

United Nations International Strategy for Disaster Reduction Secretariat, Geneva

# **PROJECT COMPLETION REPORT**

- This report must be completed and signed by the <u>Contact person</u>.
- The information provided below must correspond to the financial information that appears in the financial report.
- Please complete the report using a computer.
- Please expand the paragraphs as necessary.
- The UN/ISDR secretariat reserves the right to reject any incomplete or badly prepared reports.
- The answer to all questions must cover the reporting period as specified in point 1.5.

# 1. Description

- 1.1. Name of <u>beneficiary of grant contract</u>: United Nations Development Programme –UNDP Sri Lanka
- **1.2.** Name and title of the <u>Contact person</u>: Ananda Mallawatantri, Assistant Resident Representative –Environment, Energy and Disaster Management
- Name of <u>partners</u> in the Action: Ministry of Disaster Management and Human Rights, Disaster Management Centre of Sri Lanka
- **1.4.** <u>Title</u> of the Action: Making Schools and Hospitals Safer in Uva and Eastern Provinces of Sri Lanka

#### **1.5.** <u>Project duration</u>:

S #	Project Duration	Start Date	End I	Date
1	Original agreement	01 December 2008	30 Ju	ne 2009
2	No Cost Extension 1	30 June 2009	15	September
			2009	

- 1.6. Target <u>country(ies):</u> Sri Lanka
- **1.7.** <u>Final beneficiaries</u> &/or <u>target groups<sup>1</sup></u> (if different) (including numbers of women and men):

School children, vulnerable community groups in Uva and Eastern provinces and the General public<sup>2</sup>

# 2. Project Achievements

#### 2.1. Summary

(Please provide overall project summary towards achievements and their expected impact. There is no set format; however, please be sure to include 1) a brief background of the issue addressed by your project, 2) major achievements during the implementation period, and 3) how results of different activities carried out under the project contribute to the larger goal of Disaster Risk Reduction)

**Background of the issue addressed by the project:** Indian Ocean Tsunami in 2004 showed that the community infrastructure facilities are not planned or constructed to withstand the fury of natural disasters. In Sri Lanka this was a well known fact as the 1978 cyclone, 2003 floods and landslides have already proven the inadequacy of infrastructure planning. Schools and hospitals have been identified as critical infrastructure facilities in disaster management as their occupants are representing most vulnerable groups of the community- children and patients as well as they are being used as safe evacuation centres. Furthermore uninterrupted services of hospitals are necessary in case of an emergency. Therefore ensuring the safety of schools and hospitals is a key priority in disaster preparedness activities in Sri Lanka. Eastern province is the most vulnerable province to tsunami disasters while Uva is one of the poorest provinces of the country. As they are experiencing all major hazards in Sri Lanka it was decided to focus the project activities in these two provinces

**Major achievements during the project:** There were three main achievements of the project that highlights the success of the project. 1) Establishment of National Committee on Reviewing Building Guidelines (NCRBG) which is comprised of professionals from the construction related fields of Sri Lanka. They voluntarily initiated many programmes that includes developing model type plans for school and hospital buildings to be constructed in future 2) Identifying the most vulnerable schools and hospitals in Eastern province and in Badulla district of Uva province 3) Identification of knowledge products and knowledge transferring processes that can be used to impart the knowledge on building guidelines with the grass root level practitioners such as masons.

How results of different activities contribute to the larger goal of Disaster Risk Reduction: The objective of the project was to mainstream disaster risk reduction into the planning process in educational and health sector of Eastern and Uva provinces. The outputs of this project created an enabling environment for all the responsible parties to work towards achieving the objective. For the first time in Sri Lanka risk reduction concepts were integrated into school and hospital buildings. The Technical Committee established through the project to review building guidelines -National Committee on Reviewing Building Guidelines (NCRBG)- still function well and it provided a best practice on how to get the involvement of professionals to disaster risk reduction in a country and that is being adopted

<sup>&</sup>lt;sup>2</sup> It is difficult to estimate the beneficiary numbers for this particular project as theoretically all Sri Lankans would benefit from the safer schools and hospitals concepts and approached developed through the project.

to other risk reduction related areas of the country (ex: similar committee will be established to advice DMC on drought management in the country). The process of identifying vulnerable schools and hospitals in Eastern province developed certain innovations like combining GPS data with existing maps provided the impetus to develop Village Disaster Preparedness Maps for all the coastal villages of the Eastern Province. The exercise created technical capacities among the DMC district staff on collecting and transferring data using high tech equipments. Therefore the capacities built through the project will be beneficial for the future risk reduction activities also in the country.

