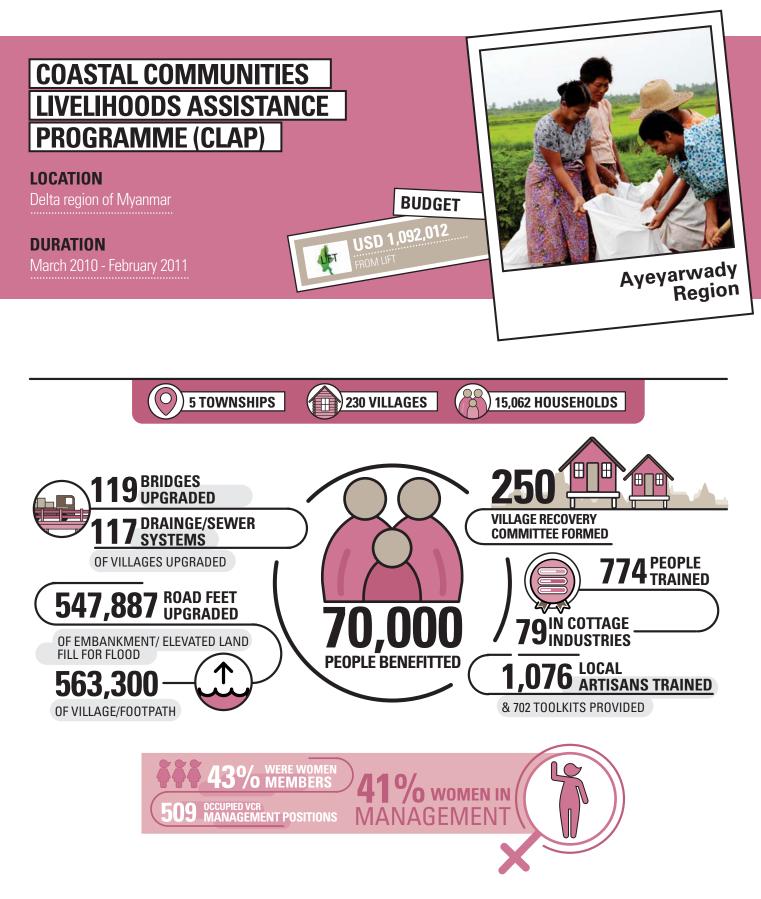
Myanmar Coastal Line



CLAP for Sustainable and Inclusive Development

UN-HABITAT 10 years in Myanmar

## CLAP FOR SUSTAINABLE AND INCLUSIVE DEVELOPMENT

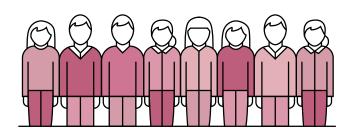


#### COASTAL COMMUNITIES

Coastal communities in the Delta region of Myanmar are exposed to a myriad of social and environmental problems such as poverty, unemployment, insufficient and fragile infrastructure, floods, and cyclones. CLAP - Coastal Communities Livelihoods Assistance Programme was created with the purpose of helping these people, namely 25,000 families in 230 villages across the Pyapon, Dedaye, Kyaiklat, Kungyangon and Bogale townships. It consisted in a labour-intensive approach that aimed to solve various problems in an efficient fashion.

The overall population benefitted from an upgraded transportation infrastructure which began through classroom and hands-on training in construction and subsequent rebuilding and improvement works, the most significant aspect of it being better drainage systems, fundamental for travelling in the area. As a direct consequence, market access was greatly improved for farmers, fishermen, and other merchants, consequently increasing household incomes and lowering prices for buyers.

THIS WAS ALSO AN INVESTMENT IN FUTURE LIVELIHOODS AS MANY CHILDREN, ESPECIALLY GIRLS, ABANDONED SCHOOL DUE TO THE DANGERS OF RIVER-CROSSING DURING THE RAINY SEASON. IN ADDITION, THE POPULATION'S HEALTH CONDITIONS HAVE ALSO BEEN IMPROVED, SINCE INTER-VILLAGE ROADS AND BRIDGES FACILITATE ACCESS TO MEDICAL CARE CENTRES, NOT JUST IN THE EVENT OF AN EMERGENCY BUT ALSO FOR REGULAR VISITS, ENCOURAGING DECEASE PREVENTION.



As the programme was implemented through UN-Habitat's approach, the People's Process, affected people were at the centre of the recovery process. In this instance, the direct beneficiaries, those who were to become trainees, were identified through a transparent consultation process with the entire community. The basic criterion of selection was to choose those families from the most vulnerable groups, such as elderly or disabled people with no family support; women-headed households with low income levels; widows; labourers with low and uncertain income; poor families housing orphans and Internally Displaced families.

For these families, involvement in the programme meant quick employment opportunities and sustainable livelihoods made possible through skill development. The remainder of the population, apart from renewed community infrastructure, benefitted from the social effects of economic improvement, the environmental conscience transmitted to the project's participants and the use of local technology for sustainable development.

All construction operations were managed through 'community contracts', meaning local communities played the lead role and entailed responsibility for all kinds of labour management, procurement, quality maintenance, progress reporting, and timely completion. This enhances collective confidence and proactivity by encouraging leadership and active participation in planning, designing, implementation, monitoring, and maintenance of programme activities. In this regard, gender balance was also worked on, resulting in 41% of management positions occupied by women.

This employment-intensive method of empowerment is highly advantageous because it directly improves the population's quality of life. It creates jobs, opens up additional opportunities to generate income and enables the learning of skills that are useful for infrastructure maintenance. In addition, many positive aspects arise from basing activities on the communities' demand and involving the poor: democratic participation and collective decision-making enhancement; assurance of decent work conditions and basic labour standards; utilisation of innovative methods, local knowledge and local material; and safeguarding of future maintenance.



Rebuilding Homes, Rebuilding Lives in Coastal Settlements



**UN-HABITAT** 

10 vears in Mvanmar

# REBUILDING HOMES, REBUILDING LIVES

A home is not just a roof. It is a space for sharing, family, warmth, safety, and identity. No matter where we live, home will always be part of who we are. But sometimes a catastrophe undoes everything.

The impact of Cyclone Nargis has caused damage and destruction to some 752,000 families in the Ayeyarwady and Yangon Divisions. The housing sector was the most affected, representing 60% of the entire damage. In the coastal township of Kungyangon, Cyclone Nargis devastated more than 91% of all households, leaving more than 23,206 families destitute.

The Rebuilding Homes – Rebuilding Lives - Coastal Settlements Support Programme (CSSP), with financial support from the New Zealand Government's International Aid and Development Programme (NZAID Programme), aimed to support the resettlement of IDP (Internally Displaced People) community, in three areas of Kungyangon - Kha Laut Tayar (185 HH), Pyi Taw Thar (164HH) and Taw Ku West (82 HH). This represented a total of 431 households, who three years after Cyclone Nargis had not yet received any shelter rehabilitation support and that lived in makeshift huts, overcrowded and poorly built with poor quality materials such as bamboo, thatch and tarpaulin roofing, fully exposed to future catastrophes.

#### SUPPORT THE RESETTLEMENT OF IDP (INTERNALLY DISPLACED PEOPLE) COMMUNITY

UN-Habitat faced some challenges in implementing standard shelter design. Due to the new shelter design policy of the National Disaster Preparedness Central Committee (NDPCC) of Myanmar and after various negotiations through different Ministries, the project review and available funding led UN-Habitat to build shelter for only 131 displaced families who were living in tents or makeshift camps. An additional 300 vulnerable households were assisted through improving latrine facilities and water supply facilities in their damaged shelters.

In response to the destruction caused by Cyclone Nargis, UN-Habitat assisted the affected communities in the Irrawaddy Delta, with shelter recovery, water, sanitation and hygiene, and livelihood, and also assisted displaced families from the Kungyangone Township, to secure land tenure and build disaster-resilient shelters with access to clean water and sanitation.

> NO MATTER WHERE WE LIVE, HOME WILL ALWAYS BE PART OF WHO WE ARE



## COASTAL SETTLEMENTS SUPPORT PROGRAMME (CSSP)





The goal of the Rebuilding Homes - Rebuilding Lives - Coastal Settlements Support Programme was to support communities to rebuild their own homes through a self-help approach, with the financial and technical assistance provided by UN-Habitat. Vulnerable families proactively participated in the recovery while re-establishing community-based social protection measures, contributing to more cohesive, safer, and empowered communities. In this way, the community's capacity to plan and manage the recovery process is strengthened, leading to longterm sustainable development.

All displaced families faced serious water and sanitation problems, as well as lack of access to basic services. With this project, these households were resettled in grazing land nearby the Pyi Taw Thar village. New Zealand Aid supported the rehabilitation of shelters, while UN-Habitat provided complementary basic access and WASH infrastructure support from other existing programmes, achieving cost-sharing and provision of value-added solutions, and also ensuring secure tenure for the displaced families.

Village Recovery Committees (VRCs) were created to work directly with UN-Habitat during project implementation, with women representing 50% of memberships, engaging them not only as participants, but also as community leaders. This is a positive aspect of the post-disaster recovery that, under the motto "Building Back Better", looked towards not only the repair and construction of houses, but also the community as a whole. In its projects, UN-Habitat, in addition to providing structurally sound shelters for people, also encourages better organised communities where women participate in leadership roles, as only then will communities be better prepared to deal with future challenges, including natural disasters.

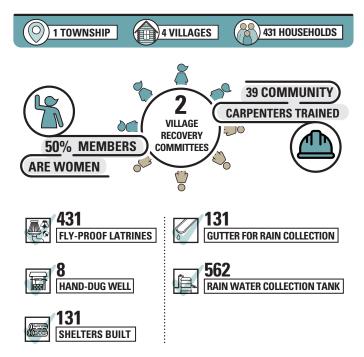
For the guide member on best practices for the committee to ensure representation of all villagers, UN-Habitat provided training on quality control, procurement, finance, and bookkeeping. UN-Habitat also provided training to 88 local community carpenters on disaster-resilient construction techniques, carpenters who have learned skills that will increase their earning potential and enable them to share these new skills with other carpenters in future opportunities. Kits were provided to the carpenters during the training period to provide them with the full range of tools.



LOCATION 3 villages of Kungvangon: Kha Laut Tayar, Pyi Taw Thar and Taw Ku West

DURATION June 2010 - October 2010 Local communities played the leading role in the development of project activities and assumed primary responsibility for work management, procurement, quality maintenance, progress reports, and timely completion. VRCs have been successful in maintaining a clear and transparent report of their expenditures, which has been achieved through the process of active community involvement, public accountability, reporting, and documentation. Cash books and financial reports were always available for the community to verify transparency.

UN-Habitat believes that one of the most important principles to follow after a disaster is to bring decision making back to the community. For this reason, UN-Habitat's role is to support people through capacity building of the VRC, the training of carpenters and supervisors and, of course, the provision of funds to the VRC for the purchase of materials and labour costs, with the conviction that the beneficiaries themselves are better aware of their recovery needs than any external agency.





Rebuilding Homes Rebuilding Lives in Dedaye

UN-HABITAT 10 years in Myanmar



## REBUILDING HOMES REBUILDING LIVES IN DEDAYE

#### DAMAGE LEVEL IN DEDAYE WAS CATEGORISED AS VERY SEVERE, WITH OVER 98% OF ALL SHELTERS DESTROYED.

Cyclone Nargis reached Category 5 on 2 May 2008, when it hit the coastal township of Dedaye and devastated over 42,194 households. Damage level in Dedaye was categorised as very severe, with over 98% of all shelters destroyed. International agencies and humanitarian communities joined efforts to address the pressing needs of approximately 10,399 of these families, namely through the provision of material, cash donations, and some reconstruction. However, close to 32,000 more vulnerable families still needed support in terms of shelter.

The Rebuilding Homes – Rebuilding Lives Costal Settlements Sustainable Recovery Programme (CSSR), financed by USAID, aimed to support the rehabilitation of vulnerable communities set up along the Dedaye township coast which suffered severe damage with the passage of Cyclone Nargis and did not receive any shelter assistance. Implemented by UN-Habitat, this programme intended to support the communities in rebuilding their own homes, through the People's Process. People were thus able to actively participate in the recovery of their houses and also contribute to re-establishing community-based social protection measures, enhancing the ability to plan and manage the whole process and leading to long-term sustainable development.

Local communities in all target villages were strengthened through a process of mobilisation, capacity building, and training for the construction and adaptation of shelters. This community mobilisation process allowed for the formation of Village Recovery Committees (VRCs) in all selected villages. The Community Action Plans (CAPs) were also prepared, so that in a participatory way, local communities could analyse the real situation

and decide on the next steps necessary for its rebuilding. Shelter activities were prioritised, discussed, and documented among community members and the UN-Habitat team.

One of the first tasks was to categorise shelters in two ways: as "destroyed", where total reconstruction is required, or as "damaged", in cases where they can be repaired. These decisions were made by the community and VSRCs (Village Shelter Reconstruction Committees), together with UN-Habitat. The selection of individual beneficiaries was a transparent, but very difficult process due to the fact that many families were in need of support. The criterion was to choose the families and individuals most in need, who were unable to repair or rebuild their own homes. In some cases, UN-Habitat had to send Community Facilitators (CFs) to help appease tensions around the selection of beneficiaries.



Rebuilding Homes Rebuilding Lives in Dedaye





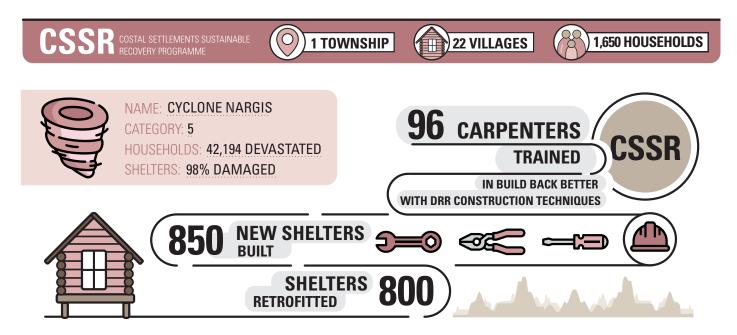
Under the active leadership of local communities, 43 Community Contracts were implemented in all target villages, specifying the work to be carried out and the timing of payments to be made by UN-Habitat. The VSRCs are responsible for paying workers, carpenters, and other artisans, as well as for disbursing funds for the purchase of materials. For transparency, the amount given to each VSRC and then to each group of beneficiaries was posted publicly so that it could be seen by the whole community.

An additional step for the CSSR programme was to select the carpenters, who were identified locally by the community itself. The 96 Community Carpenters selected already had some experience and received training provided directly by UN-Habitat, in 'Build Back Better' with Disaster Risk Reduction (DRR) construction techniques. To facilitate the acquisition of knowledge and skills, a model DRR shelter was built, which was then delivered to the most vulnerable beneficiary selected by the community. The toolkits provided also improved the capacity of the carpenters to conduct the work and to ensure sustainability of transferred capacities and skills and to continue income generation.

