



Ministry of Food and Disaster Management  
Comprehensive Disaster Management Programme



**UKaid**  
from the Department for International Development



# Disaster risk in public education system in Bangladesh

**Dr. Mahmudul Islam**

# DRR Education: Background

- Public sectors officials posted for different disaster management tasks
- Responsibilities as disaster manager have experienced at some times in their careers on impact of flood, tornado or cyclones
- They may not necessarily have the broader knowledge, skills set and experience required to enable them to drive strategic whole government risk reduction initiatives.  
-----They were targeted to provide trainings to carry out existing/future tasks.

# DRR Education: background

In view of the longer term vision

- It is important to strengthen the competency (*knowledge, skills and attitude*) of the peoples working in the national government system
- Hence a ‘**Learning and Development Strategy**’ of MoFDM has been drafted and substantial progress has been made in implementing the activities under the strategy
- To help **institutions and communities** by developing curricula and pedagogy that will give students the skills and knowledge to live and work sustainably.

# **DRR Education: objectives**

- 1. Support to provide professionals in sectoral ministries & departments for drafting and finalizing disaster management plan(s), guidelines, and carrying out activities to integrate DRR in agriculture, infrastructure, health, local government, environment and forest sectors.**
- 2. Support to National Curriculum and Text Book Board (NCTB), public and private universities, and research institutes (under DM education, research and training network) to strengthen the capacities to incorporate risk reduction issues in existing courses, degree programme and to introduce new courses and carry out research initiatives**

# DRR Education: objectives

3. Support to public and private training institutes and academies for **strengthening their capacities to incorporate risk reduction** in existing training programmes, courses, and to introduce sector specific new training courses for different cadre services, NPO and NGOs
4. Development of **e-learning tools and techniques** on disaster management

# Strategies: DM Education

- Design, develop and Introduce
  1. *Include in text books from elementary to secondary*
  2. *Prepare and introduce supplementary books, exercises, drills*
  3. *Certificate courses (Short and Long)*
  4. *Diploma degree for different public an private Universities*
  5. *Bachelor degree Course on DM*
  6. *Master degree course on DM*
  7. *General course on DM for all degree progarmme*
- Review existing course and incorporate new risk management topics in the courses
- Identifies hydrological, meteorological, climatological and geological research areas/theme for disaster management for the universities and research institutions

## **Why should education intuitions take DRR Education Seriously?**

- **To educate citizen on hazards (natural and human induced) and climate change risk and disaster**
- **Engagement with major global/national issues**
- **Transition to a low carbon economy**
- **Educate tomorrow's leaders, citizens and employees**
- **Marketing and recruitment (student interest)**
- **Build on existing expertise**

# DRR issues in Bangladesh education text books

Class	Text	Title	Subject matter	Remarks
V	<ul style="list-style-type: none"> <li>•Bangla</li> <li>•English</li> <li>•General Science</li> </ul>	1.Cyclone 2.Improved Burner (Chula) 3.Environmental Pollution	A poetry on Cyclone	3. Reasons of environmental pollution and its impact
VI	Social Science (14 <sup>th</sup> Chapter)	Natural Disaster in Bangladesh	<ul style="list-style-type: none"> <li>•Definition of disasters and its classifications.</li> <li>•Different types of disasters.</li> <li>•Planning for disaster mitigation.</li> <li>•These chapter can be the middle chapter of the book then it get more importance</li> <li>•Importance can be on               <ol style="list-style-type: none"> <li>I)Risk prevention and Risk mitigation</li> <li>II)Preparedness.</li> <li>III)Relief and</li> <li>IV)Recovery</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>•Natural disaster gets more importance than man-made disaster.</li> <li>• Earthquake, drought, <i>tornado</i>, is difficult to understand for a student Class-VI.</li> <li>•More on preparedness and immediate response can be included to support their family members what s/he needs to do during cyclone and flood can be described.</li> <li>•Planning for disaster mitigation it is not so much important for Class VI student.</li> </ul>

