




Projects library of the specialized group for construction

**SCHOOLS**

**Project** **Postconflict School Reconstruction**

**Project name** **Maravanpulo Sakalakalavalli Vidyalaya, Primary and Secondary School with Preschool, Chavakachcheri, Jaffna District, Sri Lanka**

<b>Country</b>	Sri Lanka	
<b>Town/Region</b>	Maravanpulo DS Div.: Thenmaradchchi District: Jaffna	
<b>Project type</b>	Reconstruction/New construction	
<b>Typology</b>	L-Form; 5 classrooms , Primary and Secondary school, from Grade 1-11; Pre-school	
<b>Approach</b>	Private sector contracted construction	
<b>Beneficiaries</b>	Affected people in response to the conflict (IDP's, Refugees, Returnees)	
<b>Climate</b>	Tropical monsoonal with seasonal rhythm of rainfall	
<b>Special constraints</b>	Political situation (Checkpoints, permits); Material and tools availability; Climate (monsoon)	
<b>Start / End of project</b>	March 2010 – December 2010	
<b>Country GDP</b>	1'296 USD per capita (Dec 2010)	
<b>Pictures</b>	SDC Jaffna, Maps UN OCHA	

<b>Partners</b>	
<b>Organization (Donor)</b>	SDC-HA, CARE (only livelihood)
<b>IO/NGO partners</b>	CARE (only livelihood and culverts)
<b>Government partners</b>	PTF      Presidential Task Force MoU      Ministry of Education Northeast Province Provincial Education Director Zonal Education Director School Works Branch, Jaffna

<b>Context to project</b>	
<b>Initial situation</b>	<p>Maravanpulo is a GN Division of Chavakachcheri divisional secretariat in the Jaffna District of Northern Province of Sri Lanka. Maravanpulo village is divided geographically into four hamlets for administrative purposes such as East, West, North and Center. The area is dry and arid. People live mainly from agriculture and fishing.</p> <p>All families of Maravanpulo were displaced since inception of war and during the battle codenamed "Rivirasa". The entire population lost their livelihoods, shelter, belongings, family members and relatives as a direct cause of war. The last displacements occurred in 1999 and resettlement started from 2004 to Maravanpulo West and subsequently to other hamlets such as North, East and Center in 2009 and 2010. According to the Planning Division of the Divisional Secretariat, 434 families with 1602 members have resettled.</p> <p>The SDC Program in this area was designed as a pilot program, covering all aspects involved in a successful resettlement of displaced population (so called "holistic approach". Beside the owner driven housing component, including the construction of latrines and individual wells, it was planned to rebuild a school for 300 students. Budget was allocated for the construction of additional infrastructure like washing area, community centres, pre-schools, library and health center, according to needs and priorities of the returned population.</p>
<b>Project Concept</b>	Reconstruction / New Construction



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<b>Project procedure</b>	<p>Following a rather bureaucratic identification, selection and approval procedure that involves the local Government the required technical data is surveyed and the final design and tender documents are prepared. Based on exact bills of quantities and through public bidding procedures, the lump sum contracts are given to the private sector construction contractors. Through a set of specific criteria in terms of price, quality and performance, capable contractors are identified and the contracts awarded. Contract documents are derived and adapted from international FIDIC standards.</p> <p>The rehabilitation of Maravanpulo school with its 5 classrooms was completed within almost 10 months depending on the contractor's performance, site access and weather conditions. Site supervision was carried out directly by our project site engineers. The finishing standards are of good quality.</p> <p>Legal handing over certificates, as built drawings and maintenance plans were provided upon project completion.</p>
<b>Structural concept and finishing design</b>	<p>After demolition and chipping works in the existing buildings, new floor in concrete with embedded polythene sheets was done. Finishing with neat red cement floating. Walls and pillars in block masonry. New roof with steel trusses, treated with anticorrosive paint were fixed in position in order to receive calicut pattern tile roofing, laid on purlins and rafters; all rooms with electrification, lighting.</p> <p>Seat benches for 22 students/classroom, black boards, teachers desks and furnished principal's office, incl. Storage were provided by SDC.</p>
<b>Issues/Constraints</b>	<p>Complex bureaucratic approval procedure to obtain all documents to start construction.</p> <p>Marginal community involvement.</p> <p>Weather conditions - hot and wet monsoon season shortens the construction.</p>
<b>Lessons learned</b>	<p>Using the national capacity and know-how in the design and carry out direct supervision by project staff and not the consultant was useful.</p> <p>Consistent improvements on the structure and the finishing works of the buildings must be based on the experiences made.</p> <p>High quality of work and timely completion resulted in a good reputation and image of SDC-HA.</p>
<b>Results by March 2012</b>	<p>107 students and 12 preschool children are currently attending the school. 14 teachers are employed at the school</p>

