

Rebuilding Community Infrastructure in the North and East of Sri Lanka





European Union சூරෝපා සංගමය ஐரோப்பீய ஒன்றீயம்



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From the People of Japan



COMMUNITY SPIRIT Rebuilding Community Infrastructure in the North and East of Sri Lanka

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This book is dedicated to all communities in the North and East of Sri Lanka, in recognition of their resilience and commitment to rebuilding their villages following three decades of conflict.



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Foreword

Over the past four years in the North and East of Sri Lanka, the United Nations Human Settlements Programme (UN-Habitat) has supported conflict affected communities to reconstruct vital infrastructure facilities. The programmes have been implemented to supplement the agency's housing reconstruction projects, supporting over 31,000 families to rebuild their conflict damaged homes.

This publication, entitled "Community Spirit", focuses on the provision of community infrastructure and the resultant impact on beneficiaries' lives. Through a series of photographs taken by UN-Habitat staff members from 2011-2015, the book documents the key achievements and outputs of the projects implemented in over 250 villages.

Most importantly, the book documents stories of community spirit, determination and recovery from a cross-section of communities who have been

instrumental in rebuilding their villages through a people's participatory process. UN-Habitat is grateful to our funding partners - the Government of Japan, European Union, Government of Australia, Government of Switzerland and the Coca-Cola Foundation, who made this programme possible, with a total contribution towards community infrastructure of more than US\$ 9,000,000.

The support provided by the Government of Sri Lanka at the central, district and local government levels was a vital factor in the success of this programme.

Dr. Joan Clos

United Nations Under-Secretary General and Executive Director, UN-Habitat -United Nations Human Settlements Programme



Message from the Government of Japan

I am honoured to mark this publication by UN-Habitat entitled "Community Spirit: Rebuilding Community Infrastructure in the North and East of Sri Lanka" which illustrates UN-Habitat's efforts in rebuilding community infrastructure facilities in the Northern and Eastern Provinces.

Since the establishment of diplomatic relationship in 1952, Japan has been a committed partner in Sri Lanka's socio-economic development and among diverse areas of support, provided relief and reconstruction assistance for conflict affected communities and those affected by natural disasters.

From March 2013, the Government of Japan has partnered with UN-Habitat and the Government of Sri Lanka by funding the construction of infrastructure facilities in Sri Lanka's conflict affected districts. To date, this programme has been implemented in over 200 communities in the districts of Mullaitivu, Kilinochchi, Mannar and Batticaloa.

By March 2016, the Government of Japan will have supported more than 340,000 people with access to improved community infrastructure facilities through a total grant of 722,000,000 Japanese Yen (US\$ 7,268,000). These facilities include 53 preschools, 74 community centers, 130 Km of internal roads, 20 Km of storm water drainage systems, 138 rain water harvesting systems in public buildings and the planting of 200,000 trees. This publication beautifully illustrates the resilience and spirit of solidarity among communities to rebuild their villages following years of conflict and displacement.

In addition to the post conflict community infrastructure programme, the Government of Japan is continuing its partnership with UN-Habitat by funding 507,000,000 Japanese Yen (US\$ 4,198,500) to improve the learning environment in Mannar District. This project will run to 2017.

These are wonderful examples of what bilateral assistance and UN programmes can together achieve. The Government of Japan highly values its special partnership with UN-Habitat, the Government of Sri Lanka and the community members and remains committed to supporting the Sri Lankan people through its post conflict recovery programme.

H.E. Kenichi Suganuma

Ambassador Extraordinary and Plenipotentiary of Japan to Sri Lanka



Message from the European Union

UN-Habitat's publication "Community Spirit: Rebuilding Community Infrastructure in the North and East of Sri Lanka" is a tribute to conflict-affected communities' resilience and determination for improvement. These people have relentlessly worked with their own hands to reconstruct their lost assets in spite of multiple adversities. Moreover, it captures the communities' pride, effort and sense of ownership in rebuilding not only their houses and villages but more importantly, their lives.

The European Union (EU) has been supporting Sri Lanka to recover from both the tsunami and conflict. Since 2005 it has provided EUR 760 million of which over EUR 50 million in grants to housing reconstruction and more than EUR 500 million in grants for livelihood support, social and economic infrastructure.

During the past five years, the United Nations Human Settlements Programme (UN-Habitat) has been a trusted partner of the EU, having implemented two flagship post-conflict reconstruction programmes in the North and East of the country. Implemented with funding from the EU, the Government of Australia and the Swiss Government, these programmes constitute not only examples of successful donor partnerships, but also of how owner-driven reconstruction continues to be a most effective approach to ensuring communities' control over their development process. Over 9,000 families, more than 36,000 people, have benefited in the districts of Kilinochchi, Mannar, Vavuniya, Mullaitivu and Batticaloa. To ensure holistic village development, it also supported the construction of community infrastructure facilities in over 90 villages. These infrastructure facilities included preschools, community centres and water supply schemes as well as internal roads and culverts. These have greatly helped the returnee communities to return to some sort of normalcy. The programmes were implemented by UN-Habitat and the Swiss Agency for Development and Cooperation (SDC), working in partnership with the Government of Sri Lanka. Importantly, all parties worked with the local communities so that they lead the reconstruction process.

The European Union has provided EUR 24 million for the housing and infrastructure components of the postconflict reconstruction projects implemented by UN-Habitat and SDC in these two programmes.