The carpenters encountered some difficulties in the construction, namely with regard to soil conditions, which were very muddy due to the heavy rains, preventing the concrete foot from forming, and the difficulty of digging pits for latrines as tides were at the highest level. Another difficulty found was the wait for some materials, such as toddy palm used for posts, which has less quality during the rainy season and comes from 200 km away. The access to each dwelling by the disabled, sick, and elderly people, as well as pregnant women, was guaranteed through ramps and handrails.

All construction activities were completed by the end of the project. In Phase I, a total of 1,000 shelters were completed, from June to December 2010. All shelters had access to water and sanitation through the CWSSR (Community Water Supply and Sanitation Recovery) project, also implemented by UN-Habitat demonstrating visible synergies between the projects. In Phase II, in turn, the CSSR programme supported the construction of 650 shelters, 350 new and 300 retrofitted, as well as the repair and construction of latrines.

The CSSR programme occurred after major Settlement Support Programmes already implemented by UN-Habitat in the Dedaye Township, such as water, sanitation, and hygiene education, infrastructure, livelihoods, and other DRR activities. Therefore, the CSSR programme has benefitted from the improvements to roads and bridges undertaken under the other programmes.

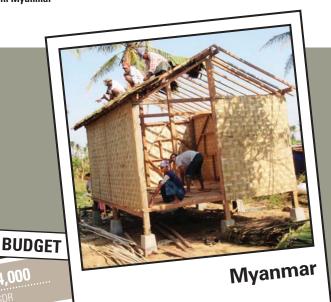




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#### UN-HABITAT 10 years in Myanmar

## GROWTH IN THE FACE OF LOSS HOW MYANMAR IS BUILDING BACK BETTER



In 2008, Cyclone Nargis cut a deep wound in Myanmar. With thousands of lives lost and thousands more left with nowhere to go, it was vital for the country to be determined in the face of catastrophe and work to avoid a scenery such as that from ever happening again. The scale of loss was unprecedented, but, in Myanmar, the will was to live, learn and grow. Scar tissue built over the wound and with it, as is often the case, came the opportunity for a lesson.

Recovery interventions and shelter construction after Nargis were intense. Thousands of people left homeless by the cyclone had to have a way to get their lives back, and so new houses and shelters were built, thanks to tireless efforts of local people and the organisations that supported them. These efforts were based on two important concepts: "Build back better" and "Build back safe" which aimed to provide resilient housing through the provision of new shelters while integrating Disaster Risk Reduction every step of the way.

To make sure that the recovery process was happening in the most effective way and lessons learnt in Delta were captured to inform donor agencies and development partners to effectively invest further in the underfunded shelter sector, UNISDR commissioned a study which was conducted by UN-Habitat two years after the cyclone. The two main needs during the recovery process - and consequently the main targets of the study - were, on the one hand, the integration of disaster risk reduction principles and practices into the Delta shelter sector (focusing mainly on cyclone resistant features) and on the other hand the engagement of communities through awareness, training and building capacity of local artisans, carpenters and other construction workers, enabling them to build back better and safer through appropriate shelter construction know-how, as well as making sure that end users were aware of the importance of a resilient shelter programme. These two aspects go hand in hand in assuring that recovery of the delta is done in an integrated manner.

THESE EFFORTS WERE BASED ON TWO IMPORTANT CONCEPTS: "BUILD BACK BETTER" AND "BUILD BACK SAFE" WHICH AIMED TO PROVIDE RESILIENT HOUSING THROUGH THE PROVISION OF NEW SHELTERS WHILE INTEGRATING DISASTER RISK REDUCTION EVERY STEP OF THE WAY.

Therefore, the study aimed to analyse the process of shelter construction being conducted by NGOs and international agencies, identify gaps and opportunities and, based on those, recommend a set of actions which would ultimately contribute to enhancing the effectiveness of the construction of disaster resilient shelters in Myanmar. The goal was to look back, see what was done, and realise how it could be improved, in order to be able to face any future catastrophe with stronger infrastructure. This cross-cutting evaluation aimed to facilitate a system-wide examination of the recovery process with focus on the implementation of the "build back better" system post-Nargis, contributing to future recovery efforts and leaving recommendations for donors and government policy.

To be able to conduct this evaluation, UN-Habitat adopted a diverse methodology that encompassed everything from desktop research, to key respondent's interviews and agency-wide interviews as well as, last but not least, surveys placed to households in the key affected areas.



Growth in the face of loss How Myanmar is building back better



This allowed UN-Habitat to have a theoretical information background but also, and most importantly, to know the challenges faced in the field and to have an insight into how people felt about their new shelters and their improved capacities to face catastrophe. For example, by conducting seven detailed agency-wide surveys, UN-Habitat was able to gather a complete set of data based on their actual experience of implementing the projects at site level, providing a strong practical view that will undoubtfully be vital in the field if another catastrophe of this magnitude occurs.

In what concerns households, the study was conducted in 918 households from 51 different villages. This survey offered a unique and privileged view of how people who use the shelters feel about them, allowing UN-Habitat to assess the end users' level of satisfaction.

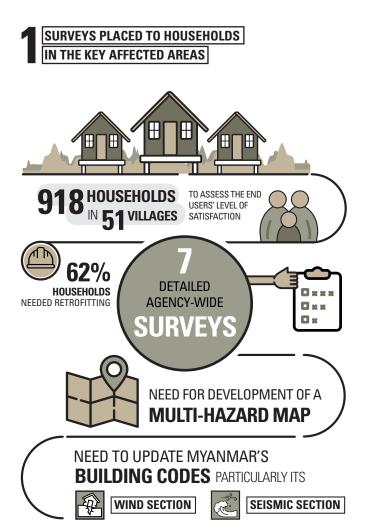
The comprehensive findings of this impressive study were submitted and shared with the Government of the Union of Myanmar, as well as with stakeholders, donors and other agencies. Through this report, certain needs and improvements have been detected and will, therefore, reach a higher decision-making level which can boost their satisfaction.

For example, the need for the development of a multi-hazard map which could be used while designing shelters, is often referred to in the report, making it stand out as a priority and a key issue for effective disaster risk reduction. The map is useful for many things, namely in what concerns retrofitting of shelter, as disaster preparedness could be improved by locating the repair/retrofitting requirements on a multi-hazard map which shows the vulnerability situation of households in different zones of Myanmar. 62% of households surveyed needed retrofitting and it has to be need based on damage assessment and not average.

The study also found that updating Myanmar's building codes was a high priority, particularly its wind and seismic sections. This is key to guaranteeing a safe design, and enables architects, engineers and designers to design shelters and retrofit the existing ones including traditional structures. It was recognised that providing fund for retrofitting without technical support will not serve the purpose for building back better and safer, hence capacity development of people involved in construction is badly needed. Maintaining traditional structures and technologies is key to assuring people's appropriation, so any measures that can be taken to ensure this are vital.

#### MAINTAINING TRADITIONAL STRUCTURES AND TECHNOLOGIES IS KEY TO ASSURING PEOPLE'S APPROPRIATION, SO ANY MEASURES THAT CAN BE TAKEN TO ENSURE THIS ARE VITAL.

There are many more conclusions made on par with these ones. The report combines dozens of recommendations, from planning to designing, to implementing and capacity building, not forgetting maintenance. It provides an impressive and encompassing look into how building back better and safer can be further improved by building on what people have learned throughout the post-Nargis years. The wealth of accumulated knowledge will be weaved into the country's core thread, making sure that Myanmar continues to become stronger and more resilient throughout the years.





# SAFE & SAFE & SUSTAINABLE WASH

#### SANITATION IS ONE THE MOST BASIC REQUIREMENTS FOR HUMAN DEVELOPMENT. ACCESS TO CLEAN WATER AND PROPER WASTE DISPOSAL SYSTEMS IS FUNDAMENTAL TO MAINTAIN HYGIENE AND HEALTH.

Sanitation is one the most basic requirements for human development. Access to clean water and proper waste disposal systems is fundamental to maintain hygiene and health. Great part of UN-Habitat's work in Myanmar is motivated by the lack of such basic conditions in many parts of the country. As the agency promotes the sustainability of human settlements, a reliable foundation must be built.

Cohesive communities rely on WASH - water, sanitation and hygiene services, entailing a sense of collective responsibility. That is one of the reasons for the success of the UN-Habitat's People's Process: the community evaluates their needs, plans solutions accordingly and awards Community Contracts, meaning that work is distributed among local entities and individuals. This includes all the steps: identifying the works, designing the works, managing the execution, controlling the finances, procurement of materials, managing labour, store keeping and accounting and accountability to the community. The openness of procedures and economic transactions are the key to the accountability, strengthening trust within the community. The end-result is a feeling of ownership and attachment to the facilities built, ensuring long-term maintenance and sustainability.

This approach is particularly suitable in Myanmar's Dry Zone, as the lack of services and community bonds hampers quality of life. Hence, UN-Habitat promoted Safe and Sustainable WASH for rural communities, a project envisioning 40 communities in the Wundwin Township. Empowering communities to make decisions regarding their own development was the project's basic approach, directly benefitted 9,971 households (69,101 people), with 52% of the beneficiaries (35,863) being women.

The identification of needs was a process of understanding their present situation and a way forward for better life conditions and well-being. They identified water and sanitation problems, confronting them while going through a process of realisation about their present situation. Afterwards, the community presented the identified problems and the rationale behind them. As the identified needs were overwhelming, there was a discussion intended to define intervention priorities.

Training and other capacity-building workshops were conducted in order to facilitate project activities on the ground. A total of 193 Community Contracts were signed for 3,012 water and sanitation infrastructures which included concrete tanks for hand washing, fly-proof latrines, hand-dug wells, school sanitary toilet and hand-washing facilities (double units), upgrading of feeder roads, and upgrading of small bridges.

Bridge and road infrastructure works were important for the initiative, firstly because they are also fundamental for livelihood improvement. This results in better and safer access to markets, which means greater income for the households and lower prices for the buyer. In addition, the work provided much needed wages for labourers.





Regarding WASH, the involvement of local communities in the project implementation exposed them to many practical realities linked to the operation and maintenance of water supply and sanitation infrastructure. This allows for community empowerment and a better understanding of the importance of the sustainable operation and maintenance of the infrastructures built.

Training was conducted for village water and sanitation committees, for operation and maintenance of low-cost water systems. The objectives were to transfer the knowledge and skills necessary to operate and maintain the system, while providing hands-on experience to apply what they had learned. Cross-cutting aspects of sustainability, capacity development and Disaster Risk Reduction (DRR) were mainstreamed into the project to facilitate communities' better management of their lives, post-intervention.

However, constructing facilities and training personnel did not resolve all matters, as practices needed to be adapted. Good practices result from education that is practice oriented, building knowledge, skills and attitudes. So, sanitation was addressed in schools, taking on the greater receptiveness of children, compared to adults. Approximately 2,500 children participated in this.

The overall assessment is tangible. The local communities are now more organised, aware and exposed to community-based access to safe water and sanitation efforts. Their understanding of the community-driven approach and their role in project implementation was a significant development in the field of community mobilisation and construction or upgrading of water and sanitation infrastructures. Several noticeable achievements were derived from the mobilisation process, namely in the areas of consensus building, community contribution and expanded networking among others. At the same time, well-planned training activities had profoundly supported and guided the smooth and successful execution of all components of projects on the ground. The training component was the backbone of the whole initiative, touching all spheres of project planning and implementation.

#### THE TRAINING COMPONENT **WAS THE BACKBONE OF THE WHOLE INITIATIVE**, TOUCHING ALL SPHERES OF PROJECT PLANNING AND IMPLEMENTATION.

In order to mobilise greater support and resources for addressing WASH needs in the Dry Zone, the project's positive results were disseminated. The process, approach and results were documented and new studies documented and deemed useful for future planning and designing of new similarly focused projects.



## EMERGENCY SHELTER SUPPORT FOR PEOPLE AFFECTED BY CYCLONE GIRI

On 22 October 2010, Cyclone Giri, reaching a category four on the Saffir-Simpson scale, hit Rakhine State and made its way along the west coast of Myanmar. Myebon, Pauktaw, Kyaukpyu, and Minbya were four of the most-severely affected townships after its impact. Cyclone Giri was the worst natural disaster Myanmar suffered since Cyclone Nargis, two years before. The impact of Giri affected approximately 260,000 people, causing catastrophic damage to agriculture, fisheries, infrastructure, and homes in a community still struggling to recover from the previous cyclone. Approximately 104,000 people became homeless, with 20,380 shelters being completely destroyed.

During the cyclone, the villagers took refuge together in a safer place, a strong house in a nearby village. These private houses were so full of people that the threat of structural collapse was imminent. The villagers remained together, all soaked and with just a little place to sit, for more than 12 hours. When the rain and wind stopped, they returned to their land, where nothing existed, everything had been destroyed by Cyclone Giri and they were left homeless.

The communities in the affected area were unable to readapt and raise their homes, experiencing many difficulties and living in inhumane conditions. Emergency relief occurred immediately, with the delivery of food, health infrastructure, and temporary shelters. Assistance from the Government, IFRC – International Federation of Red Cross and Red Crescent Societies - and NGOs included distribution of tarpaulins and emergency shelter kits, containing a hammer, rope, plastic tarps, and tarpaulins. An amount of US\$ 1.8 million was allocated to the Emergency Shelter and about 5,000 homeless families were allowed to temporarily build makeshift shelters, using bamboo post and tarpaulins for roofs and walls.



With the post-Nargis experience, UN-Habitat immediately undertook a complete joint assessment in collaboration with local and international NGOs, to evaluate damage levels, collect data and plan effective interventions based on the real needs of the people in the place. The results of the evaluation showed a different reality from which it had been disclosed that the needs of the emergency phase were guaranteed. The assessment confirmed that house destruction levels were quite high in the Giri affected areas, with over one third of the houses fully destroyed by the cyclone. Myebon was the most affected township, with nearly 50% of the houses completely destroyed. Despite emergency relief, the assessment found that, three months after Cyclone Giri, a deficit situation was still on the ground, especially in terms of shelters, with 15,000 families still without any support, living in poor and overcrowded

conditions, and remaining in the places of their houses destroyed in precarious and fragile structures assembled from recovered materials.

The assessment and action plan were presented to stakeholders, including donors. UN-Habitat received a grant of US\$ 499,904 from CERF - Central Emergency Response Fund, in March 2011,as well as US\$ 1,046,051 granted by the Government of Norway for sustainable shelter interventions starting April 2011. A short time later, ECHO then supported US\$ 983,758 to assist families with emergency shelter materials, from May 2011 to May 2012.

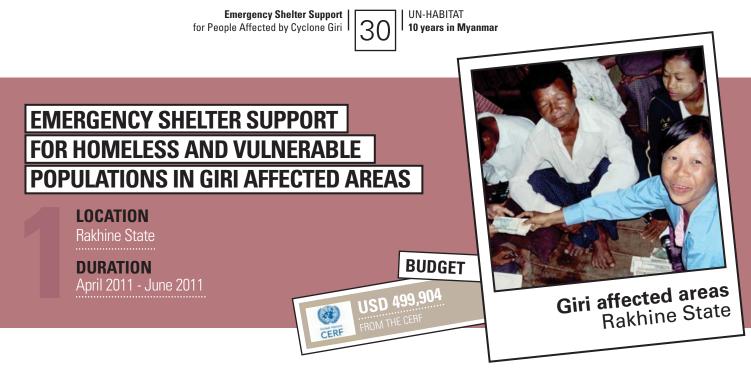
Therefore, UN-Habitat implemented its shelters recovery programme in post-Giri affected areas of Myanmar, divided into 3 projects:



EMERGENCY AND EARLY RECOVERY INITIATI Supported by ECHO.