# DRR issues in Bangladesh education text books

VI	English Literature	1.Fire-Human Induced Disaster 2.Drought		<ul style="list-style-type: none"> <li>•Unit 5 Help! Fire! Part 1 &amp; 2</li> <li>•Unit eight, Town and Village, No rain (part 1, 2, 3)</li> </ul>
VII	General Science	Flood, River, Bank erosion and drought in Bangladesh (24 <sup>th</sup> chapter)	<ul style="list-style-type: none"> <li>•Geographical location of Bangladesh.</li> <li>•Physical features.</li> <li>•Climate of Bangladesh.</li> <li>•Flood (Reason, Devastation, Preparedness and mitigation).</li> <li>•Causes and effected areas, mitigation of drought and river bank erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Pictorial demonstration is absent for flood, River bank erosion, and drought.</li> <li>• A figure can be included why the geographical location of Bangladesh is so vulnerable.</li> <li>• Affected areas can be shown by map.</li> <li>• Mitigations options of river bank erosion and drought are too short. These could be descriptive.</li> </ul>

# DRR issues in Bangladesh education text books

VI	English Literature	1.Fire-Human Induced Disaster 2.Drought		<ul style="list-style-type: none"> <li>•Unit 5 Help! Fire! Part 1 &amp; 2</li> <li>•Unit eight, Town and Village, No rain (part 1, 2, 3)</li> </ul>
VII	General Science	Flood, River, Bank erosion and drought in Bangladesh (24 <sup>th</sup> chapter)	<ul style="list-style-type: none"> <li>•Geographical location of Bangladesh.</li> <li>•Physical features.</li> <li>•Climate of Bangladesh.</li> <li>•Flood (Reason, Devastation, Preparedness and mitigation).</li> <li>•Causes and effected areas, mitigation of drought and river bank erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Pictorial demonstration is absent for flood, River bank erosion, and drought.</li> <li>• A figure can be included why the geographical location of Bangladesh is so vulnerable.</li> <li>• Affected areas can be shown by map.</li> <li>• Mitigations options of river bank erosion and drought are too short. These could be descriptive.</li> </ul>