Reference data			
GIS data (WGS 84)	N 9.6381° E 80.1419°	Altitude 1 msl (3 feet)	
Land plot	7'695 m <sup>2</sup>	Number of blocks	1
Classes/rooms per blocks	5 per block	Number of units	3
Beneficiary /classroom	21.4	Total beneficiaries	107 students (Preschool excluded)
Sanitary facilities	10 toilets (4 boys, 5 girls, 1disable) 4 urinals boys	Other infrastructure	1 Principals's office 1 Multipurpose hall with stage 1 Pre-school 1 Sanitary block 1 Kitchen 1 Watcherman house 1 Water Tank and Well
Ground floor (covered area), only main L-shaped building	680.64 m <sup>2</sup>	Floor levels	1
Total surface in m <sup>2</sup> only main L-shaped building, excl. preschool	680.64 m <sup>2</sup>	Surface / beneficiary only main L-shaped building, excl. preschool	6.36 m <sup>2</sup> / beneficiary
Volume (outside dim.), only main L-shaped building, excl. preschool	612.57 m <sup>3</sup>	Volume / beneficiary Only main L-shaped building, excl. preschool	5.72 m <sup>3</sup> / beneficiary
Heated surface	No heating	Electrification	yes
Cost per m <sup>2</sup> (surface of all buildings by SDC included; 866m <sup>2</sup> )	211.88 USD	cost/beneficiary	1'714.80 USD/beneficiary
Total cost (1US\$=113 LKR) 03.02.2012	183'484.00 USD (20'898'762.86 LKR)		



Legal framework	
<b>Political attachment</b>	Through the bilateral agreement between SDC and the Government of Sri Lanka followed by an MoU between SDC-HA and PTF
<b>Type of ownership</b>	District Education Department on behalf of Ministry of Education Northeast Province

**Relevant building construction costs (excl. planning, design and supervision)**

Construction		
Building	Size	Expenses
Main building	280ft x 26.5ft	11'922'628.80
Kindergarden	25ft x 26ft	1'182'821.40
Sanitary Block	50ft x 10ft	2'177'364.50
Kitchen	20ft x 20ft	927'642.00
1000gln Water Tank		845'329.00
Watchers Hut	22ft x 10ft	684'779.62
Extra Items		808'963.38
Bathway and Water poles		486'992.86
Boundary Wall		591'871.50
Construction Water storage tank		1'011'197.01
Construction of water sump		83'069.59
Construction water collection system (gutters)		176'103.20
<b>Total</b>	<b>In LKR</b>	<b>20'898'762.86</b>
	<b>In USD</b>	<b>183'484.00</b>

Urban planning		
Distance to:	Maravanpulo Center	1 km
	Public transport	No public transport available, but internal roads are rehabilitated and public transport was requested by the villagers.
	A32 Main road (Jaffna-Mannar)	1 km
	A9 Main road	5-7 km

For further information	
Involved SDC-HA construction group consultants	N / A
Other involved SDC-HA consultants	Martin Studer, Srikantha Rajaratnam, Loorthunayagam Lourdsmen
Author / Contact:	Martin Studer martin.studer@sdc.net Srikantha Rajaratnam srikantha.rajaratnam@sdc.net Loorthunayagam Lourdsmen loorthunayagam.lourdsmen@sdc.net
Recommended Institutions:	N / A
Recommended partners:	N / A
Recommended books/reports:	Further information (drawings, contracts...) on construction group website or email above available
Relevant other projects (links):	Project Document of the Cash for School Program, Sri Lanka, containing the reconstruction of Schools. Website: www.cfhsrilanka.com



