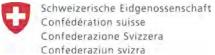
Education (school) UNICEF secondment



Project

Projects library of the specialized group for construction

PUBLIC BUILDINGS

Project name	Post Tsunami School Project in
Country	Sri Lanka
Region/town	Matara
GIS data (WGS 84)	Mahamaya Girls' School
Project type	New construction
Typology	Primary&Secondary School
Approach	Contracted construction
Beneficiaries	Ministry of Education
Climate	Hot, humid
Special constraint	Tsunami
Start / End of project	Dec-2008 / Feb-2010
Country GNP	



Mahamaya Girls' School, Matara

Partners

GO partners

Organization (donor) IO/NGO partners

UNICEF

Ministry of Education (TERM)

Context to project

Initial Situation Before Tsunami school was in the City of Matara, closed to the sea. Goals, Beneficiaries New buildings with better facilities (6 blocks) and new toilet units. Implementations/Results

3 new blocks with 30 classrooms, 3 units with toilet, science lab, comp.

room, library; 1 new blocks with assembly hall, 1 new block administration;

1 new block for canteen,

Reference data (comparative)

Land plot	7925 m2	Number of blocks	8
Total classes rooms	38(excl.computer,library, science lab aesthetic and auditorium	Number of units	58
Beneficiary /unit	Prim & Secondary school up to grade 12	Total beneficiaries	1155 Students
Latrines	4 units: female 1 unit: administration 1 unit: principal	Other infrastructure	Administration, Canteen, Science room, Aesthetic- room, Shrine, Water tank
Ground floor (incl. walls)	1′777m2	Upper floor (incl. walls)	2′107.26m2
Total surface	3′883m2	Surface / beneficiary	3.36m2 / beneficiary
Volume (outside dim.)	14′767m3	Volume / beneficiary	12.79m3 / beneficiary
Heated surface	None.	Total cost / Total surface	292.17USD / m2
Total cost (Finalized bills 05/05/2010	1'134'200USD (107.50) 121'926'513LKR	With additional cost	982USD / beneficiary 105′564LKR / beneficiary

Humanitarian Aid construction group

Approach to results

Initial Situation

- 2004 Tsunami Existing School was heavily damaged.
- After this incident building of temporary shelters.
- Project for new school was made by UNICEF in early 2008.
- The new school site was planned safer than before.

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, SDC and a National Civil Engineer. They were responsible for controlling, supervising and payments of bills.

Consultant/ Architect: Kahawita de Silva & Associates (Pvt) LTD.

Contractor: Sathuta Builders (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!
- Not enough controlling from site manager. Mistakes from construction were not corrected in time; they had to rebuild building for administration.
- Connection of water and electricity was not included in BoQ.
 MoE has failed to give connections on time, because access road was not started when the school was handed over. School opening is still outstanding.
- MoE did not support enough the school. For handing over of finalized school the district director was not present. We had to wait 3 month to receive the signed documents!

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.
- Never start a new school construction, when the infrastructure is not ready. (no access road, no electricity and water connection)

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)

Humanitarian Aid construction group

296'991

26.2%

Construction information cost repartition

Construction

Confederaziun svizra

Structure Foundations Building work USD 837'209 73.8%

External work

Walls or columns

Facade Roof

Earthquake protection

Materials Floor surface

Walls: Doors Windows Ceiling

Thermo insulation

Ceiling

Watsan Water

Toilets Waste water Rain water

Equipment Heating system

Electricity connection Telephone connection Cooking facilities

Total (USD) All School Project 1'134'200 100%

Urban planning

Distance to : Village 200m to village center

Bus and train from Matara to Galle and Colombo

For further information

Involved SHA construction group consultants	Felix Veith Construction Project Manager SDC, Galle-
2 o oa o conociación group conociación	Office UNICEF
Other involved SHA consultants	Henri Stalder Construction Managament Specialist SDC, Colombo Head-office UNICEF
Author / Contact:	Manjula Dabere Project Engineer UNICEF, Galle-Office
Recommended Institutions:	Ministry of Education (MoE), Colombo
Decembed nathers	Consultant: Kahawita de Silva & Associates (PvT) LTD, Koggala-site-office and Head-office Colombo
Recommended partners:	Contractor: Sathuta Builders (PvT) LTD, Koggala-Office and Colombo Head-office
Recommended books/reports:	
Relevant other projects (links):	

Relevant illustration



Main Entrance with building D, C and Water tower



Rain water harvesting system for building A, B, C & D 5 tanks with 1000lt



Shrine room and building A, B, C with 42 classroom



Classroom for about 40 students



Building C, B and A with all class rooms



In between building C and B

Humanitarian Aid construction group



Building A: 13 class rooms and library



Building E: Auditorium and playground



Building C: 12 class -, computer room & O/L Lab





Ramp for disabled students to access A & toilet



Auditorium with approx. 260m2



Building G: Canteen and kitchen



Building D: Teacher toilet