### Safer Education

# **Mainstreaming Disaster Risk Reduction in the Education Sector in** Cambodia

Cambodia

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Support to Implementation of Hyogo Framework for Action through Mainstreaming of Disaster Risk Reduction into Development Planning and Implementation: Advocacy and Priority Implementation Partnership in the Education Sector in 3 South East Asian **RCC Member Countries** 

Under the Regional Consultative Committee on Disaster Management (RCC) Program on Mainstreaming Disaster Risk Reduction into Development in Asia

implemented by



Ministry of Education. Youth and Sports (MoEYS)



National Committee on Disaste Management (NCDM)







Asian Disaster Preparedness Center (ADPC) with support from



European Commission Humanitarian Aid department





The Regional Consultative Committee (RCC) on Disaster Management under its program on Mainstreaming Disaster Risk Reduction into Development (MDRD) has identified Housing, Health, Infrastructure, Agriculture and Education as priority sectors to initiate mainstreaming disaster risk reduction (DRR). In the RCC, which comprises heads of the National Disaster Management Offices of 26 Asian countries, members had submitted expressions of interest to initiate mainstreaming DRR into particular sectors depending on the development priorities of their country. The National Committee for Disaster Management (NCDM) of Cambodia expressed their interest in taking up a priority implementation partnership (PIP) to mainstream DRR in the education sector by incorporating DRR into the educational curriculum and promoting hazard resilient construction of schools. Cambodia's Ministry of Education, Youth and Sports (MoEYS) has led the Mainstreaming DRR in the Education Sector (MDRD-EDU) project, together with the NCDM, ADPC, and UNDP with support from the European Commission on Humanitarian Aid department (ECHO). The MDRD-EDU project has already been implemented in two phases: Phase I from January 2007 to April 2008, and Phase II from September 2008 to December 2009.

Cambodia is at risk from flooding, typhoons and drought. Significant impacts on the

education sector are caused by flood and typhoon disasters in particular; school buildings are damaged, regular teaching is disrupted for long periods, teachers and students are killed and injured, and students drop out. For example, the Mekong floods of 2000 resulted in hundreds of children drowning, at least 1,000 schools being damaged, and around 500,000 students being directly affected by the severe flooding; and during Typhoon Ketsana in September 2009, 1,170 schools were affected. The costs of overall school rehabilitation in 2000 were estimated around US\$ 16.8 million. However, disaster risk issues are not generally considered when school buildings are reconstructed after disasters and so in many cases they are damaged again during later disasters.

Generally, children most are the vulnerable group during disasters, but teaching DRR in schools helps to raise awareness and understanding of not only children and teachers, but of their families and communities as well. Losses from disasters can be reduced by children knowing about disaster risk. At the same time, investing more in strengthening school-building structures before disasters take place will help to reduce long term costs, protect children, and ensure educational continuity after disasters.



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Data from the NCDM and World Food Program (WFP) show that about 21% of schools in Cambodia are situated in floodprone areas; this accounts for approximately 1,886 schools, 846 of these are lower secondary schools. A component of this project was the research and publication of the study Mainstreaming Disaster Risk Reduction in the Education Sector in Cambodia (below) and was carried out to determine the impacts of disasters on the education sector in Cambodia and was published in 2008. Relevant stakeholders; ministries, UN agencies and NGOs were consulted during the development of the drafts and their feedback incorporated into the final output. This study suggested that DRR and safer construction of school buildings should be an integral part of the Education Strategic Plan and Education Sector Development Plan (ESDP) as well as the long term Strategic Plan of the Education Sector so

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safe schools and safe school buildings are achieved in the goals and objectives.

The study showed that during floods students are absent from school from 1.5-2.5 months and around 40-50% of total drop-out of students is due to floods.

As flooding occurs from July to December and often lasts up to 3 months, delays to study programs occur as schools are flooded and students struggle to access them. Many students have to access schools by boat at the beginning of the academic year which is more costly and takes longer. Flood is one of the factors disrupting study program accomplishment and is affecting the quality of education in Cambodia. However, before this project there was no major educational program or curriculum related to DRR in Cambodia.