The EU celebrates the outcomes attained by its implementing partners. We thank everyone who made these programmes a success: our joint donor partners, the central, district and local Government authorities of Sri Lanka who provided their unstinted support and, above all, the beneficiaries who have put in their sweat, savings and soul to turn our aid into their homes.

H.E. David Daly

Ambassador of the European Union to Sri Lanka and the Maldives



Message from the Government of Australia

At the end of the civil conflict in Sri Lanka, Australia wanted to make a practical contribution to reconstruction where it was most needed. We knew that many families had lost their homes and we found the means to help them rebuild through a partnership with the Government of Sri Lanka, the European Union (EU), the Swiss Agency for Development and Cooperation (SDC) and the United Nations Human Settlements Programme (UN-Habitat). Australia is proud to have been a contributor to the development programme that is the subject of this photobook.

The families who participated in this development programme have led their own recovery process. The design and construction of every house was led by homeowners in collaboration with trade experts. The design and construction of other infrastructure such as preschools was led by the communities who now maintain and use these facilities. This engagement of beneficiaries as participants has been the key to the overall success of this programme.

In my visits to sites where families have rebuilt their homes, livelihoods and communities, I have

been impressed and heartened by the impact of the programme on the lives of beneficiaries and on their communities. It has been clear to me that the roads, preschools, community centres, wells and water supply schemes have made a real difference to daily life and to the future of the beneficiaries.

I am both pleased and proud that Australia was able to help families across the districts of Mannar, Mullaitivu, Killinochchi and Batticoloa to re-establish themselves and to build a firm foundation for their own lives and those of their children.

This photobook provides a clear picture of the resilience and determination of the communities in the North and East of Sri Lanka. It is symbolic of the enduring partnership between Australia, other members of the international community and the people of Sri Lanka.

H.E. Robyn Mudie

Australian High Commissioner to Sri Lanka and the Maldives



Message from the Government of Switzerland

I warmly welcome the publication of "Community Spirit", a pictorial testimony which documents the excellent collaboration of Switzerland with the Government of Sri Lanka and bilateral, multilateral and private partners, for the provision of community infrastructure to communities affected by the conflict in the North of Sri Lanka.

The durable resettlement of war affected returnees in their villages of origin is only possible when basic household and community infrastructure is established. Switzerland has been committed to support the durable return of displaced communities in the North by providing permanent housing and community infrastructure. In this context, SDC and UN-Habitat shared an excellent cooperation for the successful implementation of the infrastructure reconstruction programme in parallel to the homeowner driven housing programme.

Switzerland's support for the resettlement process in northern Sri Lanka is based on the three pillars of housing, infrastructure and livelihoods. SDC implements this concept in each village to encourage and facilitate more communities to return to their places of origin. Within the infrastructure component, SDC focusses mainly on water, education and other communal facilities which contribute to the rebuilding of a community and the spirit of its people. In the water component, while the priority was to build wells and tanks, rainwater harvesting installations were also set up in some schools and preschools as a secondary measure. Through the construction of community halls, SDC seeks to support community based income generation sources and other associated benefits.

The partnership between the United Nations Human Settlements Programme (UN-Habitat) and SDC in the implementation of the reconstruction programme proved to be a perfect match. I personally appreciate the photos in this book which bear a clear testimony of the dedication and commitment of staff members of UN-Habitat and SDC during the implementation of the project.

The restoring of a collaborative community spirit is a key element which contributes to national reconciliation not only in the North but in the whole country. The determination and spirit of the communities in the North and East have been key factors that have led to the success of this programme. Community members have been the catalyst, working tirelessly to transform their villages from conflict damaged to thriving human settlements. The photobook is a tribute to the community spirit of these returnee families and their determination to rebuild their villages and recover their livelihoods following years of displacement.

H.E. Dr. Heinz Walker-Nederkoorn

Ambassador of Switzerland to Sri Lanka and the Maldives

Introduction

Three decades of conflict ended in Sri Lanka in May 2009, displacing over 450,000 people. The subsequent loss of family assets and livelihoods forced many people into poverty while the damage to housing and community infrastructure severely affected their living conditions. To rebuild the conflict affected districts, the Government of Sri Lanka focused its 'Accelerated Rehabilitation Programme' on the reconstruction of major infrastructure including main road networks, irrigation systems and railways. Hence, investment in small, community infrastructure facilities remained inadequate. However, with the resettlement of IDP families in their villages of origin, it was crucial that community infrastructure facilities were provided to make settlements liveable and allow people to recommence their normal lives and livelihood activities.

Recognising this urgent need, UN-Habitat began supporting communities to construct small-scale infrastructure facilities, in parallel to the "homeowner driven" housing reconstruction programme, which is assisting over 31,000 conflict affected families to rebuild their homes. The rebuilding of community infrastructure together with housing support has contributed towards the holistic development of conflict affected villages.

The key objective of the infrastructure reconstruction programme was to facilitate the

sustainable return of internally displaced, conflict affected people through rehabilitation of community infrastructure facilities. It also aimed to generate employment opportunities and stabilize communities by enhancing local governance capacity and linkages with the service providers, which in turn contributed to the sustainability of the new infrastructure facilities.