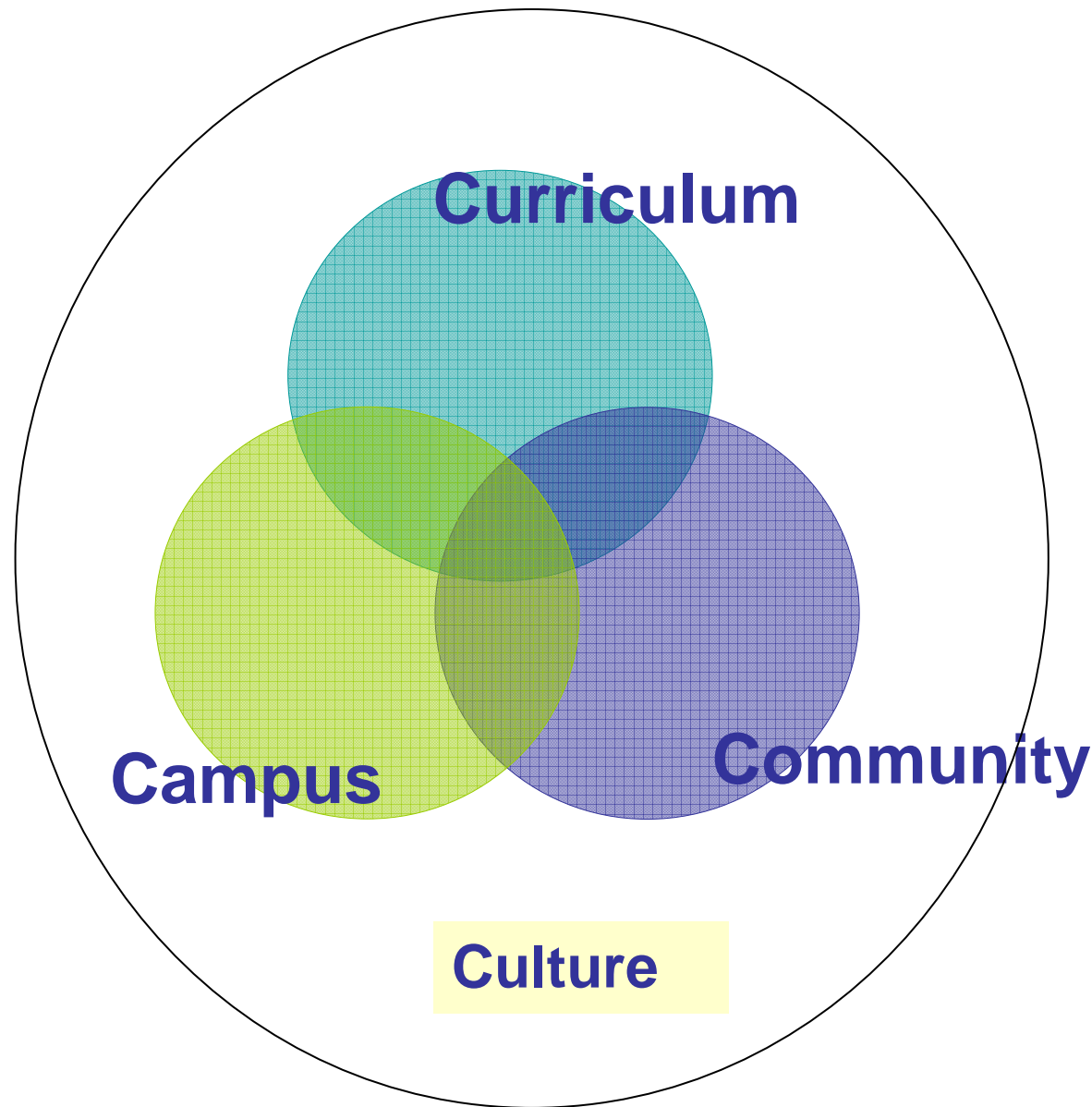
# DRR issues in Bangladesh education text books

VIII	General Science	Natural disaster: Cyclone & tidal surge. (25 <sup>th</sup> chapter)	<ul style="list-style-type: none"> <li>•Geographical location.</li> <li>•Cyclone (Formation, areas, loss)</li> <li>•Tidal surge (Causes, areas, time period, loss)</li> <li>•Diseases during disaster period and prevention.</li> <li>•Taking measures for prevention (mitigation) cyclone.</li> <li>•Warning signals has been explained.</li> </ul>	<ul style="list-style-type: none"> <li>•Too much descriptive. There are different stages of coping with cyclone and tidal surge pre, post, during and long term mitigation measures, points these can be but written in bullet form. That would be easier for students.</li> <li>•There is no figure of affected areas. The affected areas can be shown through map.</li> <li>•Experiences/information of updated disaster can be included (data and affect).</li> <li>•Earthquake vulnerability, school preparedness plan, evacuation can be included.</li> <li>•Tornado can be included here.</li> </ul>
IX and X	General Science	Disaster management and Bangladesh (21 <sup>st</sup> Chapter)	<ul style="list-style-type: none"> <li>•Objectives of disaster management (focusing on disaster response).</li> <li>•The cycle of disaster management.</li> <li>•Describe the disaster management structure beginning from National Disaster Management Council (NDMC) down to union Disaster Management committee (DMC)</li> </ul>	<ul style="list-style-type: none"> <li>•It can be discussed the pre-disaster preparedness and post disaster relief toward building back better development approach.</li> <li>•The DM cycle can be described.</li> <li>•Community based volunteer building programme and other groups of people up the community issues can be developed.</li> <li>•Students evacuation, search and rescue can be discussed and how to help the other people during and after disaster.</li> <li>•And this chapter is the last chapter of the book. X. In this chapter is on the 10<sup>th</sup> chapter then it is read by the students of class IX and X.</li> </ul>