Similar to DRR in the curriculum, there were no general guidelines for safer school construction before this project;

> there are no standards specifications or building for construction from Ministry the of Land Management, Urban Planning and Construction (MoLMUPC), or the MoEYS; SO most schools were built without any compliance to acceptable standards. The typical school building plan and technical specifications that were in use before this project were only developed and compiled as guidelines during the implementation of the Asian Development Bank (ADB) funded Emergency Flood Rehabilitation Project (EFRP) during 2001-2003 and the World Bank funded Flood Emergency Rehabilitation Project (FERP) during 2001-2004. Given this situation in the education sector in Cambodia. the MDRD-EDU project was initiated in January 2007.

Mainstreaming Disaster Risk Reduction in the Education Sector in Cambodia

Integrating Disaster Risk Reduction in the School Curriculum Impacts of Disasters on the Education Sector School Construction: Current Practices and Improvements Needed

April 2008



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**Key Results** 

### Formation of a Technical Working Group (TWG) and engagement with the Education Sector Working Group (ESWG)

There has been close collaboration with key stakeholders in the implementation of this project. A Technical Working Group (TWG) was formed at the beginning of the project to implement the project activities and meet before activities to identify and finalize details. Members of the TWG come from the National Committee on Disaster Management (NCDM) and the Ministry of Education, Youth and Sports (MoEYS). During Phase II of the project, the TWG was expanded to include the National of Teacher Training and the Department of Construction, both under the MoEYS. The TWG is led by the Undersecretary of State, MoEYS. The TWG meetings are chaired by the Focal Person of the MoEYS who is the Director of the Department of Curriculum Development.

### Development of DRR curriculum materials

The MoEYS and the TWG decided that integration of DRR topics into subjects already taught would be more effective than creating a new subject; it was felt that this approach would make it easier for the children to understand the subject. Thus, student modules containing DRR related topics have been developed for Grade 8 in the subjects Earth Science and Geography. The DRR student module for Earth Science and Geography covers: hazards, particularly flood, storm, drought, earthquake, and volcanic eruption; prevention/mitigation and safety measures, i.e. what to do before, during and after each type of hazard.

Members of the expanded TWG	
Under-Secretary of State, MoEYS	MoEYS, National Teachers Training Institute
MoEYS, Department of Curriculum Development	MoEYS, Department of Secondary Education
NCDM	MoEYS, Department of Construction
ADPC	

The TWG has led the engagements with the Education Sector Working Group (ESWG) in the country, promoting the integration of DRR in the broader education agenda of the country. The ESWG in Cambodia provides coordinated development partner support to the implementation of the Education Strategic Plan (ESP), the Education Sector Support Programme (ESSP), and the Education for All (EFA) Plan in the country. There are two important monthly meetings facilitated by the ESWG: the monthly ESWG meeting which is for development partners or members, namely, USAID, AusAID, JICA, WB, ADB, ECHO, SIDA, and Belgium Cooperation Agency. The Chair of this meeting is UNICEF and the co-chair is UNESCO. A bi-monthly meeting called the Joint Technical Working Group (JTWG) is led by the MoEYS with development partners and other relevant government ministries in attendance.



IEC material – poster about flooding

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DRR of the curriculum materials into the National Curriculum and into the Teachers' Training system. The MoEYS issued an order to all heads of the MoEYS in all provinces and districts to disseminate the curriculum "Mainstreaming on **Disaster Risk Reduction** Concept" into the lower secondary level in accordance with development the strategy of the New Millennium and Rectangular Strategic Plan of the Government Royal of Cambodia which would ensure the safety and security of both current and future school children.

#### A Teacher's

Guide was also developed to enable the teachers to deliver the DRR student modules/lessons effectively. The guide gives suggestions on the time for each lesson, material to be used, activities for the students and teaching methodologies. Existing IEC (Information, Education and Communication) materials of NGOs working on DRR in the country were reviewed and used as the basis to develop six posters as teaching aids. The posters are: 1) what to do before floods; 2) what to do to protect children during floods; 3) what to do after floods; 4) drought; 5) fire; 6) do's and don'ts to prevent fire.