This programme brought together multiple donors with the common objective of rebuilding destroyed and damaged small-scale community infrastructure. Funding was provided by the Government of Japan, European Union, Government of Australia, Government of Switzerland and the Coca-Cola Foundation.

The programme supported communities to rehabilitate and reconstruct small, yet vital, community infrastructure facilities including community centres, preschools, common wells, Water, Sanitation and Hygiene (WASH) and Rain Water Harvesting facilities in schools and public buildings, internal roads and storm water drainage systems in over 300 villages. It also built the capacity of community leaders and members of Community Based Organisations through targeted training programmes.

The People's Process methodology was initiated to implement this programme, providing community members the opportunity to decide on the priority interventions for their villages through Community Action Planning workshops. Construction work was undertaken by village level Community Based Organisations such as Rural Development Societies, Women's Rural Development Societies and Farmer and Fisheries Organisations in close collaboration with the Government authorities who provided advice and support.

The determination and spirit of the communities in the North and East have been key factors that have led to the success of this programme. Community members have been the catalyst, working tirelessly to transform their villages from conflict damaged to thriving human settlements. To date, the programme has succeeded in constructing 65 preschools, 87 community centres and 96 wells. It has also rehabilitated 165 Km of internal roads and 20 Km of storm water drainage, and provided over 2,300 school children with improved access to water and sanitation facilities. By its conclusion in 2016, this programme is expected to benefit over 436,000 people.

This publication highlights a cross section of the post conflict community infrastructure initiatives implemented by UN-Habitat and SDC in the districts of Kilinochchi, Mullaitivu, Mannar and Batticaloa, constructed in partnership with the communities and the Government of Sri Lanka.





10 / COMMUNITY **SPIRIT** Rebuilding Community Infrastructure in the North and East of Sri Lanka



Fishing is a major livelihood activity in the Eastern and Northern Provinces. Fishermen engage in both lagoon and sea fishing.





Project Location

The infrastructure reconstruction programme is implemented in the North and East of Sri Lanka in over 250 villages in the districts of Mullaitivu, Kilinochchi, Batticaloa and Mannar. The Divisional Secretariat divisions are shown below:

District	DS Division	
Kilinochchi	Poonakary 우	
	Karachchi ♀	
	Kandawalai 우	
	Pachchilaipalli 우	
Mullaitivu	Oddusudan ♀	
	Maritimepattu 우	
	Puthukudiyrippu 우	
	Weli Oya ♀	
	Thunukkai ♀	
	Manthai East ♀	
Mannar	Musali 우	
Batticaloa	tticaloa Manmunai West 우	
	Eravurpattu ♀	
	Manmunai South West ♀	



The People's Process



1 - Distribution of teaching aides to the Thiresamma Preschool at Kokkuthuduvai South GN division in Mullaitivu.

2 - Community Action Planning Workshop in Kokkilai East GN division of Maritimepattu DS division.

3 - Community Action Planning Workshop being held in Uyilankulam GN division in Thunukkai DS division.





Active Participation by Community Members



3 - Community monitoring meeting in progress.





1 & 2 - Voluntary community clean up activities in Mullaitivu district.

3 - Public meeting to discuss project progress in Kavilan GN Division, Mullaitivu.



Ceremonial Openings of Infrastructure Interventions



and Vivekandanagar Preschool.

The Road Less Travelled:

Improving Accessibility in Villages

Improving Accessibility in Villages

Well maintained internal access roads are vital for the efficient functioning of villages in rural Sri Lanka. Internal roads are used daily by residents to travel to their workplaces, farms and schools and to visit towns and marketplaces to buy and sell produce and access services. When internal roads are in a state of disrepair communities are severely inconvenienced, particularly during the rainy season as badly maintained roads flood and become impassable, cutting off communities from the larger world.

During the conflict, much of the infrastructure in the Northern and Eastern Provinces was destroyed or badly damaged. Internal access roads in villages were in a state of disrepair as they had not been maintained.

When UN-Habitat and SDC commenced implementing housing and infrastructure reconstruction projects for returnees in the North and East, many communities identified rehabilitation of internal gravel roads as a priority need.

Through the Infrastructure Reconstruction Programme, 165 Km of roads have been rehabilitated and repaired in 100 villages in the districts of Kilinochchi, Mullaitivu, Mannar and Batticaloa. In keeping with the people's participatory process of implementation, the management of the road construction was handed over to Community Based Organisations. Roads surfaced with gravel rather than asphalt was the selected option due to low traffic densities. This also eliminated the dependence on external technical resources for road maintenance as the roads are maintained through "shramadana" (traditional voluntary work) by the communities themselves.

Storm water drainage and annual flooding patterns were important considerations when designing the roads, with culverts and side drains ensuring proper drainage. Building materials used included gravel, earth, rubble, cement and sand, sourced locally where possible. Pre-cast concrete items including Hume pipes were also procured from local concrete yards.





New Road for Malayalapuram Village

Malayalapuram, a conflict-effected village of 543 families, is located in Killinochchi district. Farming, animal husbandry and daily wage labour are the main livelihoods of its residents. During the final stages of the conflict in 2009, displaced families were relocated to Internally Displaced Persons camps. Once the resettlement process began, people gradually began to return to the village. However, the initial period of resettlement proved challenging as the families tried to restart their lives without basic infrastructure facilities such as housing, water supply and road networks.