UN-Habitat, through its 3 shelter programmes, intervened to facilitate the retrofitting and rebuilding of basic shelter and essential household facilities and to facilitate the planning of community actions so that people can proactively participate in recovery while re-establishing protective measures and enhancing the capacity to plan and manage the recovery process and sustained long-term development. The goal of this programme was to help the people of Rakhine State most adversely affected by Cyclone Giri, to rebuild and improve their shelters, with disaster resilient techniques and materials, appropriate to the risks of the region - Myanmar is the second most vulnerable country to weather events, according to the Global Risk Index.

The implemented approach always sought the involvement and strengthening of the community, through the People's Process. The beneficiaries were selected jointly with the community based on the general vulnerability within the village and then according to the individual conditions of each family affected by Cyclone Giri. Priority was given to households headed by women, pregnant, elderly, chronically ill, people who could not work, and families with a disabled person.

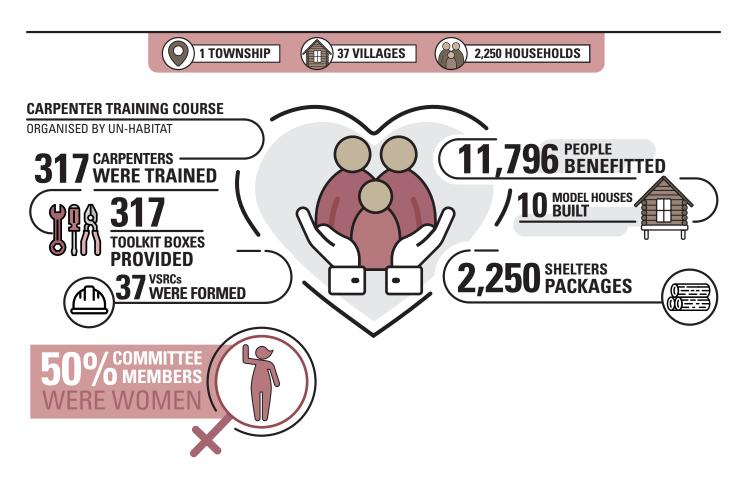


The CERF funded essential supplies and tool kits for emergency shelters to support the families most severely affected by Cyclone Giri, which supported 2,250 families with the distribution of different shelter packages – a total of 11,796 beneficiaries benefitted from CERF interventions. UN-Habitat was also committed to providing humanitarian assistance until the end of 2012 to meet the remaining needs following emergency shelter interventions, as a complement to CERF funding.

Shelter committees were formed for each target village, 37 in total, prioritising the participation of women in all of them. There was a concern about raising awareness among the participants about shelter construction techniques from the perspective of

Disaster Risk Reduction (DRR). The villagers were selected by the Village Shelter Committees, to take the Carpenter training course, organised by UN-Habitat. 317 carpenters were trained in DRR construction techniques and 317 toolboxes were provided. During the training period, 10 model houses were built and delivered to the most disadvantaged families among the beneficiaries.

Based on the selection criteria, materials such as bamboo, wood, timber post, bamboo mat for walls and floors, as well as bamboo ropes and straw cables for roofing were provided according to each one's needs. Specific questions were raised about shelters, the type of materials traditionally used for building houses, availability and price of materials, and skilled carpenters.



UN-HABITAT 10 years in Myanmar

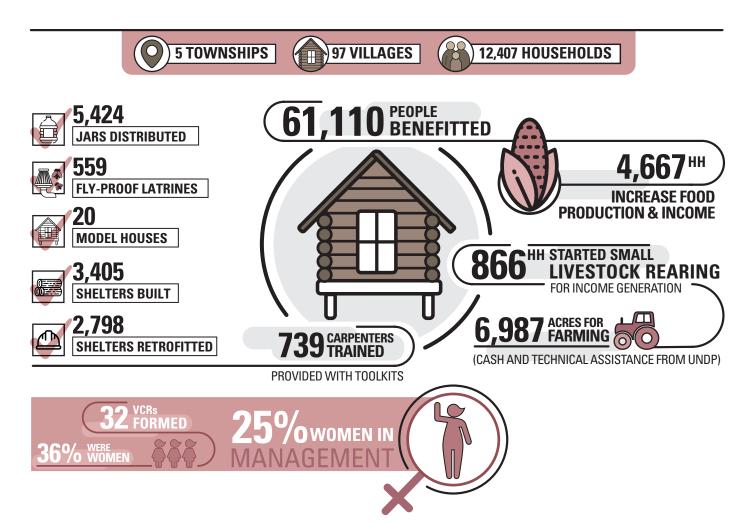


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The **Rakhine Settlements Support Programme (RSSP)** funded by the Government of Norway began as a matching fund for the CERF. The RSSP has been a complement and an extension of the **Post-Cyclone Giri Community-Based Emergency and Early Recovery Initiative** funded by ECHO. Whereas the ECHO funding has provided emergency shelter materials, the funds given by the Government of Norway have enabled the building and retrofitting of fully disaster resilient shelters. The RSSP has successfully transformed the post-Giri emergency shelter interventions into sustainable shelter recovery solutions.

The RSSP, which started in April 2011 and concluded in January 2012 - almost three months earlier than agreed, was implemented in 32 villages and directly benefitted 3,405 households - a population of 20,500 people, across two townships (Minbya and Myebon).

The actual number of new and retrofitted shelters superseded the number of shelters planned. A total of 2,798 shelters were retrofitted in 2 townships, 1,078 in Minbya and 1,720 in Myebon, and the programme also benefitted 607 households with disaster-resilient new shelters (500 initially planned). The RSSP also provided access to safe water and sanitation facilities to 5,424 households. Communities have been given the organisational and technical guidance needed to rebuild on their own, through the capacity building of Village Recovery Committees (VRCs) and the training of 239 community carpenters and other artisans (50 initially planned) in disaster resilient construction techniques, also provided with toolkits. VRCs in all 32 villages showed keen interest in continuing to work for the improvement of their communities.





16,788 PEOPLE 2,798 HOUSEHOLDS

Five hundred community carpenters were trained in DRR construction techniques and provided with toolkits. During training sessions, 20 model shelters were built as a practical exercise, and were after delivered to the most vulnerable households of the community.

During programme implementation, women's participation has always been ensured with their active participation in VRCs and occupying management positions. Gradually, population conditions were improved, as confirmed by U Maung Maung Chay, an inhabitant from Kyi Gaung Taung Village:

WE WERE SUFFERING FROM CYCLONE GIRI, WHICH DESTROYED OUR HOUSE, **WE ARE REALLY GRATEFUL TO THOSE HELPING US TO BUILD A HOUSE** WHERE WE CAN LIVE TOGETHER. Transparency and accountability were emphasised by requiring VRCs to post financial statements in visible locations. A tangible impact was seen where all VRCs very transparently reported the funds allocated for the programme activities. The programme process, approach, and results were documented and deemed useful for future planning and designing of new shelter focused programmes.

Challenges were faced in the development of the project, namely due to the unavailability of shelter materials and transportation restrictions, which entailed high costs. Furthermore, the strong winds and heavy rain, mainly in the coastal areas of Rakhine, were a growing challenge for the implementation of the project. Community involvement was not always easy, during the emergency phase, because the impact of Cyclone Giri left the population helpless, having to struggle to ensure their livelihoods on a daily basis. However, the distribution of the emergency shelter package made it easier.

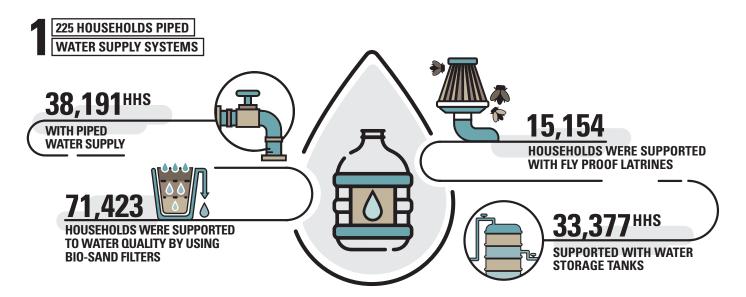
During implementation, UN-Habitat adopted the monitoring system modality in which field coordinators and project engineers conducted inspection visits. Based on the results, a monthly coordination meeting was held at the township level and the status of progress was kept up to date.





UN-HABITAT 10 years in Myanmar

## 66 OUR LIVING CONDITION WAS SIGNIFICANTLY IMPROVED ,,

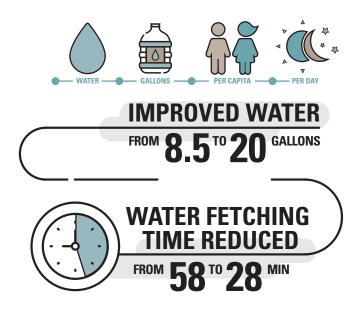


Imagine a very dry region in one of the most underdeveloped countries in the world, where water resources are sparse and what little exists is occasionally decimated by weather and natural disasters. Infrastructure is deeply inadequate and the population experiences poor living, hygiene and health conditions, due to lack of resources.

This was the scenario in Central Myanmar, known locally as the Dry Zone, where conditions for a humanitarian crisis were met and for which it was imperative to find a solution.

Thus, 2011 saw the dawning of Shae Thot – which means the Way Forward – a consortium project of four main partners, funded by USAID.

It was designed to provide villages across the Dry Zone, southern Shan state and peri-urban Yangon, with comprehensive services on maternal and child health, livelihoods, food security, water, sanitation, and hygiene, reducing suffering and preventing death.



UN-Habitat was responsible for Shae Thot WASH (Water, Sanitation and Hygiene), increasing people's access to safe and adequate water and improved hygiene through not only infrastructural improvements, but also with knowledge transfer and people skills development through hands-on training.

Access to sustainable sources of clean water is a humanitarian and critical need for the development of communities.

DURING THE 2011 TO 2017 PROJECT PERIOD, UN-HABITAT SUPPORTED WASH SERVICES – WATER, SANITATION AND HYGIENE.

At the beginning of the Shae Thot project, UN-Habitat found that village communities were getting potable water for their daily consumption from open wells, unprotected springs, creeks, rivers or ponds – often located some distance away from the village. During the dry season, many of these water sources dried up, forcing villagers on long paths until they found alternative sources of water, which were almost always contaminated, as confirmed by U Tin Htay, a villager from Ku Taw, located East of the Nyaung-U township:

"Before 2012, there was only one deep tube well with a mono pump system and one 3,000 gallon water storage tank, when we fetched water from the storage tank, we had to spend so much time to get a bucket of water because all households depended on this small storage tank. We fetched with various ways to carry the water, such as barrels, buckets and pots."

The arduous and time-consuming task of collecting and transporting water usually fell on children and women, who spent several hours a day on this task.

Shae Thot | Improves Lives | UN-HABITAT 10 years in Myanmar



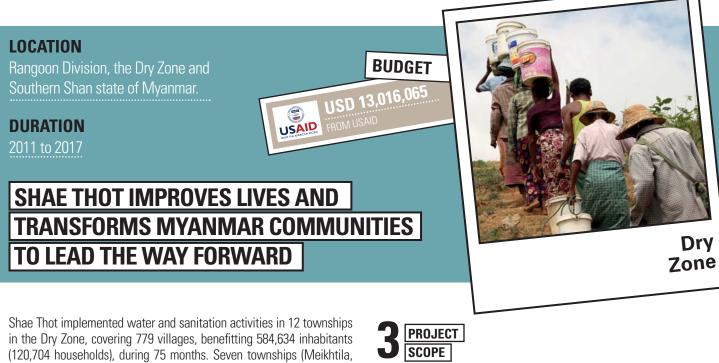
#### SCHOOL CHILDREN'S HYGIENE AND SANITATION IMPROVED

-6 CHILDREN WERE SUPPORTED WITH HAND-WASHING AND SANITATION FACILITIES IN SCHOOLS.

Furthermore, in regard to sanitation and hygiene issues, the use of latrines was not common in many of these villages, and knowledge of safe, hygienic practices was also limited, therefore diseases spread.

Shae Thot project activities focussed on expanding access to safe water and advanced hygiene through the use of innovative but low-cost technology, using locally available materials and supplies. It increased water resources and infrastructure, upgraded water quality allowing for access to safe drinking water, enlarged water storage capacity, and provided greater access to water for the communities involved. It also improved sanitation infrastructure and enhanced hygiene awareness.

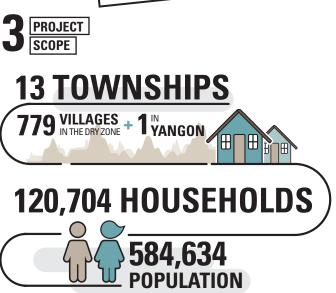
During the project period from 2011 to 2017, UN-Habitat supported WASH activities for a total of 120,704 families, representing 584,634 people benefitting from water supply infrastructures, sanitary latrines and better knowledge.

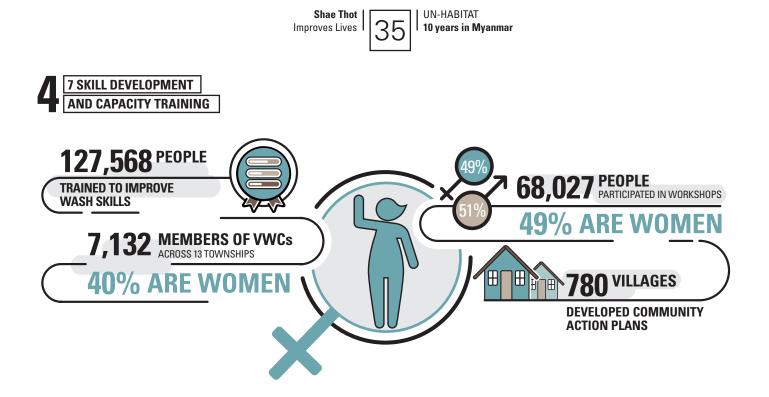


in the Dry Zone, covering 779 villages, benefitting 584,634 inhabitants (120,704 households), during 75 months. Seven townships (Meikhtila, Nyaung-U, Myingyan, Sinpaung Wei, Aunglan, Seikphyu and Pakokku) were served during the 1st and 2nd year of project implementation. In the 3rd, 4th and 5th year, the project was implemented in the townships of Buadalin, Monya, Pale, Yenanchaung and Yesagyo.

The project was also implemented in the Shwe Pyi Thar township, one of the peri-urban areas in the Yangon region, which suffered from water shortages or high levels of iron concentration, making water unhealthy to drink. The Shae Thot project allowed for the construction of 2 water treatment plants, supporting approximately 11,232 inhabitants (2,500 households) with access to improved quality and quantity of potable water.

