



## **ENHANCING DISASTER RESILIENCE EDUCATION in ASIA**

Sandpit event discussion and reporting

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## Sandpit event discussion and reporting template ENHANCING DISASTER RESILIENCE EDUCATION in ASIA

The sandpit began with a clarification of terms and scope with the following questions:

- 1. What do we mean by "education"? There can be different forms.
- Depends on the stakeholder if local community then informal will work; if universities then it becomes more formal
- Local level stakeholders: households; simple (ex. guidebooks, protocols)
- University degree programs for career (structured)
- Open to exploring
- Need to identify target beneficiaries (ACTION POINT)
- 2. What is the scope of "disaster resilience education"?
- Also depends on the stakeholders (including methods of assessment)
- (Clarification: conceptual framework how do we define risk)
- basic: any form of education should define "resilience" & "disaster resilience"
- basic: define the different types of hazards & disasters
- basic: theory → application (even emergency response should understand why they are doing it)
- Objectives, outcomes of programs
- Researchers: how effective are educational programs (action research)
- Technical competencies: prediction, preparation, preparedness, risk index, mapping (RS-GIS)
- Lessons learned from previous disasters, best practices, for improvement
- How to measure resilience (quantitative or qualitative)
- Limited tools to measure, how to develop?
- How do we know that education is making a difference in building resilience?

Each university then shared what disaster resilience education programs they are currently offering, and what else they would like to offer (but do not have yet), including the potential form, content and target audience. This was followed by a grouping of common answers and brainstorming on specific actions that can be taken.

Based on the brainstorming, 3 proposals were developed for activities under the heading of enhancing disaster resilience education in Asia. These proposals represent short-, mediumand long-term actions, but all with activities that can be implemented or at least started within the CABARET project. These proposals are also relevant to WP6 (exchange plan) and WP7 (online courses). They are:

- 1. Extension events for CABARET meetings
- 2. Exchange Program for Capacity Building with Engineering Track and Disaster Science Track
- 3. Research Proposals for Disaster Resilience/DRR Education





Title	<ul> <li>Extension Event for Cabaret Meetings (1/2- 1 day)</li> <li>Conference and mentoring sessions with researchers, practitioners, and students</li> <li>Industry Open Event or Technology &amp; Innovations Showcase</li> </ul>
Research area	Potential participants will be informed of a theme(s) beforehand to organize mentoring sessions and showcase
Group members	Philippines: Kendra Gotangco, Cris Lopez, Abby Favis (Ateneo), Mario de Leon (DLSU) Maldives: Fathmath Shadiya, Maryam Humra (Maldives National University) Sri Lanka: Chamal Perera (University of Moratuwa) Indonesia: Mais Dewo (University Andalas)
Scope of the challenges relevant to the sandpit	Sandpit event explored scope by defining the potential forms of "education" (e.g. formal: degree program, certificate course etc; or informal: community workshops); and the potential content of "disaster resilience education". It was agreed that the selection of form and content will depend on the target stakeholders.  For this particular sandpit proposal, the targets are DRR faculty, students, practitioners and potential industry partners. It is envisioned that this event will be implemented in conjunction with each of the succeeding CABARET meetings to have more involvement of and impact in host country.
Problems and challenges identified by group members	Expertise needed:  For Showcase - engineers, architects, materials design  For Mentoring - CABARET experts + local experts  Challenges: logistical, coordination, financial to support additional participants, getting industries to get involved (can host university provide the venue as counterpart support?) → scale will depend on how much funding support is available
Proposed activities with time frames	<ul> <li>What activities are you proposing to address this problem or challenge?         <ol> <li>Ask next host (Myanmar/Philippines/Indonesia) if they are willing to build the event into the program (see if CABARET can support)</li> <li>The host will organize (secure industry partners, etc.)</li> </ol> </li> <li>Timescale:         <ol> <li>One event for each CABARET meeting (Myanmar, Philippines, Indonesia)</li> <li>Secure decision from Myanmar by May (for implementation in October 2018)</li> </ol> </li> </ul>





	<ul> <li>Secure decision from Philippines in October ( for implementation in March 2019)</li> <li>Secure decision from Indonesia in March 2019 ( for implementation in October 2019)</li> <li>What support do you need from CABARET?</li> <li>Financial support</li> <li>Willingness of experts to mentor</li> <li>Organizational aspect</li> </ul>
Expected outputs or outcomes from the activity	<ul> <li>Extension event implementation</li> <li>Networking activity – which may lead to identifying other joint collaborations</li> <li>Knowledge exchange</li> <li>Technology transfer</li> </ul>