Established in 1983, Malayalapuram Thriuvalluwar Street is a 1.32 Km stretch of internal access road linking Malayalapuram to Murukandi village. The road is used daily by the residents as the main access road to travel to work, school, market places and farmlands.

The road was in a state of disrepair as a result of years of neglect during the conflict. In addition to large pot holes, it was prone to flooding during heavy rains due to lack of proper drainage and culverts. In addition, some residents had encroached onto the road, thereby narrowing its width in some locations. The rehabilitation of the internal access road was one of the priorities identified by the residents at a Community Action Planning Workshop. Following a rigorous selection process, work was handed over to a Community Based Organisation, the Malayalapuram North Rural Development Society (RDS). A total grant amount of LKR. 1,961,485 was allocated for the road rehabilitation work and following preliminary planning, the rehabilitation work commenced in October 2013. Skilled construction workers were hired and materials purchased by the RDS with UN-Habitat's technical guidance. Payments were provided in four instalments, released on the progress of work.

The Pradeshiya Sabha (Provincial Council) coordinated the design and approval process for the road, assisted in resolving the encroachment issues by demarcating the correct boundaries and assumed ownership of the road upon completion. Local Government officials provided valuable support to the RDS and Malayalapuram community members contributed their own labour by clearing areas designated for road expansion.

With the rehabilitation of the road, over 150 families have directly benefited while hundreds of others use it to access neighbouring villages.

> We were very happy to work on the rehabilitation of this road. This initiative has built the capacity of the RDS members to implement projects through a participatory approach.

> > Mr. Nahenthiran, President, Malayalapuram North RDS.

Timely assistance by UN-Habitat and the donors has helped us access the neighbouring villages, town centres and market places more easily. It has also helped to enhance cohesion in the village and build the capacity of the RDS.

Mr. Chandrabalan, Grama Niladhari, Malayalapuram.



Malayalapuram Road after rehabilitation:







Improving Accessibility in Karaveddy Village, Batticaloa

Karaveddy is a Grama Niladhari division with 1,929 people, located in Batticaloa district. To improve accessibility in the village, three internal gravel roads were rehabilitated by the community through a participatory process. The new internal roads are now providing improved access to several locations within the village.

From the 1990s to 2006, the Karaveddy community was displaced on multiple occasions as a result of the conflict. Families had to move to safe locations, living for many years with host families and in Internally Displaced Persons Camps. In 2008, they resettled in the village and started to rebuild their lives and livelihoods. The majority of residents are engaged in agriculture while other livelihoods include fishing, livestock farming and casual wage labour.

Despite receiving some infrastructure support, Karaveddy village needed further assistance to improve their community infrastructure facilities. As a result of the conflict, the village also has a large number of vulnerable residents, including 45 people with disabilities and 107 female headed households. At the Community Action Planning Workshop conducted by UN-Habitat, the Karaveddy community identified several urgent needs including the rehabilitation and extension of internal access roads and the renovation of storm water drainage systems. The rehabilitation of three internal access roads were selected for priority assistance.

Fisherman road, the main access road to the irrigation tank, is used daily by the Karaveddy fishermen and was overgrown with scrub jungle, reducing it to a narrow footpath. Cemetery road had been almost abandoned, with little rehabilitation work undertaken apart from occasional voluntary "shramadana" activities undertaken by the community.

In keeping with the participatory process of the project, the rehabilitation of the internal road network was handed over to a Community Based Organisation, the Mullamunai Rural Development Society (RDS). The RDS signed a community contract with UN-Habitat in August 2014 to rehabilitate a total stretch of 1.775 Km of gravel road with a grant of LKR. 4,809,000. The RDS was responsible for hiring skilled construction workers and to purchase building materials. The planning and implementation of the project was driven by the community while UN-Habitat provided technical assistance.

"Fishing is an important livelihood in Karaveddy. Many fishermen use the Karavettyaru tank for fishing. The internal road linking the village to the tank is very useful for fishermen to transport their catch to the markets. Also, the Cemetery Road is now wide enough for people and vehicles. As the surrounding area has been cleared of scrub jungle, we can use the road safely" Mr. S. Gobalakrishnan, the Grama Niladhari Officer of Karaveddy stated.

> This project has given us the opportunity to work with the community and the Government. We now have a close bond with the community. Mr. Seelan, President, Mullamunai Rural

Development Society.







The Karaveddy Internal Road During the Construction Phase







Creating Indoor Computies

Constructing Community Centres

Constructing Community Centres

Community Centres are a vital indoor public space in villages. They are used by community members to interact, hold meetings and important events and receive extended Government services. With the destruction caused by the conflict, many common buildings were destroyed. As a result, events were held outdoors or in temporary buildings lacking basic facilities.

Since 2012, the post conflict reconstruction programme has assisted over 80 villages to construct Community Centres in Kilinochchi, Mullaitivu, Mannar and Batticaloa districts. UN-Habitat's participatory People's Process was followed as the implementation methodology. The management of the construction process was handed over to a Community Based Organisation.

The standard Community Centre design includes a large meeting hall, two office rooms for village administrative officers, toilets and a front verandah that is used as a waiting area. Three designs were developed by UN-Habitat with varying meeting hall sizes to suit the size of the community. The communities and Government stakeholders were consulted in customizing the designs to suit each village. Disaster risk reduction features were incorporated into the construction to ensure resilience to extreme weather events such as high winds, heavy rains and flooding.