In year 6, UN-Habitat revisited the 120 villages in the Nyaung-U, Meiktila and Seikphyu townships, providing additional support through domestic water supply connection with a meter and tariff system, and corrective measures.





SHAE THOT PROGRAMME **SUPPORTS WATER COLLECTION AND STORAGE INFRASTRUCTURES**, ACTIVELY INVOLVING COMMUNITY MEMBERS.



At the end of the 6-year Shae Thot programme, UN-Habitat was able to support water collection and storage infrastructures throughout the target region, actively involving community members at each stage of the process, from the assessment and prioritisation of needs to the development of water resources and sanitation improvement plans for the construction and development of mechanisms to ensure long-term sustainability.

Through this approach, communities are now playing a key role in identifying the problems they face and the activities and solutions they wish to achieve.

They were encouraged to prioritise, make decisions and be proactive in the whole process and implementation, monitoring their updated progress. Consequently, their know-how and skills have been improved. The creation and involvement of Village Water Committees (VWC) empowered villagers and gave them a stronger voice in local decision-making processes, serving as a model for good governance and building lasting ties between villages and local authorities.

**PEOPLE PLAY A KEY ROLE,** IDENTIFYING NEEDS AND PRIORITIES, TAKING DECISIONS, IMPLEMENTING AND MONITORING THEIR OWN DEVELOPMENT.

The variety of capacity-building initiatives and skill-development training intended to enable the community to operate and maintain water supply and sanitation infrastructure, even after the end of the Shae Thot programme, simultaneously creating more employment opportunities and enhancing their livelihoods.

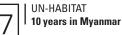
Awareness trainings were also conducted on the use of domestic water purification (bio-sand) strengthening communities' knowledge about the use of bio-sand filters and the benefits of using water treatment with low-cost technology. With all this, U Tin Htay recognises that "Now, after the implementation of these activities, we felt that the status of our living condition was absolutely changed". This is one representative view from among the beneficiaries of the project that covered over half a million people. Shae Thot Improves Lives

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UN-HABITAT 10 years in Myanmar

**Unclean water poses serious** health hazard risks, which have tangible impacts on education and economic activities due to illness impairment, especially amongst the most vulnerable population groups. Prioritising water and sanitation issues is therefore crucial in the overall human settlements development effort.

Turning Myanmar's Land Into a key for its prosperity



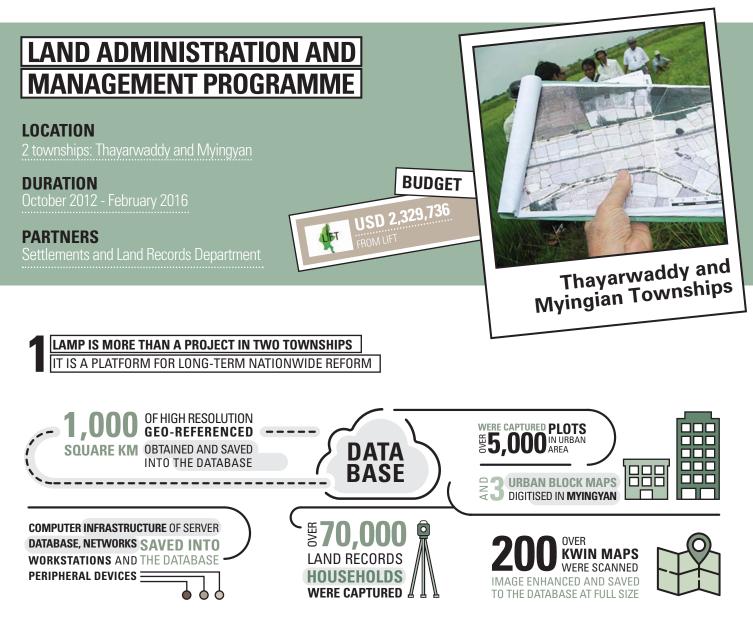
Myanmar has undertaken a few noteworthy changes since 2008, including a new constitution, new democratic election, and new reforms and measures that aim to revitalise the country. Progress has been made towards improving the lives of its population, but perhaps no measure could be as potentially powerful as the passing of two land-related laws, The Farmland Law and the Vacant, Fallow and Virgin Lands Management Law in 2012. These laws could effectively contribute to spreading prosperity for Myanmar's people, particularly farmers, as it gives them the right to land ownership. And land, as everyone knows, is a remarkable asset.

A country's land is its biggest treasure. It is more than a symbol for origin, it is more than the substrate in which people lay their roots - it is often an essential means of assuring a decent livelihood. It is in the land that people project their dreams: the building of a house, the starting of a new job, the safe haven in which to raise their families, the reliable source of steady income. Land has the huge potential of being a source of great prosperity for people, allowing them access to the building blocks that improve their lives – money, food, shelter. Since it is a limited resource, land can only fulfil this potential if it is coupled with solid, reliable governance.

#### NO MEASURE COULD BE AS POTENTIALLY POWERFUL AS THE PASSING OF TWO LAND-RELATED LAWS

However, in Myanmar, land governance is unreliable and the process of accessing and keeping land has been muddled for years. Despite being rooted in the country's history, cultures, economic, environmental and social conditions, Myanmar's land administration processes were in a state of neglect, having remained unchanged for over 50 years. Land records were unreliable and conflicting, ownership was unclear, maps were out of date, land grabs and land conflicts were frequent. This prevented effective land management and sabotaged people's chances of prosperity.

### **TURNING MYANMAR'S LAND** INTO A KEY FOR ITS PROSPERITY





There are serious consequences that come with inefficient land management. For vulnerable populations, family land is frequently their sole source of food and shelter. It is an invaluable resource, albeit an often insecure one. There are increasing pressures on land due to the growth of a market economy, and, with land grabbing an ever-growing issue (meaning huge plots of land can be unfairly acquired by individuals, governments or corporations, who are then able to control it and deny access to small scale farmers), evidence of rights and appropriate demarcation of privately-owned land becomes even more vital.

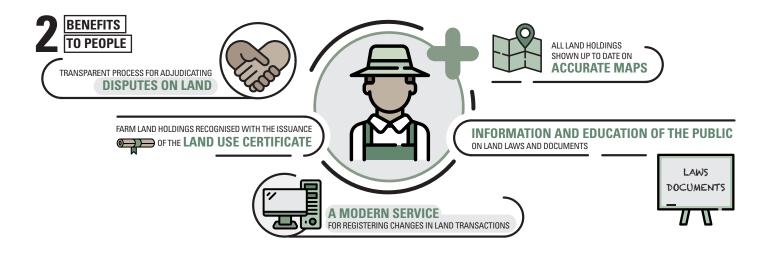
Myanmar's infrastructural development suffers too, as it is a daunting task to build new infrastructure in the country without reliable information on land tenure, boundaries, land area, ownership and land value.

In this scenario, the two laws passed in 2012 could have a huge positive impact on the population. Most of Myanmar's inhabitants rely on agriculture, but there is a high percentage of people who are landless or have insecure tenure. In this new post-2012 paradigm, having access to secure land tenure, property rights and certifiable ownership is the key to improving both food security and sustainable socio-economic development. Land management's role in this accomplishment is clear: since state land will turn private, registering the clear demarcation of lands is paramount. Furthermore, having robust land administration and management is an entry point for longer term land tenure security and to give rise to a fundamental land reform process.

Realising that Myanmar's land management systems needed an urgent upgrade, UN-Habitat under the leadership of the Department of Agricultural Land Management and Statistics (DALMS) implemented the Land Administration and Management Programme (LAMP) funded by the Livelihoods and Food Security Trust Fund (LIFT).

#### LAMP'S GOAL WAS TO **STRENGTHEN LAND ADMINISTRATION AND MANAGEMENT** BY TESTING NEW TECHNOLOGIES AT PILOT SITES

LAMP's goal was to strengthen land administration and management by testing new technologies at pilot sites, which could then be scaled up with the support of reliable and affordable systems. In the framework of LAMP, UN-Habitat refurbished the pilot Settlements and Land Records Department with new equipment, training local staff on how to make use of the equipment to digitise maps and land records, as well as to georeference urban and rural plots. During the process, thousands of land holdings were scanned, hundreds of maps were digitised, and extensive areas of land were geo-referenced. All of these changes were powered by a common thread - a long-term development plan for land administration across the country, guaranteeing that these changes can be implemented in Settlements and Land Records Department all over Myanmar.

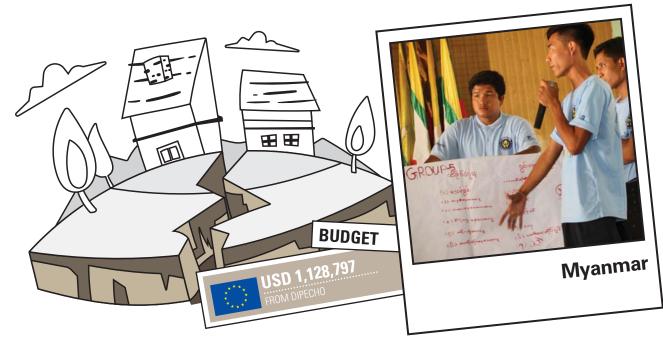




Ultimately, it is the people of Myanmar who will reap the benefits of a more effective land management process. Land holdings will now be kept up to date on accurate maps. Land use certificates will be issued to farm land users, assuring that farming communities have continued access to cultivatable land over which they hold rights. Changes in land transactions will be faster and more transparent, thanks to the modern service now in place.

This project was born out of the need to turn land into the key for the country's prosperity, making civil society an integral piece of its roll out. In each applicable township, LAMP coordinated with local leaders, members of Farmland Administrative Body, and turned them into facilitators and focal points of contact with their communities. By closely involving people through an inclusive approach and engagement with civil society, UN-Habitat managed to not only provide the basis for an overhaul of Myanmar's land management systems, but also to reinforce people's confidence and reliance in the process. Thanks to these efforts, LAMP has paved the way to achieving an inclusive vision of prosperity built on the foundations of effective land management, walking the steps towards the next project phases together with the people of Myanmar.





### IF THE GROUNDS SHAKE, MYANMAR SHALL REMAIN STANDING LOCATION Myanmar DURATION June 2012 - October 2017

### IN 1930...

a 7.3 magnitude earthquake hit the Bago area in central Myanmar, only 75km from Yangon, then the most populous city and a status it still holds. At the time, more than 500 people lost their lives and several settlements were decimated.

### NOWADAYS,

if a similar event took place, several thousand lives would be at risk. This is partly due to the much greater number of people living in the vulnerable area, but mostly because of the rapid urbanisation growth of the last few years, which has led to unsafe and unregulated dense construction of tall buildings that may collapse in an event of a major earthquake of similar magnitude. There is a common saying that states an Earthquake does not kill people but an unsafe infrastructure does".

This risk of earthquake is high due to the fact that the Sagaing Fault, the geological structure on which the 1930 earthquake originated, runs through major cities such as Mandalay, Nay Piy Taw, Bago, and Sagaing, with Yangon being located in its vicinity. The Sagaing fault is a 1,500km strike-slip fault that runs vertically on the Myanmar map, thanks to the northward motion of the Indian plate that forms the Himalayas and the Tibetan Plateau to the North and Northwest.

Recent research indicates that there is a strong possibility that a similar large-scale seismic event will occur in the near future. However, preparedness levels are insufficient because there has been no major earthquake in almost 90 years, even though tangible seismic activity is common in Myanmar. Since the DIPECHO project began being implemented, in 2012, measures have been taken by the government to strengthen the earthquake preparedness in the country which is now

gaining more traction after the Chauk earthquake in 2016. UN-Habitat has been a key member of the Myanmar Consortium for Community Resilience (MCCR) comprising 6 agencies that have been working on the various facets of Disaster Risk Reduction (DRR), with earthquake-specific focus in highly populated urban areas.

The project's first iteration, which lasted from 2012 to 2014, was about risk assessment and preparedness for CBDRM. Fundamentally, it targeted rural coastal areas prone to several hazards such as cyclones, floods, storm surges, tidal waves, and tropical storms - priority was given to the most vulnerable communities which did not have appropriate coping mechanisms in the event of a disaster.

Furthermore, the first approach to the Sagaing Fault line towns, earth risk assessments were conducted for Bago, Taugoo and Sagaing to ascertain the risk posed by the earthquake vulnerabilities.

Guided by the ERA, the programme conducted awareness-raising activities among the population and the authorities, developed earthquake preparedness plans in exposed urban centres, and prepared family level disater preparedness plans, earthquake manual and earthquake safety tips as well as safe construction guidelines.

This was a fundamental first step that created a basis for action on which the following two phases were built upon. In these, a comprehensive array of DRR concerns were covered, with emphasis on earthquakes, but also directed to general preparedness and other natural disasters.

Seismic profiles were created for all districts and regions, with earthquake hazard assessment conducted in Yangon city and Earthquake Preparedness plan prepared for Mandalay city and Disaster Management Plans reviewed and elaborated for towns where ERA were conducted in the previous phases. For capacity building and awareness raising, experts were invited to



interact with communities and "bridge the gap" by answering their questions and responding to their concerns. Spreading knowledge on the matter is a fundamental part of preparedness, as it is by understanding the phenomena and being familiar with possible responses in the case of a catastrophic event that citizens are able to protect themselves and their community.

Building regulation was also a determining factor for this overall effort in creating structural safety of housing and infrastructures. Due to the pervasive fragile construction, there was a need to enforce the building codes which would guide the construction sector towards building earthquake-resistant structures that would not put lives at risk. This was the rationale behind the National Building Code, which was formulated with the cooperation of Myanmar's Engineering Society, Geoscience Society, and Earthquake Committee. UN-Habitat's initiative to take on this issue was innovative, since the engineering principles and practices had not been taken into account for resilient construction before. UN-Habitats efforts on urban resilience building was furthered by capacity-enhancing activities for engineers (and other relevant stakeholders), along with the Rapid Vulnerability Assessment tool, the country's first retrofitting guideline, seismic vulnerability assessment and retrofitting plan of Lifeline Buildings in Yangon City.

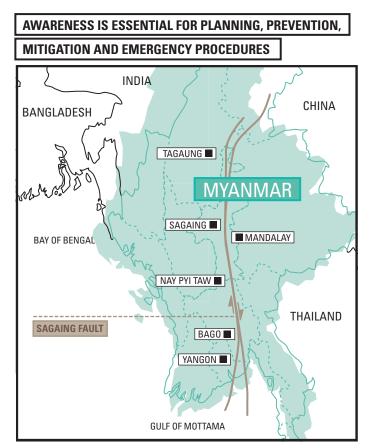
The holistic approach adopted in the programme is fundamental, as any flawed aspect of prevention, be it construction, emergency procedures, or city planning, may have tremendous consequences in the event of an earthquake or similar events. Public awareness is an aspect that should be given its due importance. Coastal communities, for example, are often aware of disasters and of their consequences, but do not understand their causes and how to reduce risks due to lack of education and training. On the other hand, in Yangon City, as most people have not experienced any disasters, awareness levels are very low.