# Why should the University take DRR Education Seriously?

IX-X	English	Mother Earth		
XI	Bengali	Disaster Prone earth: Bangladesh and the world.	<ul style="list-style-type: none"> <li>•Different types of Natural and man-made disaster.</li> <li>•Description of man-made pepercress.</li> <li>•Contribution and initiatives of United Nations in disaster management.</li> <li>•Post disaster management in our country.</li> <li>•Different steps for disaster mitigation.</li> </ul>	<ul style="list-style-type: none"> <li>•There is no description of contribution that how the student would involve themselves in preparedness and response programme after a disaster.</li> <li>•Need to include updated policy programmes.</li> <li>•Insertions with regards to HFA, the SAARC disaster management strategy (2006-2015), draft national policy on disaster management roles and responsibilities of DMB, DRR and relevant organizations can be placed in boxes.</li> </ul>
XI	Geography (2 <sup>nd</sup> part)	Rivers	<ul style="list-style-type: none"> <li>•Flood control, irrigation</li> </ul>	<ul style="list-style-type: none"> <li>•Detail water management plan for agriculture and living with flood can be included</li> </ul>
XI	Geography (1 <sup>st</sup> part)	Rivers (3 <sup>rd</sup> chapter)	<ul style="list-style-type: none"> <li>•Flood</li> <li>•Causes of flood.</li> <li>•Influence of flood.</li> <li>•Measures of flood control.</li> <li>•Govt. Measures for flood control.</li> <li>•Problems of flood control</li> </ul>	<ul style="list-style-type: none"> <li>•Detail geographical analysis of the causes of various disasters in Bangladesh, can be included Then discuss the measures taken do mitigate impact of those disaster at pre, during and post disaster phases at all levels, GOB, NGO's and community.</li> <li>•In hydrosphere part el-nino, la-nino, cyclone <i>tornado</i> formation can be included</li> <li>•Different types of natural disaster occur in the different types of climatic region. This can be hi-lighted (2<sup>nd</sup> part of climatology).</li> <li>•In the chapter of earthquake and volcano it earthquake preparedness can be included</li> </ul>
XI	Commercial Geography	Flood control and drainage	<ul style="list-style-type: none"> <li>•Definition of flood, Floods in Bangladesh, Effects of flood, Flood controlling system in Bangladesh.</li> <li>•Problems of flood control in Bangladesh, Initiatives taken by the Govt. of Bangladesh, Drainage. Initiatives taken for drainage, Salinity.</li> </ul>	<ul style="list-style-type: none"> <li>•Drought, River bank erosion and other natural disaster which have impact on the economy can be included.</li> </ul>

# Use the Four “C”s Model



# The challenge of systemic change

‘The biggest challenge for educationalists is the proposition that Education for sustainability cannot simply be added onto existing learning, but requires a *systemic change to the learning process and priorities* in education’.

*From Here to Sustainability, Real World Coalition, 2001*

# Progress: Education

- Network for Education, Research and Training developed
- Introduced **Post-Graduate Certificate courses on Leadership in diaster Management** in IUB
- Signed MoU on resource and knowledge sharing with **PSTU, KU, SUST, DU, JU, RU, MBSTU, CUET, NCTB, IUB, BRAC-U** and progress made with **BSMRAU, BUP, BRU-R** etc.
- **Expert group** formed, **DM Course curriculum is being developed** for Universities
- **BSc. in DM degree programme in 2009** (Course Curriculum is being developed and introduced in Patuakhilai Science and Technology University
- Masters course on Disaster Management in BRAC University and progress made for **Khulna University, CUET, SUST and MBSTU**

# Workshop with BCS Admin cadres (JS and UNOs)



Workshop with Joint Secretaries (BPATC and CDMP)