The new community buildings were also used to demonstrate environmentally friendly, alternative construction technologies. Community members were trained to produce new building materials, thus opening up new avenues for livelihoods. Wherever possible, building materials used for construction were sourced locally. Construction materials used include cement blocks and mud concrete blocks for walls, zinc-aluminium roof cladding and concrete door and window frames. Cost effective, eco-friendly building methods included fair-faced wall construction which eliminates the need for plaster. Two community centres were constructed using 'Rat-Trap' walls. This method has saved nearly 20% of cement blocks normally used for such buildings. A roof top rainwater harvesting system was installed in each building to utilise water in drought prone areas.

Demonstrating true community spirit, many community members have provided their own in-kind contributions towards the reconstruction process by volunteering their time and energy for clean-up campaigns and to monitor construction progress.



A Community Centre for Thiruvaiyaru Village

The Thiruvaiyaru Community Centre was badly damaged during the conflict. The community members, having faced economic hardships during years of displacement, did not have the financial resources to rebuild. The Thiruvaiyaru Rural Development Society had renovated one room which functioned as their office space while most mass meetings were conducted under a nearby tree.

The reconstruction of the Community Centre was identified as a key priority by the community at a Community Action Planning Workshop facilitated by UN-Habitat.

Following a rigorous selection process, in consultation with Karachchi Divisional Secretariat Office, the Thiruvaiyaru Rural Development Society (RDS) was selected as the CBO to reconstruct the Community Centre. Construction commenced in early October 2014. The Thiruvaiyaru RDS was responsible for the hiring of skilled construction workers and for the purchase of building materials under the supervision of UN-Habitat. A grant of LKR. 2,524,000 was provided towards the cost of construction.

The Community Centre was completed in under 5 months. The building includes a large meeting hall and separate offices for the Economic Development Officer, Health Clinic and toilets. The design incorporated several environmentally friendly methods to save building material costs and to minimise the impact on the environment, including the use of fair faced bricks to construct the walls.


Skilled masons have been trained by UN-Habitat so that the methodology can be replicated elsewhere. Concrete door frames and window frames have been used to minimise the use of precious timber resources. Recycling of construction debris and reusing excess mortar have been adopted as good construction practices. The community has also provided in-kind contributions by engaging in site clearing and record keeping.



The Thiruvaiyaru Community Centre is now fully functional. Health Clinics are conducted three Saturdays per month and the Government Officers are available for consultation 6 days per week, while community meetings and gatherings are conducted over the weekends. The Karachchi Divisional Secretariat is the local authority responsible for maintenance and will ensure the building's long term sustainability.







Type Plan of Thiruvaiyaru Community Centre



	MULTI PURPOSE COMMUNITY CENTRE IN THIRUVAIYARU -	SCALE: 8'-0" TO AN INCH	DONOR	IMPLEMENTED BY	
	TYPE PLAN I	DRAWING NO		UN (HABITAT FOR A BETTER URBAN FUTURE	
	REHABILITATION OF COMMUNITY INFRASTRUCTURE AND FACILITIES IN THE CONFLICT AFFECTED AREAS IN NORTHERN PROVINCE, SRI LANKA (RCIF)	UNH/JIP/KAR/TY/MPCC-01/001R			
		DATE : 28.08.2013	From the People of Japan		

Mahilavedduwan Community Centre: Environmentally Friendly Community Infrastructure in Batticaloa District

The multi-purpose Community Centre in Mahilavedduwan Grama Niladhari division was constructed in 2015. A unique feature of this building is the use of 'Mud Concrete Blocks', a new eco-friendly building material, for wall construction.

Mahilavedduwan GN division is located in Batticaloa district in the Manmunai West Divisional Secretariat Division. The primary livelihood of the community is agriculture, with some residents engaged in animal husbandry and fishing. The village has a population of 1,803 people consisting of 518 families.

This GN division was affected by the three decades of conflict, with significant damage and destruction to its infrastructure, economy and environment. Many families were forced to move to town areas and live with host families or in Internally Displaced Persons camps to escape the fighting. When people resettled in the village in 2008, the lack of basic infrastructure facilities created serious difficulties. The GN is particularly vulnerable as it has 72 differently abled persons and 80 female headed households.

The construction of a new Community Centre was selected as the priority requirement by the residents. As the village had no common building, meetings and events were held outdoors, most often under a tree, creating numerous difficulties particularly during the monsoon rains.

In keeping with UN-Habitat's participatory People's Process, the construction of the Community Centre was handed over to a Community Based Organisation in the area, the Mahilavedduwan Rural Development Society (RDS). Commencing in September 2014, a grant of LKR.2,948,800 was provided in several instalments, released on the achievement of milestones. The RDS was responsible for the hiring of skilled construction workers and purchase of building materials with guidance from UN-Habitat. Planning and implementation was driven by the community in close coordination with the Government Officers and UN-Habitat. The Divisional Secretary assisted the community to regularize the land ownership from the state land reservation.

From the beginning of the project, the community was consulted through

participatory planning exercises. Four type plans were prepared by UN-Habitat with one selected by the community which was then modified to suit their specific needs.