### 2.2. Overall Strategy adopted for the implementation of the project

The project strategy to achieve the objective was threefold: 1) building the capacity of officials involved in health and educational sectors on the disaster management 2) providing database support and opportunities to identify risk reduction options, and; 3) advocate for disaster sensitive infrastructure development. The weight given to each strategy was different as there were new developments during the period between the project planning and project implementation. With the concurrence of the Project Steering Committee chaired by the Secretary to the Ministry of Disaster Management and Human Rights and the guidance of Disaster Management Centre, advocacy became the main strategy and capacity building of the officials from the health and educational sectors were de prioritised. Advocacy related activities were carried out with the support of National Committee on Reviewing Building Guidelines (NCRBG) and the DMC, main partner of the project implementation.

Objective	Intervention Logic	Title of Activity as reported above	<b>OUTPUT</b> [achieved / not achieved, if not reason?] + Please quantify and
3. Strengthened disaster risk reduction (preparedness, mitigation and	3.2 Community resilience strengthened through integrated	1. Development of a data base on schools and hospitals in and identify the associated vulnerabilities due to	Achieved. Vulnerability of over 45 health service related infrastructure and over 150 schools have been identified from the districts of Eastern province and Badulla of Uva province.
response) capacities of local communities	disaster risk reduction.	2. Preparation of a priority list of health and educational facilities based on the vulnerabilities and develop infrastructural plans in consultation with the service receivers, officials and	All hospitals and schools infrastructure facilities were ranked according to the degree of vulnerability to natural disasters such as tsunami, floods and landslides.
		<ul><li>3. Develop</li><li>infrastructure</li><li>development plans</li></ul>	Type plans for model hospital and school buildings were designed by the NCRBG and a consultant has been

#### **2.3.** Achievements against the strategic Objectives

(Please highlight only outputs against each strategic objective)

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suitable for disaster prone areas for health and educational sectors	assigned to develop retrofitting plans for 30 schools and 10 hospitals in Eastern provincial districts.
4. Advocate for implementation of disaster resistant infrastructure development plans in selected school and hospitals among the policy makers, National and Provincial authorities and bilateral and multilateral agencies.	NCRBG was established with the participation of all key stakeholders relevant to the construction industry of Sri Lanka. A national workshop was organized with all key technical agencies to finalize the hazard profile development process in Sri Lanka as availability of risk profiles of a country is an essential pre condition for incorporation of risk reduction concepts into development planning.

#### 2.4. Short / long-term impact of the project

(Please describe is there any visible short term impact and / or what long term expected impact has been envisaged)

Short term impact of the project is to establish a voluntary committee of technical experts – NCRBG. This committee is working on many practical problems related to building codes and building guidelines implementation in Sri Lanka. As an example the NCRBG selected the best knowledge product from different materials available for awareness creation on building guidelines. It was not possible earlier as different organizations were promoting their own resource materials and no coordination body was available for standardization and developing consensus among the different stakeholders. In addition to that NCRBG was instrumental in finalizing the course curricular for technical collages on building codes and building guidelines. It will be the first ever course offered to the students of vocational training technical collages in Sri Lanka.

The long term impacts of the project will include developing safer schools and hospitals in Sri Lanka and incorporating the risk reduction concepts into the infrastructure development plans. Developing risk profile of the country will facilitate the mainstreaming process of the risk reduction concepts into development planning and as a whole the project will have a significant impact on creating a culture of safety in the country.

#### 2.5. Measures taken for the sustainability of the project initiatives

(What strategy adopted / activities carried out to ensure sustainability of the project?)