### **DIPECHO**

### EARTHQUAKE RISK MANAGEMENT

However, the big city faces serious risks. Shwe Pyi Thar is a semi-urban area located in northern Yangon that was recently promoted to township, based on its rapid development trend. There is no proper land planning, making it vulnerable due to the construction of high buildings and the increase in population density next to industrial zones scattered throughout the area. The local hospital has only 25 beds, being far from able to provide care in the event of a disaster. In downtown Yangon, many high-rise buildings populate the Lanmadaw Township, having been and continuing to be built with very limited earthquake and other risk information integrated in their structural design. For both townships, the priority is to focus on earthquake risk management, which happened in the context of the DIPECHO programme. Earthquake contingency plans were prepared along with building capacities of the township level government officials. There are still many concerns, among which one is the fact that when DRR plans exist, they are not always followed through. This means that prevention, mitigation, and preparedness measures are usually not implemented. At present, emphasis has been put on financing measures identified in plans through the government's planning and budgeting process. Strengthening skills and knowledge of the engineers in enhancing their retro-fitting capacities coupled by financing is being pursued so that critical assets and facilities are better prepared for disasters in a timely, inclusive, and effective manner.

The series of DIPECHO programmes has greatly enhanced the capacities of communities, township authorities and of cities by raising awareness, understanding risks and vulnerabilities, enhancing skills and capacities, and by preparing contingency plans to deal with disasters that are specific to their geographic areas.







Natural hazards such as floods, storm surges and cyclones affect a large part of Myanmar's territory and coastal areas in particular. Coastal communities, mostly rural, are in a vulnerable situation, as inadequate building materials and construction practices do not guarantee safety in a disaster scenario. Moreover, institutions are not capable of putting preparedness mechanisms in place nor are they prepared to promptly deal with large-scale consequences when incidents happen.

If no action is taken for improving Disaster Risk Reduction and Resilience in hazard prone areas, rampant urbanisation would put many more people in vulnerable circumstances.

The urbanisation phenomenon should also be taken into account in these instances: it is rapidly growing in the country, leading to the overwhelming expansion of cities and to new ones cropping up throughout the territory - urbanising current rural areas. A multitude of development opportunities arise from this dynamic, but many of the existing concerns are accentuated. If no action is taken for improving Disaster Risk Reduction and Resilience in hazard prone areas, rampant urbanisation would put many more people in vulnerable circumstances.

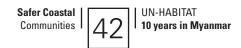


### **SAFER** COASTAL COMMUNITIES



Improvement with sights set on a safer and sustainable future is a core concept within many of UN-Habitat's projects in Myanmar, and Disaster Risk Reduction for Safer Burmese Coastal Communities (DRR-SBCC) was no exception, given its broad purpose of enhancing the resiliency of coastal communities to current and future risks. The approach was based on three action lines for Development Planning: evidence-based Policy Advocacy, Disaster Risk Reduction mainstreaming and Climate Change adaptation. Policy paper on land use planning in relation to human settlements was drafted and consulted with key stakeholders to further feed the outcomes into an ongoing land use planning guidelines framework. Land use planning training was also conducted at the Urban Research and Development Institute, under the tutelage of the Ministry of Construction.

At the community level, small scale mitigation activities were very important for the dissemination of the importance of DRR. Safer construction was promoted through carpenter training in the 8 townships that were covered by the project. At a wider, strategic level, UN-Habitat worked with the Ministry of Construction and the Myanmar Engineering Society (MES) in the development of carpentry training modules along the lines of the National Skills Standards Authority (NSSA) requirement for the accreditation. This resulted in reviewed curriculums that were institutionalised and enabled Competency Based Certification, which is recognised in the whole ASEAN region, granting its holders opportunities to work abroad. In addition, training incorporated green building concepts - an environmental concern to which UN-Habitat is no stranger.

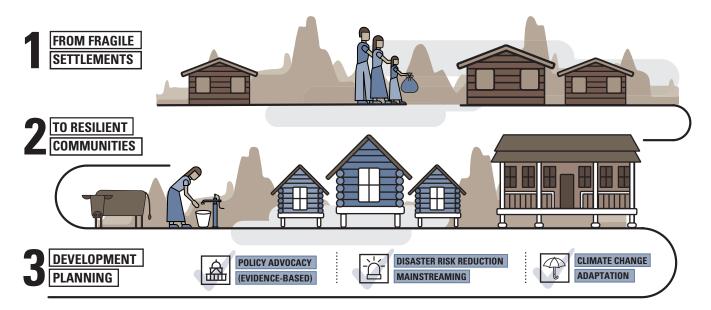


On the other hand, the development of Township Disaster Management Plans was supported. UN-Habitat worked with National, State and Regional and Township authorities to review and update the plans, based on previously established guidelines. These Management Plans have the particularity of ensuring that the differential needs of vulnerable groups are addressed through an inclusive approach, i.e. these groups have a say in the matters that directly affect their lives.

A more inclusive approach is also one of the main priorities for mainstreaming Disaster Risk Reduction, which has been integrated within the ongoing decentralisation process in Myanmar, empowering communities and authorities on a township level to build their own DRR and resiliency mechanisms. Within this effort, it is essential to upscale awareness among all stakeholders. So, the project has supported the provision of 15 Sets of Training Aids (Laptop, Projector, Portable Audio System and Generator) for a training outreach and awareness programme. In addition, a partnership was set up with DRR Working Groups for conducting advocacy workshops targeting Regional Government Ministers, Parliament members and officials who are engaged in policy making. A more inclusive approach is also one of the main priorities for mainstreaming Disaster Risk Reduction, which has been integrated within the ongoing decentralisation process in Myanmar, **empowering communities and authorities on a township level to build their own DRR and resiliency mechanisms**.

All in all, this project acted in part as a pilot, establishing connections with various others and also policy instruments. It will influence the future of Myanmar in the climate change and disaster risk reduction topics, paving the way for policy tools which are already in the development stages, with national land use policy expected to be finalised by the end of 2019.





**Rehabilitating the Most** Vulnerable Communities UN-HABITAT 10 years in Myanmar

### **REHABILITATING THE MOST** VULNERABLE COMMUNITIES

Of Myanmar's 51.54 million inhabitants, 32.1% of the population lives below the national poverty line, making poverty one of the country's main afflictions. In rural states such as Chin and Shan, poverty incidence is extremely high (73 and 33 percent, respectively). In these states, where many ethnic minority communities reside, access to basic services such as water, sanitation, education, and health is scarce.

Ethnic minorities are the most deprived, as their social fabric is getting weaker and they are not reaping the benefits from economic growth. Due to the fragile living conditions and the aforementioned lack of basic services, many remain susceptible to both health and social hazards, such as exclusion and the escalation of violence for cultural and material reasons.

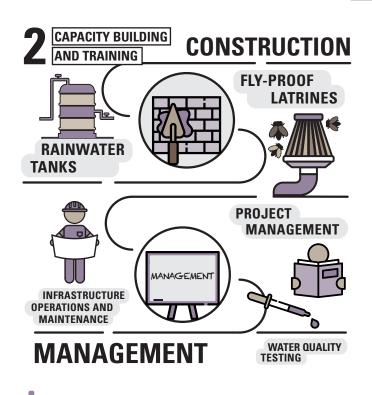
Agriculture is still the main economic activity in the country, particularly in these states. Most use it as a means of subsistence, keeping some yield surplus for trading through bartering and exchange with other home-based producers. This is, unavoidably, a poverty-stricken context resulting in a mounting loss in labour force, as young people migrate to urban centres and foreign countries for employment, contributing to underdevelopment and isolation. In order to promote social inclusion and local development, the Government of Japan funded The Programme for Development and Rehabilitation of Communities in Ethnic Minority Areas of Myanmar, which was implemented in ten townships in Chin, Shan, Kayah, and Kachin States. The project's scope was considerable, benefitting over 200,000 people in 509 villages across the targeted area.

As such ethnic minority areas are prone to armed conflict, many villagers were distrusting of external agents, and sometimes even within their own community, which made building trust one of the key challenges for successful implementation. This, added to the poor living conditions often aggravated by conflict, shaped the project's goal, which was the enhancement of social cohesion and peace-building through development - envisioning "Comprehensive Recovery".

Firstly, community infrastructure was attended to by improving water supply and sanitation, and connectivity infrastructures. Similarly, training and capacity building was conducted in order to provide the population with the knowledge and skills necessary to restore their livelihoods.







AS ALWAYS, THE UN-HABITAT'S FLAGSHIP APPROACH, **THE PEOPLE'S PROCESS**, TURNED OUT TO BE THE MOST EFFECTIVE METHODOLOGY.

It unlocked the villagers' potential, promoting self-help from such a deprived situation. In this instance, communities were able to cope with extreme difficulties and demonstrated determined ability to improve their lives in the face of extreme circumstances. The People's Process enabled them to reflect and gain insight on their capacities by organising and initiating actions for rehabilitation and development with their own initiatives and creativity.

Access to potable water was one of the most pressing health and hygiene issues. The majority of water sources are open ponds, spring water, river water, and rain water, which makes the population vulnerable to water scarcity in the dry season, as well as diseases originated from poor hygiene habits and contaminated sources. Through basic infrastructure building, over 200,000 people gained access to potable water in both quality and quantity. Furthermore, hygiene awareness was disseminated and sanitary facilities were built in thousands of households.

In regards to community infrastructures, there were great improvements in the accessibility to schools, health services, and market places due to the construction of several culverts, small bridges and hundreds of kilometres of roads which consequently reduced isolation for every village. Electrical coverage was improved with the investments in solar and hydro power. These are the sources of renewable energy in the targeted townships which have not been tapped into yet. In two instances, sewer systems were constructed for betterment of drainage and waste disposal in the respective villages.

Notwithstanding the immediate importance of the previously detailed efforts, training and capacity-building play a fundamental role from a sustainability point of view of the infrastructures created under the project.

Practical training included construction methods for water storage tanks and other concrete structures, bio sand filters and fly-proof latrines. Managerial training covered community and project management,



with specific modules in bookkeeping, infrastructure operation and maintenance, and water quality testing training.

Throughout the process, and as communities were involved in the decision-making process, local women were able to take leading roles, resulting in more equitable decision-making and a substantive coverage of their needs and priorities.

Finally, inter-village visits were organised with the purpose of sharing knowledge and building confidence among communities. This further advanced an enriching process of social capital enhancement, increase of livelihood opportunities, and social network strengthening.

UN-Habitats People's Process puts extra emphasis on transparency of financial resources use and horizontal accountability of VDCs to the members of community. As the integral part of its process, social audits are conducted in all communities where the project financial resources are provided to the communities to implement the projects of communities' priorities. Ensuring transparency in financial resources utilisation and in decision making are of utmost importance in community-driven projects.



Making Climate Change an Agenda in Mvanmar

2<sup>ND</sup> COUNTRY

with the greatest risk of

vulnerability to weather events



UN-HABITAT **10 years in Myanmar** 

Though climate change has been manifesting itself throughout the entire planet, it is more evident in some countries due to their geographical and morphological specificities. According to the Global Risk Index, Myanmar ranks second in vulnerability to weather events related to climate change.

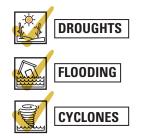
> According to the **Global Risk Index**, Myanmar ranks second in vulnerability to weather events related to climate change.

In recent decades, the country has experienced increased intensity and frequency of multiple events such as droughts, extreme temperatures, cyclones, torrential rain, flooding, storm surge and sea-level rise. By itself, any of these is capable of great harm to human and natural environments, making their combined potential devastating.

# MAKING CLIMATE CHANGE AN AGENDA

**IN MYANMAR** 

— CLIMATE THREATS TO MYANMAR



USD 5,165,56



STORM SURGE

### **ECONOMIC IMPACT**

Myanmar's economic cornerstone, rain-fed agriculture, is threatened by droughts, flash floods and salinisation, due to sea-level rise. The fishing sector experiences losses due to the deterioration of natural aquatic habitats, besides the destruction of equipment in catastrophic events. Such disasters also affect livestock breeding, while high temperatures propagate pests and disease. Myanmar's hydropower, a renewable energy source that has significant potential to expand, could be crippled by droughts and erratic rainfall. Floods and cyclones severely hinder transportation. Scarcity of raw materials, often linked to weather phenomena, causes price escalation, impacting numerous industrial sectors.



Natural resources are also vulnerable to the changing climate dynamics. Desertification and deforestation have been increasing. Water sources can flood or expose soil to erosion and become contaminated because of concentrated rain periods. In aquatic environments, biodiversity is particularly at stake.

#### **Plant life cycles have been notably shifting**, as have the migration patterns of many animal species.

Human settlements are also directly at risk from floods, cyclonic winds and coastal erosion. Health problems arise from heat waves and water contamination. Insufficient resources, including land, water and food may also exacerbate civil and political conflict in areas that are prone to unrest.



Since having a coherent and coordinated plan among all sectors is essential, the MCCA is implementing reforms and building the necessary policy, strategic and legal instruments to back sustainable development. This comprehensive effort shapes the National Climate Change Strategy - identifying the main strengths and weaknesses in each sector so as to provide an action plan to improve capacities at all levels.

MCCA aims to prepare Myanmar to combat the impact of climate change by establishing policies, structures, systems and processes that lead to taking appropriate climate action.

Another key activity is the development of technical solutions and strategies that contribute to mitigation and adaptation. This enables Myanmar's citizens to learn how to adapt to climate change and engage in sustainable practices in a multitude of areas, such as agriculture, water management, forestry, sustainable cities and management of natural resources.

Even though a number of already existing practices can be documented and capitalised upon, many relevant agents still steer towards unsustainable practices. In parallel, the development of the fossil fuel sector, albeit economically advantageous, raises serious concern on this matter.



#### **THE MCCA's WORK**

This grim outlook motivated the creation of the Myanmar Climate Change Alliance (MCCA), Executed by the Ministry of Natural Resources and Environmental Conservation, implemented by UN-Habitat and UNEP (UN Environment Programme), funded by the European Union and integrated within the Global Climate Change Alliance - a fundamental link, given that the issues at hand are worldwide.

The MCCA works on an inter-ministerial level to raise general awareness of the consequences of climate change, mitigating practices and adaptation strategies. This involves a wide strata of people, all with roles and responsibilities, from the national government, academia to civil society.

In essence, the MCCA has been positioning Myanmar within the global effort to combat climate change, in regards to both internal affairs and climate diplomacy - Although the country's share of contribution towards global warming is minute, it has committed to playing a positive role in curbing the rising threat.

For this reason, sitting at the table of the negotiations is essential in order to present and defend Myanmar's position, in alignment with other countries in similar conditions.

#### Myanmar is a **"a carbon sink"** country, since its vast forest area removes carbon dioxide from the atmosphere, **reducing global warming**.

Myanmar Climate Change Policy, Strategy and Action plan will help align all climate actions in Myanmar to a strategic direction in each of the sectors impacted by the adverse effect of climate change. A PROACTIVE APPROACH ON DISASTER MANAGEMENT

USAID

A Proactive Approach on

Disaster Management

### MYANMAR CONSORTIUM FOR CAPACITY DEVELOPMENT IN DISASTER MANAGEMENT (MCCDDM)

THE CONSORTIUM'S FUNDAMENTAL PREMISE

A PROACTIVE ONE, PROMOTING A CULTURE OF

MITIGATION AT NATIONAL AND STATE LEVELS.