Workshop with BCS Admin Academy with Admin Cadres

# Training BCS Health and Education Cadre



**Training, BCS Health Cadre (BARD and CDMP)**



**Training, BCS Education Cadre (NAEM and CDMP)**

# Progress: DM Role of Armed Forces



Seminar, Armed Forces (AFD, DSCSC and CDMP)



Certificate course with Armed forces (AFD and CDMP)

# MoU Signing PSTU (left) and RDA (right)



MoU Signing with PSTU Aug 08



MoU signing in Aug 08 (RDA and CDMP)

## Consultation meetings with Professors (left) Trainers (right)



**2<sup>nd</sup> Consultation Meeting at PSTU Nov 08**



**Meeting at BARD (BARD and CDMP)**

## Partners under NDMERT

**National Curriculum and Text Book Board (NCTB), Ministry of Education**

**Armed Forces Division (AFD), Prime Ministers Office**

**University of Dhaka (DU)**

**University of Rajshahi (RU)**

**Jahangirnagar University (JU)**

**Bangladesh Agricultural University (BAU), Mymensingh**

**Khulna University (KU)**

**Patukhali Science and Technology University (PSTU)**

**Mawlana Bhashani Science and Technology University (MBSTU), Tangail**

**Shahjalal University of Science and Technology (SUST), Sylhet**

**Chittagong University of Engineering and Technology (CUET)**

**Independent University Bangladesh (IUB), Dhaka**

**BRAC University (BRAC-U), Dhaka**

**Bard Academy for Rural Development (BARD), Kotbari Komilla**

**Rural Development Academy (RDA), Sherpur, Bogra**

**National Academy for Educational Management (NAEM)**

**BCS Administration Academy, Shahbagh, Dhaka**

**Bangladesh Public Administration Training Centre (BPATC) , Savar Dhaka**

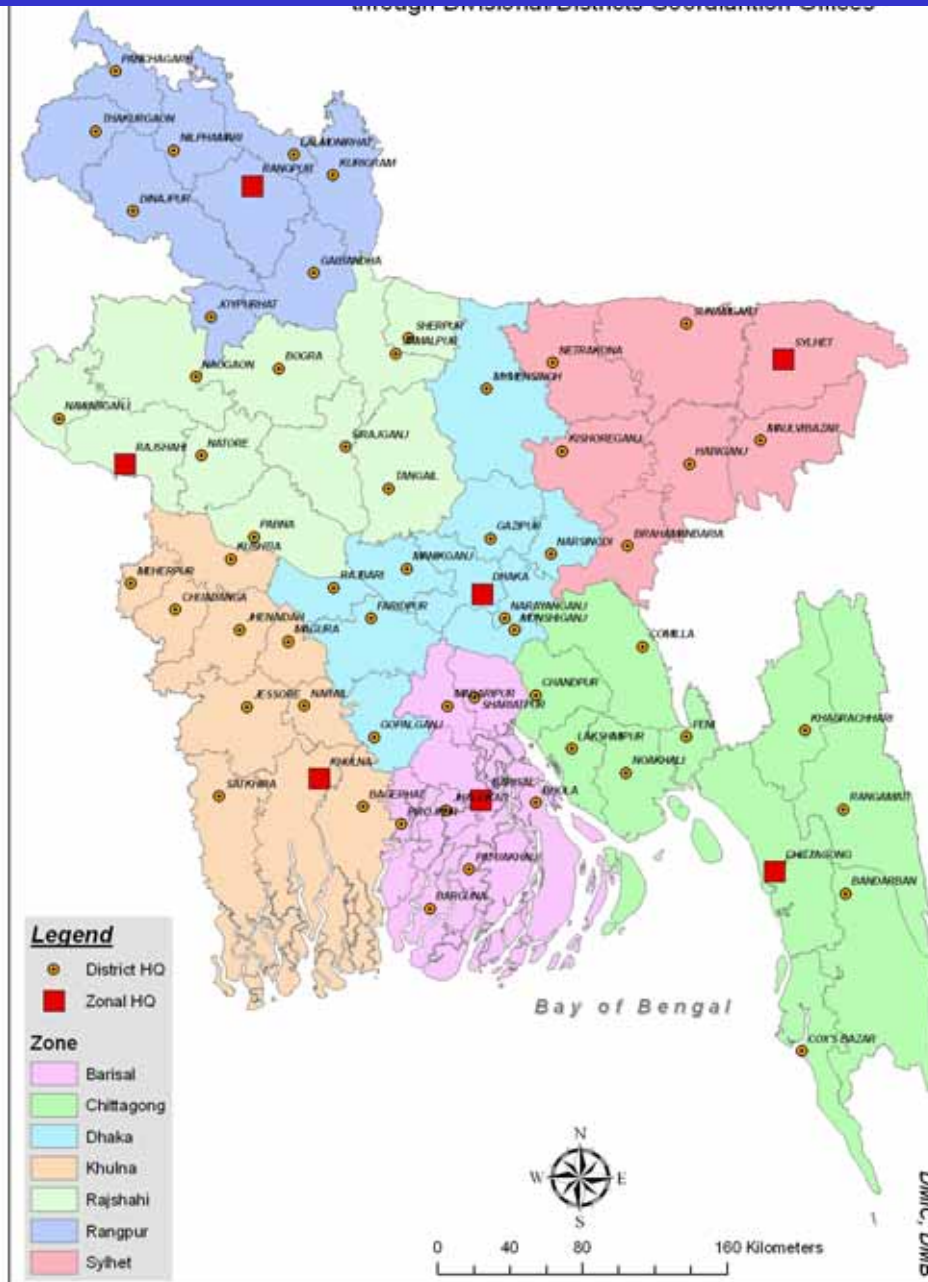