As many other programmes managed by UNDP- DRM programme, this project was also implemented under the National Implementation Modality where a government ministry is the main implementing partner. In this project also the Ministry of Disaster Management and Human Rights was having the ownership and the Disaster Management Centre was implementing the project. Therefore the Ministry and the DMC is committed to ensure the sustainability of the project outputs. The DMC will include the retrofitting plans implementation in their budget proposals for 2011 as planned in the project designing stages.

NCRBG is the other main outcome of the project even though it was not envisaged at the designing stages. As the NCRBG is a voluntary committee and the DMC has assumed the role of convener, even after the project completion the Committee will resume their duties as usual.

### 2.6. Overall Challenges / difficulties

(Please describe overall <u>difficulties that you have encountered</u> during the implementation period and the <u>measures taken to overcome</u> these difficulties / challenges)

The project experienced major setbacks in implementation at the beginning as the hospitals and schools administration in the country were found to be extremely complicated than it was envisaged at the planning stages. The initial understanding was that the central government ministries related to Health and Education can wield the power over the Provincial level ministries. But when the project was about to start, it was found out that due to resource limitations practically the Central government ministries are not interested in infrastructure development of the hospitals and schools governed by the Provincial Councils. Unfortunately most of the vulnerable schools and hospitals were administrated by the Provincial Councils. The identification of the schools and hospitals was done fairly quickly but the infrastructure development plan preparation got delayed as it was not possible to identify the relevant stakeholders to get involved in the process. Due to past experiences DMC was not willing to develop the infrastructure development plans individually with the support of an external consultant as there was a high risk of 'non compliance' with the plans by different ministries if they were developed without their full involvement. In the mean time Central Government ministries were committing their support to the project and offered to modify the existing model plans they were using to construct buildings for hospitals and schools through out the country. The model plans were used by all provincial level authorities also so it provided a way out of the stalemate as the safer schools and hospitals objectives could be achieved with new buildings to be constructed in the future.

The DMC kept the discussions with the provincial officials alive while supporting the Model Plan Redesigning process is taking place and the National Committee for Reviewing Building Guidelines worked intensively on the finalization of the uniform set of building guidelines.

Ultimately the DMC was able to convince the provincial authorities with the results of disaster identification and the work the DMC did with the Central level authorities and agreed to implement the building retrofitting plans developed through the project.

The time taken for these discussions were worthwhile at the end as the sustainability of the project outputs were ensured through the discussions and the mutual understanding developed between the DMC and the relevant officials. The outcomes will have a greater impact than it was anticipated at the project planning stages since all future buildings constructed for hospitals and schools will be incorporating risk reduction concepts. But unfortunately due to the short time span of the project it will not be possible to complete all the activities before the end of the project period in August due to the delays occurred at the beginning of the project.

#### 2.7. Good Practices

(Please provide details of good practices evident in result of your interventions at any level.)

During past couple of decades many institutions were established in Sri Lanka with the objective of regulating and developing construction industry. Unfortunately a proper coordination mechanism was not available between the institutions or different initiatives they have taken to develop the industry. Due to these issues several building guidelines have been developed by many institutions without referring to the efforts taken by other organizations. But all guidelines were having some weaknesses as proper consultation was not carried out before developing the guidelines. It was difficult to develop a consensus between these institutions as all institutions were having vested interests in promoting their own set of building guidelines rather accepting a set of guidelines developed by some other institution. Among the many shortfalls all the guidelines had lack of integrating disaster risk reduction concerns into account as in the past Sri Lanka was considered as a 'safe heaven' from natural disasters.

Disaster Management Centre (DMC) was established in November 2005 as the apex institution for coordinating disaster management related issues in Sri Lanka. It was provided with necessary resources by the government as well as through UN and civil society organizations to some extent and was empowered to work on risk reduction related issues within a very short time period from its establishment. Unavailability of proper building guidelines was one of the main factors affecting the efforts of the DMC to integrate risk reduction into development process in Sri Lanka. In the meantime the project for 'Making Schools and Hospitals Safer in Uva and Eastern Provinces of Sri Lanka' initiated with the support of UNISDR and the European Union.