WAS SHIFTING FROM A REMEDIAL APPROACH TO

PREPAREDNESS AND STRENGTHENING DISASTER

Cyclone Nargis was a game-changing event for Myanmar. The

degree of destruction it caused clearly showed that the country

was severely unprepared to both deal with catastrophic events and

Subsequently, the authorities had to rethink Disaster Management and Disaster Risk Reduction strategies. In 2012, the country endorsed

the Myanmar Action Plan for Disaster Risk Reduction in order to adopt

a comprehensive disaster risk reduction strategy to build national and

regional resilience and reduce its vulnerability. The plan highlighted the

need of a Disaster Management Training Centre (DMTC), even though the

Government's Relief and Resettlement Department had been conducting

BUDGET

USD 2,999,764

**UN-HABITAT** 

10 years in Myanmar

#### DURATION

September 2014 - October 2017

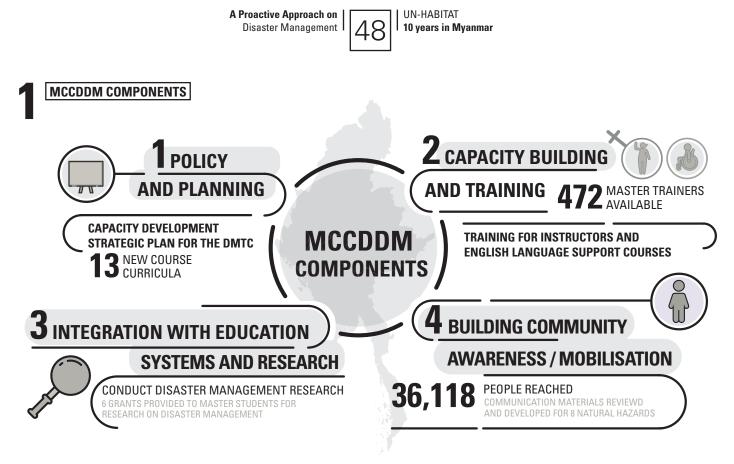
mitigate their consequences.

Disaster Management Courses since 1977, with the aim of generating capacity for Government Officials. Since the courses had been limited to specific areas and were not conducted regularly, the DMTC was established in Hinthada, Ayeyarwady region. The DMTC serves as a central hub to many activities, namely capacity development and research initiatives at the National and State/Region levels, which have been instrumentally supported by the MCCDDM (Myanmar Consortium for Capacity Development for Disaster Management) since its inception.

Myanmar

As the post-Nargis political scenario was also much more open to the international community, foreign input was decisive for the restructuring endeavour which resulted in the Myanmar Consortium for Capacity Development in Disaster Management (MCCDDM), led by UN-Habitat and featuring ACTED, the Asian Disaster Preparedness Center (ADPC), the American Red Cross (with the Myanmar Red Cross Society), SEEDS Asia and UNDP as members; UNICEF, International Organization for Migration (IOM), Handicap International and HelpAge International as technical partners and Ashoka Social Development Association (ASDA) as a local partner. This diversity of organisations brought great benefits to the consortium, creating a more complete approach and promoting the participation of women, children, the elderly and the people with disabilities, as well as the inclusion of their specific issues.





The Consortium's fundamental premise was shifting from a remedial approach to a proactive one, promoting a culture of preparedness and strengthening disaster mitigation at National and State levels. There were four pillars of action.

Policy and Planning initiatives were developed with the objective of upgrading the capacity of people implementing disaster management activities. Among these, the Strategic Plan was developed for the DMTC, following the identification of institutions whose technical and institutional cooperation would be profitable (NGOs, Universities, and Government Departments) for enhancement of disaster management capacity.

The training aspect was central as Capacity Building and Training was another pillar, with the clear purpose of training a core group of Disaster Management experts, which would then be qualified to conduct multiplier training courses, consequently spreading the knowledge and capacity obtained. The end result was very positive, with a total of 472 master trainers trained and available, most of whom are now core instructors on the subject, regularly implementing training. Revised courses were socially inclusive, addressing the needs of women, children, the elderly and people with disabilities during disasters

As for all development efforts, research is essential for Disaster Management. This justified the instauration of the third pillar, Integration/Enhancement within Education Systems and Research. In its scope, linkages between the DMTC and academic or research institutions were established on a National and International basis. Priority research areas were identified, with the main ones being Urban Risk and Coastal Hazards, a deliberation that decisively reflects in the activity of UN-Habitat and other agencies dedicated to the topics of Disaster Risk Reduction.

Lastly, in order to increase public awareness on Disaster Management, several activities were conducted within the Building Community Awareness and Mobilisation pillar. 36,118 people were directly reached by multiple means of communication such as radio, film, trainings, schools, and exhibits. Print materials were developed on the subjects of Cyclones, Floods, Earthquakes, Fires, Lightning, Tsunami, Landslides, and Droughts. The entirety of Myanmar benefits from the Consortium's work under the project which developed core trainers, training modules and incorporation of the training events in the annual workplan of the training centre. During the project period, work has been done in specific regions, prone to future disasters, in the Kachin State, Ayeyarwady Region, and Mandalay Region.

The MCCDDM, by empowering the DMTC, has in essence established a foundation so that the country can build its own capacity. MCCDDM has helped DMTC develop from just a building to an institute with trainers, training manual and a functional system of training programme implementation. In future natural disaster circumstances, the impacts can be significantly mitigated thanks to this initiative and the holistic vision it applied to Disaster Management and Risk Reduction.





UN-HABITAT 10 years in Myanmar



# CITIES FOR THE FUTURE

Urbanisation processes raise various social, environmental and infrastructural issues. Disenfranchised communities settle in city outskirts where housing conditions, often fragile to begin with, degrade with the unrelenting influx. Mounting consumption levels call for extraordinary responses from the waste management sector. Road traffic rapidly intensifies, rendering transportation systems and infrastructures ineffective. As cities grow, so does the amount and complexity of such problems, making urban planning and management a fundamental capability of modern societies.

After the regime change that followed the 2010 general elections in Myanmar, several political reforms were enacted, many of which opened up the country to the international community, its cultural influences and global market. Subsequently, the country's socioeconomic dynamics have been undergoing major transformations, one of the most relevant being rural-urban migration, since Myanmar is one of the least urbanised countries on the planet. The continuous expansion of medium and large cities, namely in the Yangon - Nay Pyi Taw – Mandalay axis, that comes intertwined with the recent remarkable economic growth, has been establishing Myanmar's urbanisation process as a subject of increasing concern.

Myanmar's urban management sector is fairly behind the recent needs of the urban population. No organisation offers a broad range training on the subject, so very few national entities are capable of acting adeptly and swiftly, as the situation demands. So, the Transformation of the Urban Management project was implemented through the Urban Research and Development Institute (URDI), one of two institutions that provide training directly related on the matter.

#### **Myanmar's urban management sector** is fairly behind the recent needs of the urban population.

The project's objective was to accelerate improvement in the sector, through the dissemination of knowledge on urban governance, planning and management, among various stakeholders. Participants from 6 cities received training in 8 areas, including strategic urban planning, urban land management, introduction to environmental and social safeguards and planning of urban infrastructure investments.





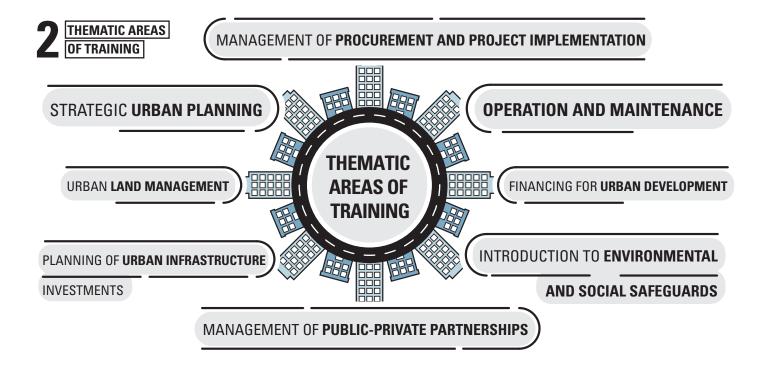
To the best of logistical possibilities, modules were adapted according to each city's specificities. Furthermore, training of trainers was provided in order to give the participants tools to spread the knowledge learned.

One of the most useful outputs of the initiative was the development of business plans for a few of the sector's organisations, with special focus on the Urban Research and Development Institute. For instance, this particular business plan proposes that training is eventually transferred to an academic institution, so that URDI can focus solely on research. Dividing tasks is fundamental for the growth process that these institutions have been experimenting, envisioning a continuity of work that ultimately leads to sustainable progress and development.

Combined with the spread of knowledge the project propitiated and the multitude of lessons learned through the discussions that were generated in its context, the well-working of stakeholder organisations will ensure better quality of life for people in many of Myanmar's cities and villages that accompany the nation's growth.

Although short, medium and long-term goals were set, the effort undertaken was mostly a long-term investment. This means that, even though the most important results cannot be immediately assessed, a sturdy stepping stone was set, on top of which the country can build significant progress and achieve sustainable development.

> One of the most useful outputs of the initiative was the development of business plans for a few of the sector's organisations... Dividing tasks is fundamental for the growth process that these institutions have been experimenting, envisioning a continuity of work that ultimately leads to sustainable progress and development.





5

# BRACED

Myanmar is at a moment of unprecedented economic and social development. This has been and should continue to be supported by increasingly effective institutions that provide platforms on which to build upon, promoting growth and stability in a number of fields.

Regardless of mankind's efforts, climate is not a field in which stability is obtainable, and Myanmar is particularly exposed to its volatility: according to the 2018 Climate Risk Index, the country ranks third in the list of the most affected by extreme weather events over the last two decades. Such a vulnerability may hinder progress, as dealing with these events exhausts considerable resources, time and focus. Cyclone Nargis is proof of this, with a death toll exceeding 100,000 and millions affected by the destruction of households, infrastructures and livelihoods.

REGARDLESS OF MANKIND'S EFFORTS, **CLIMATE IS NOT A FIELD IN WHICH STABILITY IS OBTAINABLE**, AND MYANMAR IS PARTICULARLY EXPOSED TO ITS VOLATILITY

However, when Nargis struck in 2008, Myanmar was unprepared and vulnerable. Currently, there are initiatives in place to make sure such a catastrophe does not happen again. The BRACED Alliance is one of the most important, aiming to improve the resilience of communities, in a process driven by women and children and supported by effective institutions. BRACED is a 6-agency consortium with a very broad range of action: saving lives, protecting livelihoods, improving institutional coordination and influencing national policy, through a unique model of policy action and media outreach.







The action range derives from three objectives. First, that communities, especially women and children, are equipped with the knowledge, skills and resources to mitigate the risks of and recover from climate shocks and stresses; Second, that institutions are coordinated, responsive, accountable and inclusive in their management of climate risks; Third, that the evidence-based is strengthened and that knowledge on climate extremes management is disseminated to inform and influence the resilience related policy strategies and agenda at international, national, and subnational levels.

In short, BRACED's practical goal is community resilience for the present and future, better preparing communities to deal and cope with extreme weather events, lessening the negative impacts on their livelihoods, households, and health, while also improving their ability to return to normalcy afterwards. It is a fairly simple objective that requires a complex and coordinated effort of training, setting up institutions, creating adequate policy and enhancing communications. Since, before the project, resilience was a non-issue in Myanmar, the work had to be done practically from scratch.

One of the fundamental steps for resilience is building resistant infrastructure and housing, granting the affected people shelter and mobility in case of a disaster, while lessening the economic and social impact of nature's destructive forces. Hence, training builders, such as carpenters and masons, was one of UN-Habitat's main activities. It is a regular feature in the agency's initiatives and for good reason, since it builds capacity and therefore enhances sustainability. Training was conducted according to the National Building Code, an institutional tool which the agency previously helped develop to ensure that safety standards were in effect. Subsequently, a certification system was introduced, allowing for its holders to increase their earnings by working abroad, as the credentials were recognised by the ASEAN countries.

Training was not restricted to builders, as the institutional reinforcement also required increasing local government capacity. At the township level, this included courses on settlement planning and disaster management for officials and the subsequent development of Township Disaster Management Plans, properly audited and certified. At a Regional level, training was conducted on climate forecast translation and application and detailed climate profiles were developed, which reinforced the policy dialogue on resilience by spreading knowledge and bringing new contributors to the table. At a National Level, the activities served as the basis for all others: training of trainers on climate forecast and settlement planning and community training for hazard readiness. Policy dialogue is a cornerstone of development which, particularly at such a wide scale, needs to rely on a strong knowledge and information foundation in order to achieve positive results. UN-Habitat took the opportunity to conduct applied research in different fields, reinforcing the dialogue and shaping future strategies. The themes addressed were: Human Settlements requirements for Building Resilience; Resource Allocation and financing mechanisms for Resilience in Myanmar; Climate Information Needs for Decision Making in Myanmar. These areas benefit decision making towards resilience and sustainability and researching them is a fundamental investment for the future of Myanmar.

BRACED'S PRACTICAL GOAL IS COMMUNITY RESILIENCE FOR THE PRESENT AND FUTURE, BETTER PREPARING COMMUNITIES TO DEAL AND COPE WITH EXTREME WEATHER EVENTS, LESSENING THE NEGATIVE IMPACTS ON THEIR LIVELIHOODS, HOUSEHOLDS, AND HEALTH, WHILE ALSO IMPROVING THEIR ABILITY TO RETURN TO NORMALCY AFTERWARDS.

The BRACED coordinated effort includes an astounding amount of initiatives, since each agency plays a different role. Overall, the resilience improvement is very palpable. Besides the aforementioned UN-Habitat activities, it was achieved through the betterment of communication channels and access to information on the climate subjects, informing the decision-making and planning abilities of the communities, which become more capable of establishing reliable collective safety nets.

Communications were improved mainly through the media, as national TV stations started to develop their own Public Service Announcements and the Early Warning System was institutionalised, highly increasing disaster preparedness. Autonomy was also a relevant practical achievement, as community platforms such as Self-Help Groups and Village Savings and Loans Associations helped secure livelihoods, fostering the economic sustainability of the development proposals that the communities were capacitated to submit. These are just a few examples of initiatives within BRACED that are integrated with UN-Habitat's work in the pursuit of the common goal, showing the scope and thoughtfulness that goes into initiatives such as this.

Housing and Infrastructure to Improve Community Life



UN-HABITAT 10 years in Myanmar

For forty years, UN-Habitat has been working in human settlements throughout the world, focusing on building a brighter future for villages, towns, and cities of all sizes. Housing and Infrastructure to Improve Community Life



### HOUSING AND INFRASTRUCTURE CONSTRUCTION TO IMPROVE COMMUNITY LIFE

Armed conflict has severely affected ethnic communities in Myanmar, leading many people to be displaced from their homes and accommodated in IDP (Internally Displaced People) camps. Moreover, Myanmar is constantly threatened by devastating natural disasters, such as floods, cyclones, and earthquakes, holding the first position on UN-OCHA's list of most at-risk countries in Asia Pacific in 2012.