## Future partners selected

1. Bangladesh University of Professionals (BUP), Mirpur Dhaka
2. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur
3. Begum Rokeya University, Rangpur
4. Haji Danesh Science and Technology University (HDSTU), Dinajpur
5. University of Chittagong, Chittagong
6. Bangladesh University of Engineering and Technology, BUET, Dhaka
7. Jessore Science and Technology University, Jessore
8. National University, Gazipur
9. Jagannath University, Dhaka
10. Bangladesh Ansar Academy, Safipur, Tangail
11. Bangladesh Police Academy, Rajshahi
12. National Institute of Local Government, NILG, Dhaka
13. Imam Training Academy, Dhaka
14. Teachers Training Colleges, National University
15. Youth Training Centres (whole Bangladesh)
16. Academy for Planning and Development, Dhaka
17. National Academy for Primary Education, Dhaka
18. National Institute of Preventive of Social Medicine, Dhaka
19. National Institute of Public Health and Nutrition, Dhaka
20. Barind Multipurpose Development authority (BMDA), Rajshahi

# ***Tornado in education materials in Bangladesh***

- The hazard tornado has been placed in many part of the elementary and secondary education materials,
- the description of tornado hazard and disaster and preparedness for tornado has been discussed in the new “public preparedness for disasters’ on *Ghurnijha o Abohawar notun satarka Sanket abong gono Durjug Barta*”- New Warning signals for Cyclone and Weather and Disaster News-published by Disaster Management Bureau.
- The issue tornado also placed in National Disaster Management Plan and other education and research issues.