NGOs working on DRR contributed to the development and enhancement of these DRR curriculum materials. They participated in the workshops, provided comments and inputs on the draft materials and acted as resource persons for a number of lectures/sessions. Among the NGOs who constantly assisted the TWG and the MoEYS during the conduct of activities were: ActionAid, Plan-International, Oxfam-America, Oxfam-GB, World Vision, World Lutheran Federation, and the Church World Service; as well as the Cambodian Red Cross and the Danish Red Cross.

The Minister of the MoEYS has approved and endorsed the use of the DRR module, the Teacher's Guide, and the teaching aids in the country. This is an initial but significant step in the institutionalization

### Training of teachers and trainers and pilot testing (ToT)

A training of teachers and trainers (ToT) was held to orient and enable teachers and teacher trainers to use the DRR curriculum materials for Grade 8. The training was also attended by provincial and district education officers, and school principals of the pilot schools. The training provided guidelines for writing lesson plans, participants practiced teaching in the classroom in a simulation exercise; feedbacks on teaching techniques and methodologies in the delivery of the DRR modules were provided by the school officials, teacher trainers, and TWG members.

Over 1,200 students were taught the DRR module during the pilot testing in Prey Veng, Kratie, Takeo, and Kandal provinces, covering Phase I and II of the project. Teaching of the curriculum material on DRR has been carried out with a range of teaching methods, including the use of songs, competitions, posters and plays. Teaching of the DRR module was monitored by curriculum specialists from MoEYS, the NCDM focal point, TWG members and school principals. In Phase I, based on the comments from the monitoring, some lesson plans in the Teacher's Guide were revised and a more enriched student module has been produced in Phase II.

### Development of Curriculum Framework Plan for integrating DRR in all grades

The integration of DRR in the entire National Curriculum of the country was recognized as an important strategy in ensuring the safety of the education sector in Cambodia. As such, it was recommended by the TWG that a Curriculum Framework Plan for DRR integration should be articulated to guide the MoEYS in taking steps towards the full integration of DRR in all primary and secondary grades in the country.

A workshop was held in December 2009 to review the current curriculum and identify appropriate DRR topics for integration in appropriate subjects from primary to secondary grades. The hazard related contents of the current subjects in all grade levels were identified. From this, corresponding DRR topics were recommended for integration in selected subjects. The Curriculum Framework Plan aids the MoEYS towards prioritization of DRR curriculum materials/modules for development for specific grades in view of full DRR integration in the National Curriculum. It also assists donors in understanding the priority needs of the MoEYS with regard to mainstreaming DRR in the country's curriculum.

## Integrating hazard resilient school construction features

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The need for improved hazard resilience of school construction was identified as a priority by the national government. The MoEYS Department of School Construction, together with ADPC, formed a Technical Working Group to develop the country's school construction guidelines which incorporates hazard resistant features. Donors and representatives from other relevant agencies participated in meetings and the national workshop to develop, review and enhance the draft guidelines. The review-workshop of the school construction guidelines was held, with the participation of donor agencies such as the WB, ADB, and JICA, in addition to provincial and national engineers and technicians from the MoEYS from the national to the provincial level. The involvement of the donors in the workshop and interviews to develop the guidelines enables the adoption of the document by the donors when it is approved. The newly developed school construction guidelines shall be submitted to the Minister of Education for approval.

### WAY FORWARD

Significant progress has been made in mainstreaming disaster risk reduction into the education sector in Cambodia. The implementation of the MDRD-EDU program has demonstrated the need to upscale, consolidate and disseminate the activities in the region, thus further activities are proposed to do this. Based on lessons learned from previous phases and recommendations following evaluations, the proposed activities for an additional phase are outlined below.

### Institutionalization within the Education sector

Emphasizing DRR in the broad national education agenda of the country ensures the integration of DRR into the education sector. Therefore, supporting the MoEYS and the ESWG on integrating DRR into the Education Sector Plan can ensure the institutionalization of DRR in the education sector. The partnership between the ESWG and the TWG is very important for this objective and Cambodia is reviewing their Education Sector Plan in 2010.

