




Projects library of the specialized group for construction

PUBLIC BUILDINGS

Project	Education (school) UNICEF secondment	
Project name	Post Tsunami School Project in Sri Lanka	
Country	Sri Lanka	
Region/town	Matara	
GIS data (WGS 84)	St. Servatius College Secondary (Ex-Rohana)	
Project type	New construction and renovation	
Typology	Secondary School	
Approach	Contracted construction	
Beneficiaries	Ministry of Education	
Climate	Hot, humid	
Special constraint	Tsunami	
Start / End of project	Dec-2008 / March-2010	
Country GNP		

Partners

Organization (donor)	UNICEF
IO/NGO partners	
GO partners	Ministry of Education (TERM)

Context to project

Initial Situation	Before Tsunami old school buildings on Matara Road.
Goals, Beneficiaries	New construction with better facilities for tsunami affected students.
Implementations/Results	3 new buildings for 34 classrooms, 6 science labs, new administration 1 library & 2 computer rooms, 4 units of new toilets, security hut, 6 renovated units with 14 classrooms, canteen, storeroom and auditorium.

Reference data (comparative)

Land plot	13'599m2	Number of blocks	18
Total classrooms	45 (excl.computer,library, science,music & dancing)	Number of units	69
Beneficiary /unit	Secondary School up to Grade 12I	Total beneficiaries	1624 Students
Latrines	2 units: male 1 unit: disabled 1 unit : staff (male, fem)	Other infrastructure	Administration, Canteen, Science room, Aesthetic-room, Shrine, Water tank
Ground floor (incl. walls)	2'696m2	Upper floor (incl. walls)	2'193m2
Total surface	4'889m2	Surface / beneficiary	3.01m2/ beneficiary
Volume (outside dim.)	18'232m3	Volume / beneficiary	11.23m3 / beneficiary
Heated surface	None.	Total cost /Total surface	198.1USD / m2
Total cost (amended)	970'122USD (107.50)	With additional cost	597.36USD/beneficiary
Contract value 29/09/08	104'288'079.54LKR		64'216LKR/beneficiary



Approach to results

Initial Situation

- 2004 Rohana school was effected by the Tsunami
- 2006 UNICEF took over the school project from SDC and included it in their Tsunami recovery project.
- Rohana school site was developed as a Secondary school of heavy damaged St.Servatius school.

Approach

- UNICEF Project called "Tsunami recovery Projects, implemented by:
UNICEF team: CMU (Construction management unit) in Colombo and UNICEF team in Galle with two persons (Construction Project manager and a National Civil Engineer). They were responsible for controlling, supervising and payments of bills.
Consultant/Architect: LAN Management Development Service
Contractor: Daya Constructions (PVT) >LTD.

Problems/Constraints

- BoQ from Consultant was not perfect, some items were missing. Contract was made before UNICEF team of South had possibility to correct mistakes => additional cost!
- Lack of feedback from site managers to HQ of Contractor and Consultant.
- Contractor failed to follow time management of construction =>lack of material supply and workers on site are effect that final finishing date had to be extended.
- Feedback from school (principal) to MoE and return of it was not good. We needed to make a lot of direct intervention from UNICEF HQ to receive information (New school name, moving of students to other school sites etc.)

Lessons learned

- Small school complex in a village gives better result than big school in town.
- More time for revising of plans and BoQ by UNICEF would give a better result.
- A flat land plot is much more effective (less cost and easier to construct) than land plot in hilly areas.

Evaluation

- Government was not able to give enough support to school.
- Future of education for this area is secured.

Legal framework

Political attachment

Type of ownership

Ministry of Education (Government)



Construction information		cost repartition
Construction		
Structure	Foundations Walls or columns Facade Roof Earthquake protection	
Materials	Floor surface Walls: Doors Windows Ceiling Thermo insulation	
Watsan	Ceiling Water Toilets Waste water Rain water	
Equipment	Heating system Electricity connection Telephone connection Cooking facilities	
Total (USD)	All School Project	970'122 100%

Urban planning		
Distance to :	Village	200m to village center
	Matara City	2km by bus
	Public transport	Bus to Matara and then by train or bus to Colombo

For further information

Involved SHA construction group consultants	Felix Veith Constructio Project Manager SDC
Other involved SHA consultants	Henri Stalder Construction Managment Specialist SDC
Author / Contact:	Manjula Dabere Project Engineer UNICEF
Recommended Institutions:	Ministry of Education (MoE)
Recommended partners:	Consultant: LAN Management Development Service Contractor: Daya Construction (PvT) LTD.
Recommended books/reports:	
Relevant other projects (links):	



Humanitarian Aid construction group

Relevant illustration



Main Entrance with new block B (15 classrooms)



Monument of the School



Building B with 15 classrooms (new building)



Main entrance to new 3 new buildings: H, L and K



New building L and K and renovated F and E



New building K with 15 classrooms



Humanitarian Aid construction group



Renovated buildings I and J, E and F



New toilets N and water tank (5000 lt)



New classroom in building B



New classroom (47 m2)



Renovated classrooms



New toilet N for males