# Network for DM Education, Research and Training



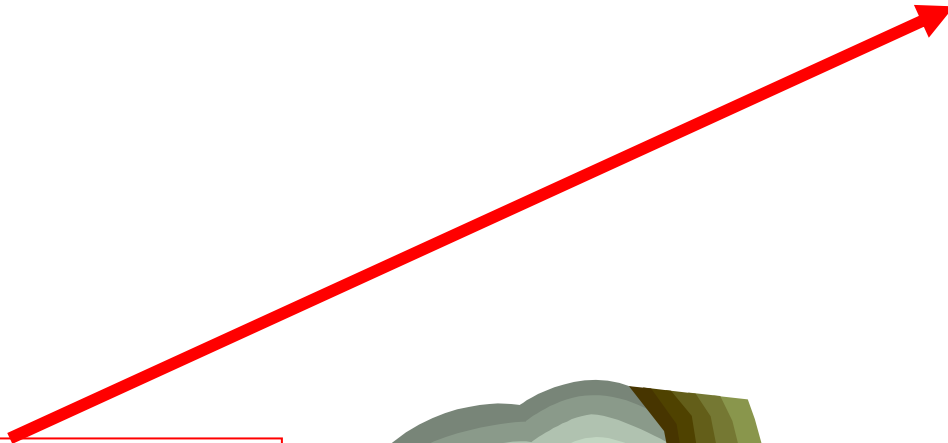
1. **Rangpur**: UN sub-Offices, Begum Rokeya University, Rangpur. RDRS, HDAU, Dinajpur
2. **Rajshahi**: Rural Development Academy (RDA), Bogra; Rajshahi University and BMDA
3. **Khulna**: Khulna University, Jessore Science and Technology University
4. **Barisal**: Patuakhali Science and Technology University (PSTU),
5. **Dhaka**: Dhaka University, BUET, BAU, BPATC, BCS Admin Academy, NAEM, AFD Jahangirnagar University; Mawlana Bhashani Science and Technology University, Tangail, BSMRAU, GAZIPUR
6. **Sylhet**: Shahjalal Science and Technology University (SUST), Sylhet,
7. **Chittagong**: Bangladesh Academy for Rural Development (BARD), Chittagong University of Engineering and Technology (CUET), Chittagong University (CU)

# From here to there...

Relief &  
Rehabilitation



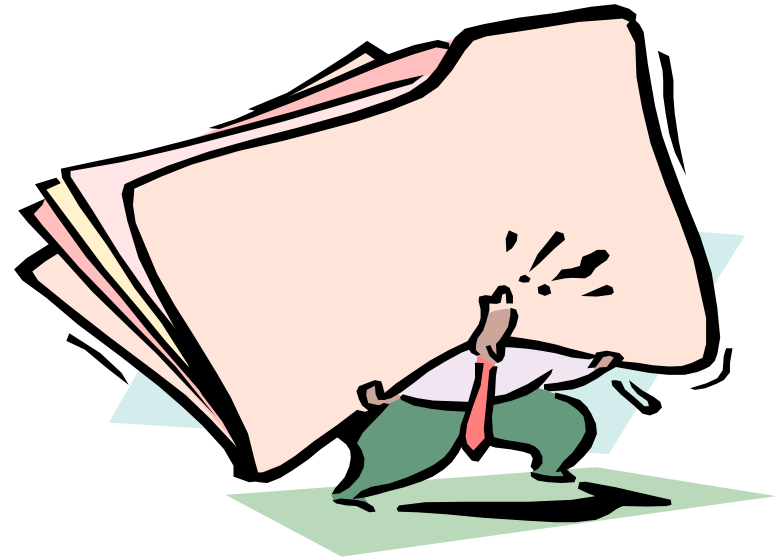
Comprehensive Risk  
(disaster)  
management



# Barriers

## *Cited factors*

- Crowded curriculum
- Sorting Irrelevance materials
- Limited staff awareness and/or expertise
- Limited institutional commitment
- Limited commitment from external stakeholders
- Too demanding



## *Types of barriers*

- **Paradigmatic/psychological**
- **Policy/purpose related**
- **Structural (governance, compartmentalisation etc)**
- **Resource/information deficiency**

# Way forward

- **Continue the support to the existing partners on course curriculum, capacity enhancement and research**
- **Develop e-learning tools**
- **Increase numbers of partners**
- **Engage them in Disaster Preparedness and response network**

# Thank you all



Ministry of Food and Disaster Management  
Comprehensive Disaster Management Programme



UKaid  
United Kingdom for International Development