The Mahilavedduwan Community Centre construction work was completed in mid-2015. "This opportunity helped us to work more cohesively with the community and with the DS office and created a bond between the RDS and the community," the Secretary of the Rural **Development Society** stated. The community centre is used by the Grama Niladhari and Samurdhi Officers to conduct their official duties. The main hall is used for community meetings and meetings with Government residents.

As this Community Centre is in a central location, residents from all four villages of this GN division will benefit.

> Grama Niladhari Officer. Mahilavedduwan GN Division.

officials and CBOs. Once a week, the centre is used by midwives to run health clinics for the





Type Plan of Mahilavedduwan Community Centre, Batticaloa

 COMMUNITY HALL AND OFFICE - TYPE PLAN Ib
 DRAWING NO : UNH/BAT/KEYII/CC/I

 FUNDED BY:
 Improvement of community infrastructure, improvement of livelihood and empowerment of women in the People of Japan
 Implemented BY :
 Scale : 8-0" an inch

 NORTHERN AND EASTERN PROVINCES
 DRAWING NO : UNH/BAT/KEYII/CC/I
 DATE 12.3.2015

Mahilavedduwan Community Centre - Rebuilding Community Centres in Batticaloa District





Environmentally Friendly Construction: Using Mud Concrete Blocks to Build Walls

An environmentally friendly technology introduced by Moratuwa University, was used to construct the Mahilavedduwan Community Centre in Batticaloa. Training programmes have been conducted by UN-Habitat for local masons and brick makers in collaboration with the University researchers, who frequently monitor the production to ensure the quality and stability of the masonry work.

Mud concrete technology is both cost effective and environmentally friendly. Having been subjected to rigorous laboratory and field testing, it is proven to be of very good strength with the ability to withstand extreme weather conditions. Mud concrete blocks can be manufactured at community/ household level, using available gravel and soil mixed with cement. As the cement proportion varies with the soil composition, initial testing of soil is important to prepare high quality blocks. However, the composition of native soil can be adjusted by adding gravel, sand or clay to reach the suitable proportions. Curing of mud concrete blocks is not necessary as the soil mix contains sufficient water to harden the cement. This is an added advantage when operating in areas where water is scarce. After curing the blocks under a polythene sheet for about a week, they are ready to be used to build walls. Placing the blocks on a hard, level surface ensures a smooth face while mould oil or grease mixed with diesel is applied to the mould to reduce friction when removing the block. The researchers have initiated the process of obtaining a patent for the "Mud Concrete Block" from the National Intellectual Property Office.

Buildings constructed of mud concrete blocks offer improved thermal comfort over those built using cement blocks or burnt bricks, with additional advantages including reduced consumption of cement and sand and the production of blocks by unskilled persons without the need for a machine. Walls are aesthetically pleasing, eliminating the need for costly plaster.



Innovative Technologies : Rat Trap Bond Technologies

Rat-trap construction for Community Centres.

A "Rat-Trap Bond" is a type of masonry bond in which bricks are laid on edge (i.e. the height of each course in case of a brick size 230x110x75 mm, will be 110 mm plus mortar thickness) such that the 'shinner' and 'rowlock' are visible on the face of masonry.



Building a Brighter Tomorrow:

> Constructing Education Infrastructure

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Constructing Education Infrastructure

Schools and preschools are vital in ensuring children are given the necessary foundation in life. As the conflict had damaged a large number of education buildings, many schools and preschools were housed in makeshift, temporary structures with little or no facilities for children or teachers. Recognising the urgent need for assistance in this sector, UN-Habitat and SDC supported the construction of preschools and schools in several districts in the Northern Province.

The post conflict reconstruction programme has supported over 60 villages to rebuild preschools in the districts of Killinochchi, Mullaitivu and Mannar, providing facilities for over 1,200 children. Through a participatory process of reconstruction, the preschool buildings have been constructed by Community Based Organisations. These CBOs have worked tirelessly to purchase good quality building materials, hire skilled construction workers and to monitor the progress of work while managing the finances.

Each preschool consists of a main school room, a teacher's room, kitchen, and toilet facilities. Different designs to suit the student populations were customized with the communities and teachers. Disaster risk reduction features have been incorporated into the design and construction. These include roofs anchored to a reinforced concrete framed structure and restraining plaster bands over clay tiled roofs to resist seasonal high winds. Plinth levels were raised, taking into consideration annual flood levels and dampness due to high ground water levels during monsoon rains. Alternative technologies and rainwater harvesting tanks have been incorporated into the preschools, similar to those used in Community Centres. A playground with equipment is located in the preschool yard.

In addition to providing the building and equipment, this programme has also contributed towards capacity building of preschool personnel. Through a partnership with Save the Children Japan, selected preschools have been provided with specialist training, targeting teachers and preschool management committee members. This includes conducting a preschool teacher diploma course, training on Child Friendly Teaching Methods and Preschool Management techniques. In addition to preschools, SDC has repaired and constructed primary and secondary schools in the North, providing over 1,200 school children with access to education facilities.

A Brighter Future for Children in Selvanagar Village

The conflict affected the lives of over 800 families in Selvanagar village in Kilinochchi. Most of the village infrastructure, including housing and community assets had been destroyed or badly damaged beyond repair. The lack of access to basic services resulted in some of the families migrating to townships that had better infrastructure facilities, particularly for children's education.