Title	Exchange Program for Capacity Building (A) Engineering Track (B) Disaster Science Track
Research area	Engineering cluster: Several participants of CABARET have engineering backgrounds. What formal educational programs can be developed for engineering students in HEIs?
	Disaster Science cluter: DRR requires integration of physical and social sciences, also represented by several participants of the CABARET project. What formal educational programs can be developed for these students in HEIs?
Group members	Philippines: Kendra Gotangco, Cris Lopez, Abby Favis (Ateneo), Mario de Leon (DLSU) Maldives: Fathmath Shadiya, Maryam Humra (Maldives National University) Sri Lanka: Chamal Perera (University of Moratuwa)
Scope of the challenges relevant to the sandpit	Indonesia: Mais Dewo (University Andalas)  First need to identify type of educational program (e.g. a module / intensive training within an existing course? A course / subject? A full program?) and the specific topics and needs for the students of the 2 "tracks". Materials development and capacity-building must consider both the potential "demand" from the students' side and the expertise from the CABARET participants and other potential partners.
Problems and challenges identified by group members	Depends on the topics selected for materials development and capacity-building.
	Challenges: financial (travel, accommodations, for how many participants); making sure that there is a demand or market for the program to be developed (market survey / needs assessment → can also be done during the actual visit)
Proposed activities with time frames	<ol> <li>What activities are you proposing to address this problem or challenge?</li> <li>Need roadmap for WP6</li> <li>Work out the guidelines for the exchange</li> <li>Identify the universities</li> <li>Conduct some market survey / needs assessment**</li> <li>Identify the content (may need preparatory online meetings to exchange materials)</li> <li>Identify specific modules and target materials</li> <li>Faculty exchange (Maldives → Philippines; Philippines → Maldives/Sri Lanka)</li> </ol>
	8. Determine if we need additional support for materials development / capacity-building from grant mechanisms focusing





	on higher education
	**The survey can be expanded to the whole region to explore challenges / barriers to, and opportunities for disaster resilience education in the region. The outcomes can be the basis of a journal paper and/or conference applications.
	Timescale:
	<ul> <li>Framework, MOU/MOA, guidelines for exchange by October 2018         (Myanmar meeting) → Need to consult with WP6</li> <li>Faculty exchange: Philippines, Sri Lanka, Indonesia and/or others</li> </ul>
	visit Maldives maybe around January 2019
	<ul> <li>Faculty exchange: Maldives visit Philippines in March 2019 (1-2 weeks before Philippines meeting)</li> </ul>
	Regional survey by the end of 2018 (?)
	What support do you need from CABARET?
	Financial support
	<ul> <li>Network for disseminating survey</li> </ul>
	Guidance on survey design and analysis
Expected outputs	Output:
or outcomes from	Jointly developed module/course/program or research
the activity	Research paper and/or conference presentation (on needs
	assessment, barriers opportunities for the whole region)
	<ul> <li>Potential proposals for further higher level degree program, if needed</li> </ul>



Title	Research Proposals on Disaster Resilience/DRR Education
Research area	(1) Joint research on assessing DRR education activities and outcomes → how effective? (experimental research) (quantitative)
	(2) Joint research on traditional/local knowledge and how to incorporate into DRR and DRR Education (qualitative)
Group members	Philippines: Kendra Gotangco, Cris Lopez, Abby Favis (Ateneo), Mario de Leon (DLSU)
	Maldives: Fathmath Shadiya, Maryam Humra (Maldives National University)
	Sri Lanka: Chamal Perera (University of Moratuwa)
C (1)	Indonesia: Mais Dewo (University Andalas)
Scope of the	For (1): How do we define "effectiveness" of DRR education? How can
challenges	this be measured? Indicators and assessment/measurement methods
relevant to the	may be country- and stakeholder-dependent. How to implement the
sandpit	project? Either (a) Choose a university with an existing program to assess
	and/or (b)Design a short course and assess before/after
	→ Some piloting might be possible under WP7
	For (2): Who are the participating countries? What are the
	commonalities vs. differences in culture, traditions, local knowledge of
	participating countries? Who are the stakeholders / communities to
	engage and how do we engage them?
Problems and	Terminology: What makes disaster resilience education "effective"?
challenges	
identified by group	Expertise needed:
members	<ul> <li>Education (can evaluate educational programs, develop the indicators)</li> </ul>
	<ul> <li>Sociologist/Anthropologist (approaches, identify communities)</li> </ul>
	<ul> <li>Policy makers (if want research outcomes to translate into policy)</li> </ul>
	Challenges: communications (given many different countries), time
	management, where to source the funding, resources for initial activities
	(situational analysis, etc.)
Proposed activities	What activities are you proposing to address this problem or challenge?
with time frames	1. Compiling the potential funding mechanisms, timetables and
with time frames	deadlines
	2. Identify stakeholders outside of HEIs to partner with
	3. Situational analysis (within participating countries)
	4. Preliminary exchanges (of Universities currently involved) as part
	of proposal development (ex. initial site visits, etc.) through
	Skype/online means
	5. Policy briefing sessions (to better understand existing policies and
	infrastructures and better recommend how traditional / local





	knowledge and practices can be integrated within that infratructure)
	Timescale:
	<ul> <li>Commence work for this after March 2019; Develop the research proposals in the last 6 months of CABARET</li> </ul>
	What support do you need from CABARET?
	Financial support
	<ul> <li>Involvement in developing the proposals</li> </ul>
	<ul> <li>Expertise (defining the research questions, accessing grants)</li> </ul>
Expected outputs	Output:
or outcomes from	3 – 4 draft proposals
the activity	Enhanced policies, guidelines
	Design for informal education