The Programme for Emergency Assistance to Poor and Vulnerable Communities in Ethnic Minority Areas and Yangon, developed by UN-Habitat with the contribution of USD 5.2 million from the Government of Japan, was designed to help vulnerable people in communities that have been suffering a series of socio-economic setbacks due to conflicts, natural disasters and extreme weather conditions in the Mansi and Momauk Townships of Kachin State, Pekon Township in Shan State, as well as the Dagon Seikkan Townships in Yangon.

# In 2012, Myanmar held the first position on **UN-OCHA's** list of most at-risk countries in Asia Pacific.

The project, which addresses the emergency needs of people most affected by conflict and natural disasters so as to improve their quality of life, consisted of two components: the first involving emergency support to low-cost housing construction targeted towards the most vulnerable families living in squatter conditions in the impoverished Dagon Seikkan



township of Yangon; and the second focusing on emergency support on community infrastructure and WASH targeted towards poor and vulnerable communities living in conflict and disaster-prone villages of Mansi and Momauk Township (Kachin State) and Pekkon Township (Shan State).

# THE PROGRAMME FOR EMERGENCYASSISTANCE TO POOR AND VULNERABLECOMMUNITIES IN ETHNIC MINORITYAREAS AND YANGON

#### LOCATION

Mansi and Momauk Townships in Kachin State; Pekon Township in Shan State; Dagon Seikkan Township in Yangon

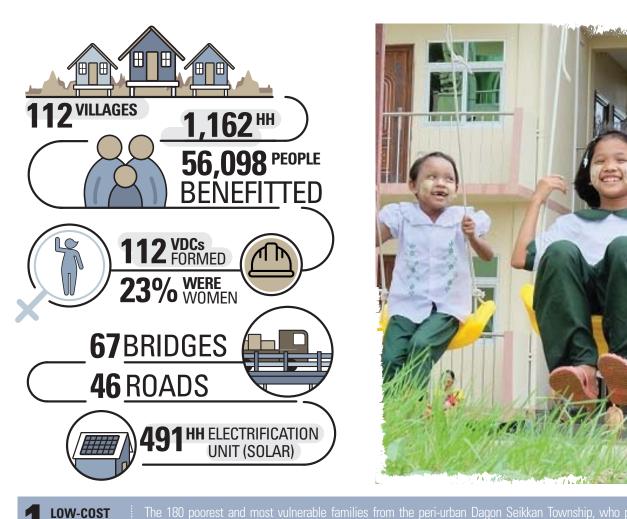
**DURATION** May 2015 – August 2018





Housing and Infrastructure to Improve Community Life

UN-HABITAT 10 years in Myanmar



The 180 poorest and most vulnerable families from the peri-urban Dagon Seikkan Township, who previously lived in overcrowded squatter settlements, are now living in new and safe apartments. This was the result of this pilot project that addresses the problem of squatters and provides housing and basic facilities to the most vulnerable and poorest families.



HOUSING

The construction of low-cost housing has been completed in the Dagon Seikkan and South Dagon townships, in the Yangon region, where nine 5-storey buildings were built, with 4 units on each floor which makes 20 dwellings in each building. The quality of life of these 180 families, who benefitted from the project, has radically changed. They previously lived in squatter areas, with inadequate accommodation, lack of access to public electricity, limited access to clean water and sanitation, lack of a proper waste disposal system, and a poor environmental sanitation which make their settlements not suitable for human living. Now, after the project implementation, these 180 families are living in new and safe apartments, with a clean and safe compound, total access to public electricity for their school children, clean water supply system, septic drainage system, and waste disposal system, in order to offer a healthy environment for the residents.

These buildings were constructed with minimum and better land use, which was made available by the Ministry of Construction, and incorporated disaster resilient design and construction so that people could defend themselves and deal with potential natural disasters like cyclones and floods.

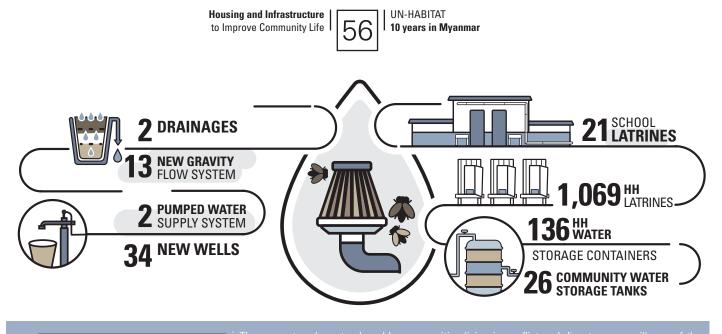
UN-Habitat adopted a participatory approach for the implementation of the project, in which beneficiaries were involved in the decision-making process, on house design and construction, and on the proper maintenance, after the completion. Thus, the beneficiaries established rules and regulations of committees to have a transparent and responsible governance. An Apartment Users Committee (AUC) was formed for each building, and members of the Integrated Apartment Users Committee (IAUC) were also selected to manage the projects and for common works such as the compound and others.

All AUCs and IAUC signed a social contract, committing themselves to the project and the people they represent. Consequently, Community Implementation Agreements (CIAs) were signed between UN-Habitat and beneficiaries, which is the legal instrument to transfer funds.

These community-driven actions contribute significantly to the promotion of social cohesion, building confidence and taking the path towards sustainable improvement of the beneficiaries' living conditions.

A local NGO, Women for the World (WFW), worked as UN-Habitat's partner, supporting beneficiaries with community mobilisation.

The project successfully tested an approach of community engagement in the resettlement process of families from informal settlement and also tested a "Vulnerability-based" selection criteria in the selection of beneficiaries from many deserving poor families in the informal settlement. This project's approach is a milestone of the successful implementation of informal settlement resettlement and will be helpful in the implementation of large scale city wide informal settlements resettlement programmes which the city of Yangon and the Yagon Region Government is planning in order to deal with the issue of 400,000 poor habitants of informal settlements in Yangon city.



COMMUNITY RECONSTRUCTION AND REHABILITATION WORKS The poorest and most vulnerable communities living in conflict and disaster-prone villages of the Mansi and Momauk Townships - in Kachin State, and Pekon Township - in Shan State were selected to benefit from community infrastructure and WASH after a thorough assessment of their needs.

Clashes and sporadic fighting between the Myanmar Army and non-state ethnic armed groups occurred in Shan and Kachin States, resulting in various protection concerns and the displacement of several thousand people while the population who were left behind in their places of origin had to live with severe lack of basic services such as water supply, access roads, drainage and culverts etc. The environment of insecurity did not facilitate the work of UN-Habitat's team and it was a challenge to work in villages where their inhabitants were still at IDP camps, fearing to return because of the ongoing conflict and land mines. The armed conflict posed risks to staff security and challenges to staff field visits.

To counter this problem, UN-Habitat applied a community-driven approach, challenging the beneficiaries themselves to identify their priorities and to select the activities considered a first concern for communities. Selected activities included the implementation of community infrastructure, water and sanitation, hygiene education, cash-for-work activities, skills development and trainings.

UN-Habitat encouraged the villagers to prepare Community Action Plans (CAP) to discuss and identify priority needs through majority decisions. After choosing the prioritised activities, the participants selected Village Development Committees (VDCs) as representative bodies of the communities. These VDCs then entered into Implementation Agreements (CIAs) with UN-Habitat, establishing the way to obtain funds, helping communities to take responsibility for their implementation and follow-up maintenance of assets. VDCs play a key role in the implementation of community infrastructures and WASH facilities, according to the CIAs. The project encouraged women to become actively involved in CAP meetings. Women's groups were formed to contribute with their input in the selection of priorities for WASH facilities, as well as other necessary decisions.

The promotion of water, sanitation, and hygiene was one of the main components of the project, where access to safe drinking water has been the major challenge in selected villages. The community infrastructure was the other important component of the project, which included the construction and renovation of access roads, bridges, and drainages. Most of these villages were located in some remote and isolated areas due to the lack of access, which prevented the reduction of poverty and improvement of the quality of life. Ongoing conflicts further deteriorated basic services since the authorities were not able to continue providing services in these communities.

Capacity building and training was an integral component of the entire project cycle, with the goal of developing skills to improve the employability of the workforce, including women in the labour market, and increase the capacity of the community to build and maintain the infrastructure.

Beneficiaries who got this opportunity to pave a new path to improve their living conditions will be a model for other communities to implement the community-driven approach in their development projects.





#### UN-HABITAT 10 years in Myanmar

## **423 SLUMS CO-EXIST IN YANGON** MAPPING YANGON: THE UNTAPPED COMMUNITIES

Yangon, the largest city in Myanmar and its commercial capital, currently houses more than 5 million people and is expected to continue to grow, as a result of recent political and economic changes. Myanmar only recently opened its economy and encouraged investment and private sector development. This change has occurred over the past seven/eight years and has resulted in rapid population growth and urban areas, especially in Yangon and Mandalay.

The city's planning process did not consider these economic and demographic transformations which led to a rapid proliferation of slums and informal settlements. Most of them are located in the peri-urban areas of Yangon, thus segregated from the rest of the city, which contributes to the increase of social and economic inequality.

# The unregulated nature of the slums can create **serious problems for the city and people living in them**.

Although the informal communities play an important role in the day-to-day life of the city and contribute to its economy and competitiveness, the unregulated nature of the slums can create serious problems for the city and people living in them. These slums are undocumented, have no connections to municipal infrastructure or basic services, and lack any type of tenure guarantee. In addition, there are no data on their location, extent, and living conditions. For this reason, it is imperative to identify informal settlements and work to improve living conditions, namely through the provision of infrastructure and basic services, but also for them to be officially recognised.



**Mapping Yangon: The Untapped Communities** was the first approach to contributing to a dignified and safe environment for people living in the slums of Yangon.

Mapping Yangon: The Untapped Communities was the first approach to contributing to a dignified and safe environment for people living in the slums of Yangon. Funded by Cities Alliance, the project began by establishing a knowledge base on poor communities in Yangon, notably its extension, location, and living conditions. It allowed for a detailed socioeconomic survey of residents, including housing conditions, demography, livelihoods and employment, income, and health.

With this project, UN-Habitat identified a total of 423 different informal settlements in the city of Yangon, representing some 365,000 people, and created a database with information about the location of these settlements. The largest number of informal settlements (a total of 181, nearly 43% of the city's total) is located in the township of Hlaing Tharyar, where close to 125,000 inhabitants live. Other townships such as Shwe Pyi Thar, Dagon Seikkan, Insein and Dala also house a significant proportion of the residents in informal settlements in the city.





UN-HABITAT 10 years in Myanmar



However, as a comparison, the World Bank estimated that 34% of Yangon's 5.2 million population is living below the poverty line. This suggests that the poor population of Yangon is larger and not confined to informal settlements.

The living conditions in the slums of Yangon are very precarious: people mostly live in small, overcrowded houses, built in flood-prone areas, with limited access to water and energy. There are complicated ownership issues, with illegal occupations or illegal subdivisions of land. In other cases, dwellers have the legal right to reside, but the slums lack municipal infrastructure and basic services.

Most families came to these slums because of economic hardship. The proximity of job opportunities is the main reason for choosing to live in such precarious areas, in search of employment and stability.

Knowing the exact location of all informal settlements and the specific nature of its problems is an essential first step towards improving the living conditions in the slums. This project was undertaken as part of the work that UN-Habitat is developing to support the Ministry of Construction of Myanmar, Yangon City Development Committee, and Yangon Regional Government, to help prepare a strategy and approaches to deal with slum related issue in Yangon.





### MANDALAY **AS A BEACON OF RESILIENCE**

ACUTE SHOCKS, LIKE EXTREME CLIMATE EVENTS ARE AFFECTING SEVERAL CITIES AROUND THE WORLD WITH FRIGHTENING FREQUENCY. (...) TO MAKE MATTERS WORSE, IN THE

AFTERMATH OF THESE CRITICAL EVENTS THE GREATEST BURDEN OFTEN FALLS ON THE POOR.



Mandalay

Having cities that are resistant and, more importantly, resilient is progressively crucial these days. Cities have become a worldwide pole of attraction and are growing at a very rapid pace. At the same time acute shocks, like extreme climate events are affecting several cities around the world with frightening frequency. These kinds of shocks or chronic stresses can lead to social breakdown, physical collapse, or economic decline. To make matters worse, in the aftermath of these critical events the greatest burden often falls on the poor, the disenfranchised and vulnerable people who have limited resources to cope with disaster. These people take longer to recover, increasing inequality and widening social gaps that jeopardise sustainable development.

Realising the need for a concerted effort focused on strengthening cities' capacities to endure and overcome such catastrophes, the Rockefeller Foundation pioneered the 100 Resilient Cities project. The reasoning behind this project is to hope for the best but prepare for the worst. 100 Resilient Cities aims to help metropolises around the world become more resilient to the physical, social and economic challenges that are currently prevalent, by promoting the adoption of resilience measures that take into consideration not just the shocks (events like earthquakes, fires, floods, etc.) but also the stresses that affect cities on a daily basis. Resilient cities included in the programme will be capable of preparing for, facing, and recovering from different multi-hazard threats with the least damage to infrastructure, public safety, health, and the economy.

# 100 RESILIENT CITIES PROJECT

**LOCATION** Mandalay

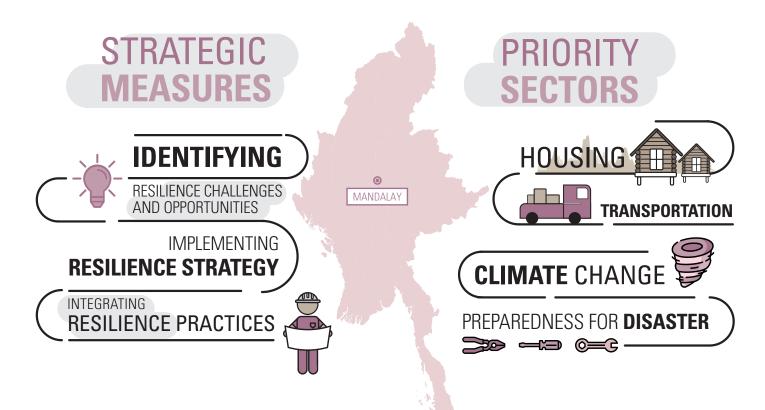
**DURATION** August 2015 - November 2017

BUDGET

ROM THE ROCKEFELLER FOUNDATION







There are several vulnerabilities making Myanmar prone to different kinds of shocks and stresses, and it is paramount to make sure the country is equipped to deal with it. Mandalay, the country's second-largest city, is a major economic driver but is also plagued by specific vulnerabilities, caused by the city's location along the Sagaing Fault (an active tectonic plate boundary) as well as by its location in the banks of the Ayeyarwady River, making it prone to cyclical flooding.