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### Relevant illustration



1L	Entrance gate to Maravanpulo School
2R	Overview L-shaped building with preschool building at the right side



3L	Open covered space at junction of two blocks forming L-shape
4R	Hall with stage



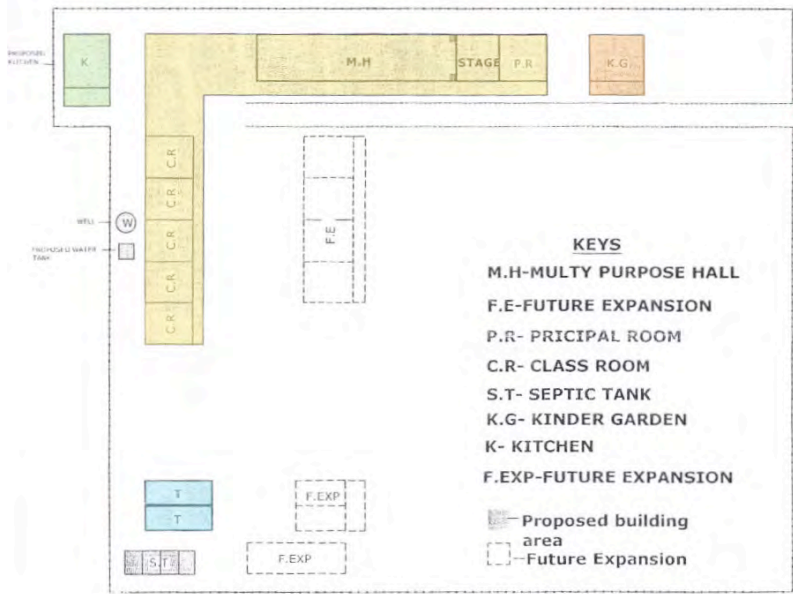
5L	Watchermans Hut
6R	Kitchen



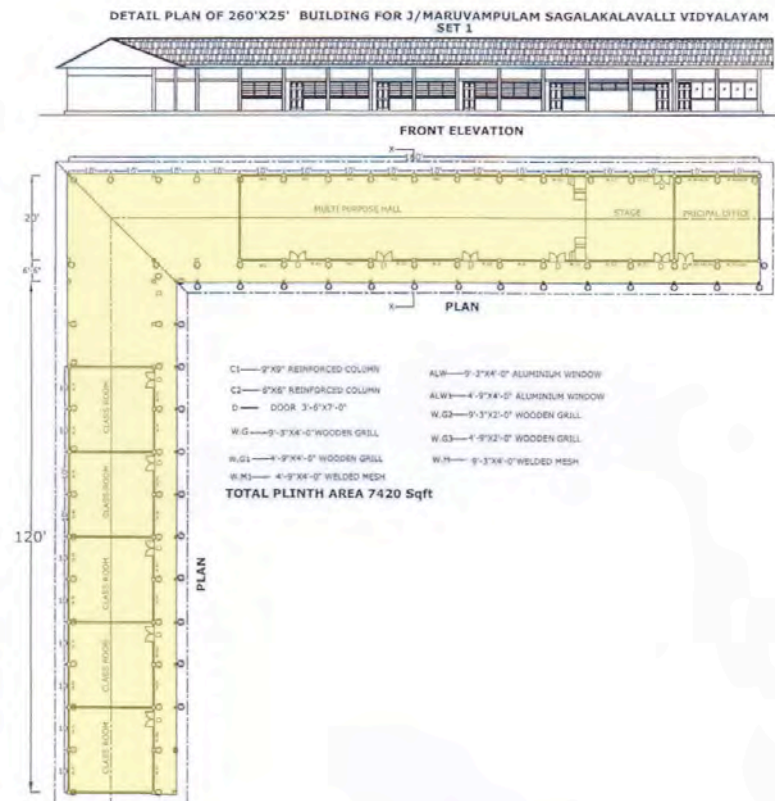
7L	Sanitary Block
8R	Harvesting System



Relevant Drawings



9L General Layout Plan  
(The sanitary block in the final drawings was slightly changed in it's position and a water tang for the rainwater harvesting system was added next to the classrooms)



10L Plan of main L-shaped building