The National Committee on Reviewing Building Guidelines (NCRBG) was established with the support of the project and with the coordination support of DMC. The Committee was chaired by University of Moratuwa and all the relevant national institutions were invited to represent the Committee. A very positive response was received from all the agencies and altogether 12 national agencies were represented in the Committee [Institute of Engineers Sri Lanka (IESL), Central Engineering Consultancy Bureau (CECB), University of Peradeniya (UoP), University of Moratuwa (UoM), Open University of Sri Lanka (OUSL), National Housing Development Authority (NHDA), Society of Structural Engineers (SSE), National Building Research Organization (NBRO), Ministry of Education, Ministry of Health and Nutrition, Ministry of Local Government and Provincial Councils, Disaster Management Centre (DMC)

This was the first time ever that all agencies were summoned to work on a specific issue which has implications on all the representing agencies in Sri Lanka. The agencies recognized the importance of the functions of the Committee and all members agreed to serve in the Committee in voluntary basis as everybody eagerly waiting for an opportunity to serve a national cause. As all relevant institutions were presented and they were interested in achieving the objectives, the committee had meetings once in every two weeks. All agencies appointed senior staff members to the committee so the time taken for effective decision making can be reduced.

Initially the Committee reviewed different sets of building guidelines prepared by different agencies and agree that the guidelines prepared by National Housing Development Authority (NHDA) were the most comprehensive and user friendly. Fortunately NHDA has already developed a knowledge product suitable for the usage by practitioners who really matters when implementing building guidelines. The guide book was developed by NHDA in collaboration with the German Technical Coorporation (GTZ) and they agreed to reprint 3,000 copies with due acknowledgement to the project.

Then the Committee decided to work on the model building plans used by the health and education authorities for constructing new buildings in Sri Lanka. A technical subcommittee was appointed to work on the model plans and the subcommittee had currently completed most of the preliminary work related to the re designing model plans.

Simultaneously the Committee assisted the project to complete one of the activity planned through the project- to design retrofitting plans for 30 schools and 10 hospitals in the project area. As the project members were working in voluntary basis only the cost related to other technical and logistical issues were included in the consultancy agreement reducing the cost by more than 40% from the market rates.

Most important outcome of the NCRBG is the national consensus it has been able to develop on the building guidelines and practices. Even though the project support to the Committee will terminate from August 2009, DMC will keep the Committee alive as it is a high impact low cost initiative efficiently and effectively contributing to the risk reduction mainstreaming in the country.

#### 2.8. Lessons Learnt from project

(Describe your experience and lesson learnt during the implementation of the project, in term of project implementation / management, Building partnerships, community mobilization, capacity building, advocacy & awareness etc.)

Disaster Management Centre and the Ministry of Disaster Management and Human Rights were consulted in designing stages of the project. In addition to them, Ministry of Health and Ministry of Education officials were also consulted in the design stages of the project. As the main coordinating body for disaster management related activities in Sri Lanka, DMC has the responsibility to develop an enabling environment to build a Safer Sri Lanka. The project activities were planned with these objectives and when implementation was started, the main implementing parties realized that many external stakeholders are required to realize the goal of safer schools and safer hospitals. As an example the responsibilities vested with the Provincial Councils, National Housing Development Authority, Centre of Housing, Planning and Building, Universities and Institute of Engineers Sri Lanka were some of the key stakeholders who were not consulted in designing the project. The project implementation got delayed by several months as it was necessary to obtain the buy in of all the key stakeholders before starting the activities as the sustainability of the initiatives has to be ensured. Exclusion of certain key stakeholders occurred due to the lack of experience for Disaster Management sector experts to get involved in construction industry related work.

The high influence of universities and other academia on the disaster risk reduction was another lesson learnt through the project. Even though academia was involved in much other past risk reduction initiatives their role was limited to consultancies and they were never given the opportunity to lead a risk reduction programme. Under this project, NCRBG was established and it was chaired by a well known university professor. He was able to mobilize the support of all key agencies to the project work and his leadership convinced the members of the Committee to contribute voluntarily to the success of the project. The NCRBG is continued to provide their services even after the completion of the project.

#### 2.9. Visibility

(Please provide instances/approaches taken to highlight the visibility of EC and UNISDR.)

As per the visibility guidelines provided through the European Commission and the UNISDR, the relevant logos were appropriately demonstrated in all knowledge products.