Due to this particular combination of vulnerability and significant urban expansion, Mandalay was selected to be a part of the 100 Resilient Cities project and, in the process, become a beacon of resilience, shining its light for the whole country to follow. In Mandalay, the project is being implemented with the support of UN-Habitat, acting as the project's strategy delivery partner.

The driving force of this process is to select a Chief Resilience Officer, who will be in charge of the concerted approach to the city. Together with other working group members, the CRO starts by identifying and prioritising Mandalay's resilience challenges and opportunities, and then by integrating resilience practices into the city's connective threads. The CRO will effectively lead the city's resilience building efforts, through activities and responsibilities as diverse as creating and implementing a resilience strategy, serving as a senior advisor to the Mayor or municipal leader, promoting resilience thinking on an assortment of levels, and coordinating all the stakeholders involved, promoting the necessary cohesion for the project to be successful. It is a significant responsibility, but one that brings with it the possibility of creating a city that is safe, secure and able to rise above any challenge posed by shocks and stresses.

The 100 Resilient Cities project thus aims to bring a holistic approach to building resilience, by looking at the fabric of a city and understanding the threats it may face, working to make the foundations stronger and better suited to face those threats.

Mandalay now takes advantage of the opportunity to coordinate with global and local experts, and of being part of a global network of member cities which have a great opportunity to learn from each other's experience. It's an effective way to galvanise a huge pool of knowledge

and practices on behalf of cities all around the world. The global benefits will concretely and positively impact the lives of millions of people around the globe.

This means that the resilience strategy developed articulates Mandalay's particular resilience priorities with specific initiatives for implementation. In Mandalay, the prioritised sectors were housing (namely to address the issue of slums and low safety housing) transportation, climate change and preparedness for disaster. The project's second phase is currently underway. The four topics identified as priority have been researched and the proposed activities are being studied from a resilience standpoint by a working group composed of more than 50 people. This process of study and reflection will give rise to the Mandalay City Resilience Strategy, the guiding tool with vision, mission and list of prioritised actions that will define the city's path toward a resilient future. Its activities will be developed and implemented in collaboration with service providers and partners from the private, public and NGO sectors.

By integrating resilience practices into the overall operations and functioning of the city, Mandalay will not only be a stronger city but also be able to share the new practices with other cities across Myanmar. It will surely become a model city for the future and a beacon for resilience, helping Myanmar and the world become more prepared for the physical, social and economic challenges ahead.



Curbing Disease Through Water and Sanitation UN-HABITAT **10 years in Myanmar** 

BUDGET

USD 4,400,000

# CURBING DISEASE THROUGH WATER AND SANITATION

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### A SHORT STEP FROM IMPROVED WASH TO HEALTHIER COMMUNITIES

**LOCATION** Myanmar's Dry Zone

#### **DURATION**

January 2016 - December 2018

U San Myint is a cheerful resident of Nyaung Pin Thar Village, Natogyi Township. He knows he can just turn on a tap in his house and fill a glass with clean water whenever he feels thirsty. He is not the only one to enjoy this recent improvement. There is a newfound quality of life in Nyaung Pin Thar: people are healthier and more relaxed. But as U San Myint knows, this was not always the case. Not too long ago, he had to get up before 3 in the morning to line up and draw water from a well, the only freshwater source in his village.

Like U San Myint, most people often queued before dawn for hours to simply get a couple of buckets of water. That would be their only available water for the day. Even children, women, and elderly inhabitants were subject to demanding routines of water collection, preventing them from enjoying the basic things in life or working to complement their income. And all this effort could be for nothing: the unprotected water could end up making them sick, boosting the prevalence of waterborne diseases and malnutrition, which especially affects children. This is what the people in Myanmar's Dry Zone had to deal with on a daily basis in the past. In the Dry Zone, located in central Myanmar, it rains much less than in the rest of the country. Nearly less than half of the households have year-round access to safe water. In fact, only 3% of communities have access to safe piped water in rural areas; the remaining communities can only access un-purified poor-quality water, and/or have disproportionately difficult means of obtaining water for their families.

Drv

Zone

THE UNPROTECTED WATER COULD END UP MAKING THEM SICK, BOOSTING THE PREVALENCE OF WATERBORNE DISEASES AND MALNUTRITION, WHICH ESPECIALLY AFFECTS CHILDREN.



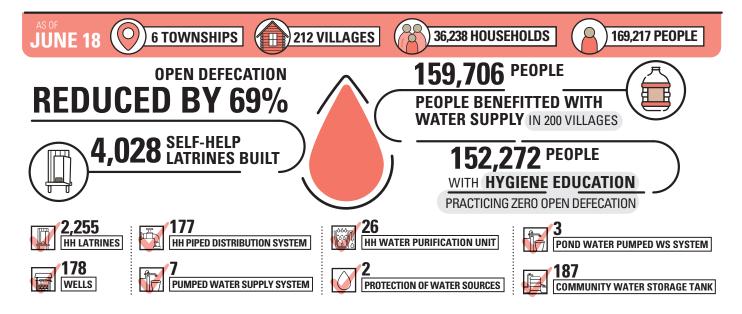


Lack of sanitation is another urgent issue: most of the households in the Dry Zone do not have access to latrines, which means they practice open defecation. While this may not be frowned upon from a cultural standpoint, it is highly detrimental for the community's health: the most common cause of water contamination is exposure to faecal matter of human origin. Contaminated water can be the cause of diseases such as diarrhoea, cholera, or the transmission of parasites – diseases that are especially dangerous when contracted by children, because in addition to damaging their health they can also harm their growth and development. The consequences are quite evident: 2 in 6 children under five are underweight and have severe malnutrition in the Dry Zone. Malnutrition is a leading cause of death or disability and is an explanation for the high rates of under-five mortality in the region: 46.1 per thousand, almost 9 times the average rate in high-income countries.

Looking for a way to prevent the rampant spread of diseases and curb the child mortality rate, UN-Habitat, together with LIFT devised a tailored project called "A short step from improved WASH to healthier communities". Its aim was to provide safe drinking water, improved sanitation, and hygiene education, helping these communities to adopt new practices for a healthier way of life. The project started in 2016 and it brought clean water, sanitation, and better health to 212 villages across six townships of the Dry Zone. Approximately 160,000 people have been directly benefitted. The project is implemented using the People's Process approach. This method puts communities in the driver's seat: they were the ones prioritising their needs, planning and building their own water and sanitation infrastructures with assistance provided by UN-Habitat. As the project progressed and communities were increasingly involved, the people understood they would have a say in the decision process. They came to realise that they were not merely passive beneficiaries, but active owners and managers of the project.

To date, all of the 212 villages involved in the project have completed capacity building workshops. They have also elected their Village WASH Development Committees, created to support the decision-making process, monitor the progress, and mobilise people around hygiene promotion. Groups of Hygiene Promotion Volunteers help villagers in keeping up their new habits and provide guidance. Most of these volunteers are women: they are the main caretakers and important role models in their communities.

Thanks to the Zero Open Defecation campaign, villagers are adopting good hygiene practices that can help them avoid certain diseases – improved sanitation can reduce diarrhoeal diseases by more than a third. But how can they adopt proper hygiene habits without the tools to do so? After all, even if people want to prevent open defecation, what can they do when thousands of them do not have access to latrines? In a place where the price of a latrine can match the average monthly income for a family, it is essential to make latrines as affordable and easy to get as possible.



With this in mind, UN-Habitat provided and strengthened carpentry skills in the communities, thus empowering hundreds of villagers to build their own latrines. By providing a small subsidy to the poorest families, assuring technical support and showing the various latrine designs possible, UN-Habitat helped develop latrine building as a new skill. Many villagers are now able to build their own toilets – as many as necessary, for as long as it takes. They can even use their skills to help out neighbouring communities, contributing to expanding the project's reach. Hygiene Promotion Volunteers map out areas of open defecation, effectively monitoring its eradication while latrines become a more prevalent common use. Open defecation has been reduced by 80%.



Now, villagers like U San Myint need no longer queue for hours to get fresh water. Their houses are equipped with piped water, and they are able to operate and preserve the new infrastructures. In exchange for a small monthly maintenance fee, villagers make sure that the new facilities remain in working order. Money left from the monthly fee is used to make other improvements in the village, in a self-betterment cycle that has been proven successful.

All in all, 212 villages have benefitted from the implementation of the project: 200 villages with water and sanitation, and 12 villages. These communities are now able to take their future in their own hands, walking the path to Zero Open Defecation and acquiring safe drinking water, improved sanitation, and better hygiene practices, which collectively leads to improved nutrition, therefore improved health with multiple positive effects. Hopefully, soon more people will, like U San Myint, stroll happily to a latrine nearby, and have safe water easily available in their homes. The Rise After the Fall Empowering Chin State

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UN-HABITAT 10 years in Myanmar

### PROJECT FOR EMERGENCY SUPPORT TO POOR AND VULNERABLE COMMUNITIES

#### LOCATION

241 villages across Hakha, Falam, Tedim and Thantalang townships of Chin Sate

#### DURATION

May 2016 - December 2017

### BUDGET



Chin State

### THE RISE AFTER THE FALL EMPOWERING CHIN STATE

Chin State is located in a mountainous region in western Myanmar, bordering India and Bangladesh. Its people, the Chin, are comprised of numerous ethnic groups. Enclosed in one of the poorest countries in the world, Chin is Myanmar's poorest state: 8 out of 10 people live below the poverty line.

#### CHIN IS MYANMAR'S POOREST STATE: 8 OUT OF 10 PEOPLE LIVE BELOW THE POVERTY LINE.

As the country becomes more urbanised, young people migrate to cities in search of employment, leading to a loss in the State's labour force and economic stability. Due to its geography, Chin State is highly isolated from the rest of the country. The roads, often built on mountain slopes, are subject to frequent landslides and become impassable during the monsoon season. Electricity coverage is very low and frequently disrupted. Communications are hindered by the lack of mobile signal and the multitude of local dialects.

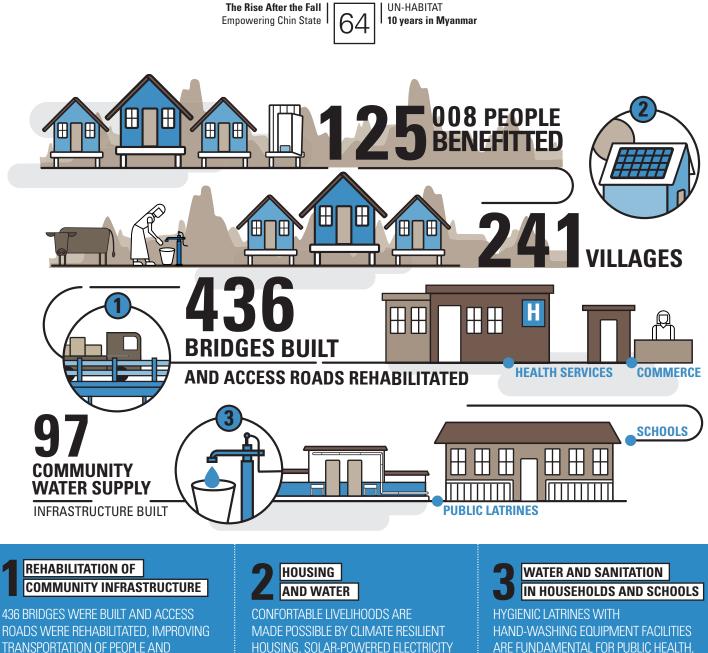
In such a harsh context, climate phenomena are a great threat to Chin State, particularly extreme weather events such as torrential rain. In 2015, prolonged heavy rainfall led to extensive floods and landslides, which caused widespread damage to households and basic infrastructure.

With the purpose of bringing the community back on their feet, Emergency Support to Poor and Vulnerable Communities in Ethnic Areas, funded by the Government of Japan, was put into action in August 2016. The project was implemented in 241 villages, through the People's Process, UN-Habitat's approach that promotes local participation, empowerment and capacity building while maintaining the necessary features of a development initiative – i.e. the communities were considered the primary agents of development, not merely the beneficiaries of external aid. Communities were represented in the form of Village Development Committees (VDC), who took charge of their recovery.

While it aimed to empower the community and promote development, the project mitigated direct consequences of the floods. This meant creating immediate access to safe drinking water and adequate sanitation, as well

as rehabilitating access roads and infrastructure required for immediate recovery of living conditions. Several workshops were organised, turning into platforms the Chin utilised to share and discuss ideas. Therefore, decisions regarding their own settlements' recovery were based on their specific concerns. Female participation amounted to 38% of the total, a favourable figure in terms of development and inclusive decision making. The workshops were designed to provide custom responses to the population's needs. For instance: water-quality testing was taught in places where water may be unsafe for drinking, cooking and washing. To avoid issues that frequently hamper sustainability in community projects, operation and maintenance processes were discussed and established.





TRANSPORTATION OF PEOPLE AND GOODS. DRAINAGE WAS ALSO IMPROVED. HOUSING, SOLAR-POWERED ELECTRICITY AND COMMUNITY WATER SUPPLY.

> As mentioned before, road reconstruction was a main priority for the recovery of basic services after the floods. This was followed by the expansion of the road and bridge infrastructure, since villages are distant from each other and located in areas with many rivers and valleys. These measures significantly improved access to educational, market and health facilities.

ESPECIALLY IN SCHOOLS.

The electric power coverage was also upgraded. Solar panels were installed, providing energy for daily activities and enabling children to study at night. This had great impact on the living conditions of the overall population, who previously used candlelight in the dark, given the lack of connection to the national power grid.

In the end, the most vulnerable people were the greatest beneficiaries. The project helped them to actively rebuild their communities, from safer housing to better water and sanitation, and developments on transport and communications infrastructure. Most importantly, communities as a whole were given the tools to fully engage with future improvement activities, learning how to collectively take advantage of opportunities.

significantly decreases during the dry season in Chin State. This model, more robust and hygienic than its wooden predecessor, increased water storage capacity and allowed households to have enough water for daily use and to keep a small vegetable garden. THE DRAINAGE SYSTEM WAS IMPROVED,

Profiting from the project's financial and technical assistance, the locals

planned and built water and sanitation, according to their villages'

priorities. Concrete ground water tanks were constructed to ensure

water provision in quantity and quality to households, since quantity

### **CONTRIBUTING TO LOWER THE PREVALENCE OF DISEASES** LIKE MALARIA AND DENGUE.

Additionally, school toilets were equipped with hand-washing facilities and double room latrines, for the betterment of children's health. Other workshop subjects included hygienic habits and facilities. Even though the community typically used latrines, improvements were in order. Therefore, the building of durable fly-proof latrines was an essential part of rehabilitation, combined with hygiene awareness sessions, focused on disease prevention through cleanliness and sanitation (healthy nutrition habits, drinkable water, and hand-washing habits, latrine cleaning and solid waste management).



UN-HABITAT 10 years in Myanmar





UN-HABITAT 10 years in Myanmar

**UN-Habitat has enjoyed a** long-standing presence in Myanmar, re-entering the country after **Cyclone Nargis and supporting its** re-engagement with the international community. Since 2008, UN-Habitat has been working in the areas of disaster risk reduction and urban resilience, climate change, basic services, housing, urban planning and development, land administration, and slums improvement.

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