### **Teacher Training System**

There is a need to strengthen the Teacher Training System to deliver DRR curriculum materials. The capacities of the teacher-trainers need to be strengthened for technical understanding of hazards, and prevention and mitigation measures. Capacity also needs to be strengthened on the teaching and pedagogical strategies and skills used to effectively deliver the curriculum materials to their students. considering varied learning intelligences of students and other factors such as gender and disability.

### Further DRR module and Curriculum Framework Plan

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It is recognized by the experts of the Department of Curriculum Development that it is essential to upscale the DRR module development to another grade in secondary school; this is reflected in the recommendations in the Curriculum Framework Plan. Secondary education consists of three grades in Cambodia and DRR topics have been introduced into one grade so far, thus Cambodia has expressed the need to expand the teaching of the DRR topics to one more grade in secondary school. This action would add to the continuity and also to the costeffectiveness of the MDRD-EDU program. The Department of Secondary Education is now responsible for developing a DRR module for Grade 7. The Curriculum Framework Plan for DRR integration also recommends further development of curriculum materials for one grade in primary education.

### Implementation of hazard resistant school construction guidelines

Support is needed to obtain approval of Cambodia's school construction guidelines. Following this, support will be needed to train technical officers from various stakeholder groups engaged in school construction on the use of the guidelines as well as on technical knowledge and skills in incorporating hazard resilient features and measures to ensure safe schools in the country. Raising awareness of officials from the department responsible for the construction of new schools, and the ministry responsible for preparing annual budgets, needs strong advocacy to bring a shift in focus from disaster response to investing in disaster resilient construction for long-term sustainable development. There is also a need to link DRR and safer school construction with the longterm Strategic Plan, which needs to be addressed by the senior policy makers of the MoEYS.

#### Training and knowledge sharing

The project aims to conduct a regional knowledge sharing forum among the three partner countries (Cambodia, Lao PDR and the Philippines) and all other DIPECHO funded South-east Asian countries on their experiences and lessons learned in promoting safe schools to further build capacities of those involved. A regional training course on mainstreaming DRR in the education sector is also recommended to be conducted as a final consolidation activity of this project.

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ADPC 2010

#### **Regional Consultative Committee** on Disaster Management (RCC)

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The RCC comprises of members who are working in key government positions in the National Disaster Management offices of countries of the Asian region. To date, 26 countries are represented by 30 RCC members from the Asia and Pacific regions, namely, Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, Georgia, India, Indonesia, Iran, Jordan, Kazakhstan, Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand, Timor Lesté and Vietnam.

#### **RCC Program on Mainstreaming Disaster Risk Reduction into** development Policy, Planning and Implementation in Asia (RCC MDRD)

A key priority identified by the RCC is the integration of DRR into development process. To initiate action on this agreed direction, the RCC program on Mainstreaming DRR into development policy, planning and implementation (MDRD) was launched at the 4th RCC meeting in Bangladesh in March 2004. The RCC 5 adopted the Hanoi RCC 5 statement on Mainstreaming DRR into Development in Asian countries which prioritizes mainstreaming of DRR to be initiated in national development planning process as well as sectoral development. It identified priority sectors namely Agriculture, Education, Health, Housing and Infrastructure for mainstreaming of DRR. The program has five components for implementation:

- 1. Partnerships for mainstreaming disaster risk reduction into National Development Planning processes;
- 2. Priority Implementation Partnerships (PIP) on mainstreaming disaster risk reduction into sector development;
- 3. Advocacy for Building awareness and political support for mainstreaming disaster risk reduction into development policy and planning;
- 4. Knowledge management platform for mainstreaming disaster risk reduction: Showcasing good practice and lessons learned; and
- 5. Capacity development for mainstreaming of disaster risk reduction into development of national and sectoral ministries, technical institutes, private sector and NGOs in RCC member countries.

This document highlights the experience of undertaking a Priority Implementation Partnership (PIP) on Mainstreaming DRR in the Education Sector in Cambodia, implemented by the Ministry of Education, Youth and Sports (MoEYS), together with the National Committee on Disaster Management (NCDM), Asian Disaster Preparedness Center (ADPC), United Nations Development Programme (UNDP), and with support from the European Commission Humanitarian Aid department (ECHO).