As most of the families in the village were conflict affected returnees lacking their own financial resources, they were unable to support the construction of a new preschool building, resulting in lessons being conducted in a temporary building. This building also doubled as the village youth club and had very basic facilities, consisting of one small classroom with little educational or play equipment and no access to proper sanitation facilities or a kitchen to prepare the children's mid-day meals.

When the project commenced in Selvanagar, the community members identified the construction of a preschool and a community drinking water well as priority needs of the village. Both these small scale, but vital, infrastructure activities were then selected for funding. The construction of the preschool was contracted to the Selvanagar

Rural Development Society and undertaken through a grant provided in four instalments based on the achievemnet of milestones. Skilled construction workers were hired and the construction materials purchased by the RDS. Technical assistance on construction activities including the architectural design of the preschool, preparation of the bill of quantities, advice on building materials and procurement of skilled labour was provided by UN-Habitat, along with special training on sustainable construction and disaster risk reduction methods for the RDS and artisans. The construction of the Selvanagar preschool was completed in September 2014 within 10 months of commencing and includes a class room, teachers' room, kitchen and toilets.

Several environmentally friendly technologies have been incorporated into the construction of this building. Fair-faced blockwork has been used to build the walls while pre-cast concrete door and window frames have been used in place of timber frames, significantly reducing the cost of construction. Several eco-friendly construction practices such as reusing construction debris and proper storage of building materials has been practiced by the RDS. Community members have been actively involved in this intervention by participating in "shramadana" campaigns to clear the area and back fill the foundation. The careful monitoring of the construction work and bulk procurement of building materials by the members of the RDS has contributed towards the timely completion.

The new preschool is now full of laughter and chatter of little children, with over 43 children from Selvanagar in attendance. The children and their parents are delighted to have a brand new building with brightly painted walls, furniture and play equipment.

We faced many difficulties in conducting preschool activities due to the lack of space and facilities. The children had to go home in the middle of lessons to use the toilet as the preschool building had no sanitation facilities. Now the children as well as the parents are very happy with the new building. We are also very pleased with the separate teacher's room and kitchen. Fresh and hygienic food is prepared daily in the kitchen for all the children while we use the teacher's room to plan the lessons and to keep our records and equipment safely. I am sure more pre-schoolers from neighbouring villages will also join our preschool from next year.

Ms. Malliga, Preschool Teacher.





Type Plan I : Used for Selvanagar Preschool in Kilinochchi





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PRESCHOOL AT SELVANAGAR -TYPE I	DATE 20.08.2013	DONOR	Australian Version and Australia Egysourchut Contention and Australia Egysourchut Con
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Sivanagar Preschool, Mullaitivu District









Tharmapuram Preschool in Kilinochchi District



From temporary shelter to permanent building

Tharmapuram preschool in Killinochchi district.

Before: 1 & 2 - The children were housed in the temporary building.

After: 3 - The new Tharmapuram preschool. The new building can easily accommodate over 30 children.





Plan Used for Vivegananthanagar Preschool in Kilinochchi



PRESCHOOL AT VIVEGANANTHANAGAR WEST - TYPE PLAN II	DATE 20.08.2013	SCALE 8 '-0" TO AN INCH	DONOR	Australian Contractor business Contractor busines	
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Reconstruction and Repair of Schools



Water for Life:

Establishing Water Supply Schemes in Villages

Establishing Water Supply Schemes in Villages

Water is a precious resource in Sri Lanka's dry zone. As most rural areas are not connected to pipe borne water, families usually obtain water from available sources including wells, rivers and irrigation tanks. During the dry season, many water sources dry up, compelling residents to travel long distances to collect potable water.

Since 2011, the post conflict reconstruction programme has provided access to fresh water to communities through several initiatives. These include the construction of deep community wells in villages where UN-Habitat and SDC are assisting families to construct homes. These common wells are located in easily accessible locations where families can now obtain water for drinking, cooking and washing needs. To date, 96 wells have been constructed.

Other key water supply assistance include the provision of over 250 rooftop rain water harvesting systems in houses and public buildings, ponds, mini water supply schemes in villages and schools and tube wells in areas where the water table is too low and dug wells are not a sustainable solution.

These initiatives have been constructed and installed with the participation of the community members. In keeping with the participatory methodology, Community Based Organisations in each village as well as Local Non-Govermental Organizations have implemented these projects with technical assistance from UN-Habitat and SDC.



Fresh Water for Schools





The water supply scheme in the Palaikuli village was damaged in the early 1990's. The residents faced severe hardship obtaining fresh water. The water supply scheme was repaired in mid-2014, providing fresh water to over 74 schoolchildren and 60 families in the village, benefitting over 400 people.

Palaikuli village is located in Musali Divisional Secretariat Division, four kilometres from the Mannar - Puttalam main road. The main livelihoods of the community include fishing, paddy cultivation and cattle farming. The community were forced to leave their village in 1990 when the LTTE gave 36 hours for all families to vacate their homes. For many years, the internally displaced families lived with friends and family in the neighbouring districts and finally returned to their village in 2010. As most of the village infrastructure had been damaged during the conflict, the returning families needed assistance to rebuild.

The lack of a functioning water supply scheme in the Palaikuli school was a major drawback for the school children, affecting their health and hygiene as they had no access to fresh water during school hours. A Community Action Planning Workshop was conducted in 2013 by UN-Habitat to identify the main issues affecting the community and to collectively identify solutions. During this workshop, community members prioritised the need for a permanent water supply scheme to address the lack of potable water during the dry season.