## 3. Partners and other Co-operation

How do you assess the relationship between the formal partners of this Action (i.e. those partners which have signed a partnership statement)? Please specify for each partner organization

**3.1.** How would you assess the relationship between your organization and State authorities in the targeted countries? How has this relationship affected the Action?

Ministry of Disaster Management and Human rights is the main implementing partner of the project. UNDP has a good experience in implementing disaster management projects with the Ministry since its creation in 2005. The Secretary to the Ministry is chairing the Project Steering Committee and guides the project implementation together with other senior officials of the Ministry and the Disaster Management Centre of Sri Lanka. The partnership with the ministry is cordial and the Ministry considers UNDP as a trusted partner in developing a Safer Sri Lanka as per their vision.

- **3.2.** Where applicable, describe your relationship with any other organizations involved in implementing the Action:
- Associate(s) (if any)
- Sub-contractor(s) (if any)
- Final Beneficiaries and Target groups
- Other third parties involved.
- **3.3.** Where applicable, outline any links you have developed with other actions.

The sustainability of the project initiatives will depend on the ability of the Sri Lankan disaster management sector to develop tools that are necessary for practitioners to use building guidelines and building codes. Architectures and civil engineers may not have an in depth understanding on the disaster risk reduction. Therefore a simplified risk indicator should be provided to them and National Risk Profile is the only way to accomplish the said objective. The initiative supported by the project to agree on methodologies to develop the hazard profiles for main disasters occurring in the country was the first step towards developing a national risk profile. Another UNDP managed disaster risk reduction project titled "Strategic Support to Operationalize the Road Map in Sri Lanka" which is supported by the Bureau for Crisis Prevention and Recovery of UNDP will support the risk profile development process in Sri Lanka till year 2011.

Furthermore the DMC will develop budget proposals for the government budget in 2011 based on the risk reduction retrofitting plans developed under the project. In addition to that Priority Implementation Partnership project implemented by the Asian Disaster Preparedness Centre, Thailand and the Disaster Management Centre in Sri Lanka on the strategies to incorporate building guidelines in national policies has linked up with the NCRBG established through this project.

# 4. Performance Monitoring Table

S#	Outcome / Output Indicator	Baseline Value	Cumu	ılative	Quarter -1		Quarter -2		Quarter -3		Quarter -4	
			Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
3.1.1w	All new infrastructure development plans in health and education sectors of Eastern and Uva provinces incorporate DIA recommendations		1	1	0	0	0	0	1	0	0	1
3.1.1x	No. of schools and hospitals in Eastern and Uva provinces strengthened to reduce vulnerability against key natural disasters through other organizations		1	0	0	0	0	0	0	0	1	0
3.1.1y	Infrastructure development plans formulated for 40 schools in selected provinces		40	30	0	0	20	0	20	0	0	30
3.1.1z	Infrastructure development plans formulated for 10 hospitals in selected provinces		10	10	0	0	0	0	10	0	0	10
1.1.1m	No. of Infrastructure Plans implemented for schools and hospitals by provincial councils of the selected provinces through the government and other organizations		1	0	0	0	0	0	0	0	1	0

4.1. Means of Verification (MOVs) (It is mandatory to attach MOVs against the reported indicators, during the project time-period, therefore please provide MOVs against each indicator, as described in the table below)

Ind. #	Unit	MOVs
3.1.1w	Infrastructure development Plans with	
	DIA recommendations	Annexure 1- Copies of Infrastructure Plans
3.1.1x	Schools and hospitals	Annexure 2- List of schools and hospitals where vulnerability reduced against key natural disasters
3.1.1y	School Infrastructure development Plans	Annexure 3- A sample copy of a School Infrastructure Plan
3.1.1z	Hospital Infrastructure development	Annexure 4- A sample copy of a Hospital Infrastructure Plan
	Plans	
1.1.1m	Infrastructure Plans implemented	List of provinces where infrastructure plans implemented- Not achieved

# 5. Annexure

- Any other publications / significant documents which, is not part of the MOVs above
- Any other printed material developed and utilized during the project time frame (Newsletters, broachers, leaflets etc.)

Name of the contact person for the Action: Mr. Ananda Mallawatantri

Signature: .....

Location: UNDP, Colombo