The renovation of the water supply scheme was completed in September 2014 and the school children and teachers are now using the facilities. They have easy access to potable water to wash their hands before and after meals and a ready supply of water in the toilets and kitchen. The renovated water supply scheme includes a tube well, an overhead water tank and taps and washbasins for class rooms, school kitchen and toilets. Outdoor taps have also been installed in the garden as additional hand washing facilities.

In addition to the internal water supply network in the school, a water collection point with four taps has been installed adjacent to the school premises to provide direct access for community members. Nearly 60 families in the neighbourhood collect water from this point for drinking and cooking.



Common Wells

The Northern and Eastern Provinces experience a dry season from April to September. During this period, when shallow wells and streams dry up, families struggle to find potable water. By constructing deep, dug wells in strategic locations, all community members have access to fresh water, even during times of drought.





Rain Water Harvesting Systems



Typical Type Plan of a Common Well. Common Open Dug Well at Koppavely



New Community Well for Weligahakandiya Residents

Weligahakandiya village, located in Batticaloa district, has a population of 57 families. Agriculture, fishing and daily wage labour are the main livelihoods of its residents. Farmers cultivate rice paddy with water from the Weligahakandiya and Panichaiyadithakulam irrigation tanks while fishermen use the tanks to catch fish. Many residents undertake casual wage labour to make ends meet.

Obtaining fresh water was a serious issue in Weligahakandiya. The residents collected water from three small dug wells and two tube wells in several locations. However, these wells did not provide water throughout the year as they dry up during periods of drought.

Due to the intensification of the conflict from the 1990s to 2007, the Weligahakandiya residents were displaced on multiple occasions. In mid-2007, with the end of hostilities in the Eastern Province, the families returned to their village. As the conflict had damaged housing and community infrastructure, they faced many challenges including the lack of permanent shelter, sanitation, electricity, fresh water and regular income.

As the community had no financial resources to improve infrastructure, they were unable to construct a well deep enough to obtain a year round water supply, resulting in hardship during the dry season.

When the project commenced, the community members prioritised the need for water supply schemes. Funding was provided to build the community well in a strategic location to benefit a maximum number of families.



The location was identified by the community based on the availability of a high water table throughout the year. The land was provided by one of the senior residents named Velliyar Mama and the Eravurpattu Divisional Secretary assisted in regularizing the tenure. The construction work was entrusted to a Community Based Organisation, the Rural Development Society (RDS) of Koppavely. With a grant of LKR.483,000, the RDS commenced work on the well construction in March 2014. Technical assistance was provided by UN-Habitat including the design of the well, preparation of the bill of quantities and advice on selecting building materials. Skilled construction workers were hired by the RDS to dig and construct the well.

The completed well is 8 feet in diameter and 27 feet deep and was constructed using cement-sand blocks. The CBO and the masons were trained by the UN-Habitat technical team on the incorporation of standard structural and safety components including reinforced column and apron construction, casting tie beams every 5ft, 3ft high external wall and rung ladder construction.

Construction was completed in January 2015 and the Weligahakandiya residents are now using the well for their daily water needs. A resident of the village stated "it is really useful to have this well close by. We use it daily to collect fresh water for drinking and for other domestic chores." This is the first time our organisation managed the construction of a community well. We have learned good management practices through this project, including obtaining competitive bids for building materials and skilled labour. Careful planning and regular monitoring helped us to complete the project within the specified time period.

Mr. Arumugam, RDS President.







Improving Health and Hygiene:

> Access to Sanitation Facilities

Access to Sanitation Facilities

Access to sanitation facilities is vitally important in schools and homes to ensure the health and wellbeing of school children and families. Following the end of the conflict, lack of finances had hindered many residents from constructing suitable sanitation facilities.

Recognising the need to provide sustainable solutions for sanitation and to improve health and hygiene of children attending rural schools, UN-Habitat has initiated water, sanitation and hygiene (WASH) projects including the provision of sanitary toilets for families as part of the housing programme and separate school toilet blocks and hand washing facilities for boys and girls.

With access to running water through roof top rain water harvesting systems in schools, children now have the means to wash their hands before and after meals and after using the toilets, which has significantly improved their health.





Establishing WASH Facilities in Schools



Many schools in the conflict affected Northern Province had inadequate sanitary facilities as their toilets had been destroyed during the conflict. Sanitary toilets have been constructed for school children in Kilinochchi district in collaboration with the school authorities and Non Governmental Organisations.

Everyone is eager to wash their hands:

Children in Poonakery DS Division enjoy access to fresh water to wash their hands before and after meals and after using toilets.



As a result of the protracted conflict in Sri Lanka, much of the infrastructure in the North and East was either badly damaged or completely destroyed. Upon their eventual return, internally displaced people possessed little financial and other resources and as a consequence, were incapable of rebuilding the damaged facilities.

Implemented by UN-Habitat and the Swiss Agency for Development and Cooperation (SDC), with funding from the Government of Japan, European Union, Government of Australia, Government of Switzerland and the Coca-Cola Foundation, the post conflict reconstruction programme contributed significantly towards the development of conflict affected villages.

This book is a pictorial testimony of community recovery, highlighting the resilience and spirit of the people in the North and East of Sri Lanka.

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