

**SYIAH KUALA UNIVERSITY
TSUNAMI &
DISASTER MITIGATION
RESEARCH
CENTER**

Muhammad Dirhamsyah

THE TSUNAMI AND DISASTER MITIGATION
RESEARCH CENTER SYIAH KUALA UNIVERSITY

"Sharing Knowledge on Disaster Warning: Community-based Last-Mile Warning Systems"
Jakarta, Indonesia,
March 5, 2008


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**UNSYIAH for ACEH
RECONSTRUCTION +**

Unsyiah Task Force for After Earth Quake and
Tsunami, SK Number 1, Banda Aceh, January 2nd,
2005.

Memorandum of Understanding "University
Collaboration for Aceh Reconstruction – U-CARe"
Unsyiah – UI – IPB – ITB – USU, Depok, February
5th, 2005

Head of National Development Planning Board (Dr.
Sri Mulyani Indrawati), Vice Governor Nanggroe
Aceh Darussalam (Ir. Azwar Abubakar, MIM) and
Rector of University of Syiah Kuala (Prof. Dr. Ir. Abdi
A. Wahab, MSc) Jakarta, February 7th, 2005



Blue Print

Agencies
Executing ! Principle ! Assessor
Pelaksana ! Pengarah ! Pengawas

Historical Background

- Unsyiah Task Force for After Earth Quake and Tsunami, Decision Letter Number 1 - 2005, Banda Aceh January, 2nd 2005
- Decision Letter Number 024, Year 2005 concerning Development of the Tsunami Research Center,
- Decision Letter Number 215, Year 2006 Center of Mitigation
- Decision Letter Number 418, Year 2006 concerning Development of the Tsunami Research Center until now, including international advisors from Kobe University, Germany, India and Sri Lanka

Mitigation Center Strategy



National or International agencies and Non-government organizations

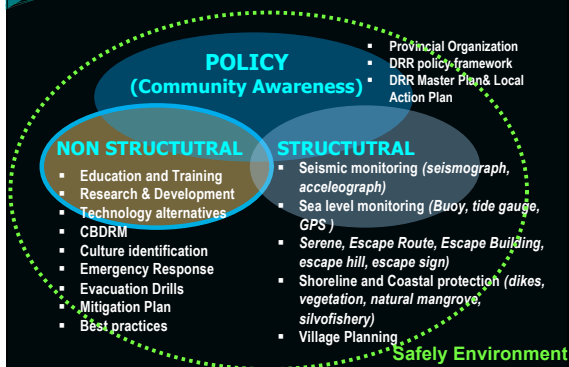
- Early detection and Mapping
- Cooperate with stakeholders
- Popular scientific writing for easy understanding
- Facilitate ToF and ToT
- Empowerment of educated people and students with good assessment scores.
- Trainees can be facilitated as mediators / explainers and disseminators of technology application.
- Academic Business Government (ABG)


AGENDA OF CENTER

Undertake the following phases:

- Carrying of disposary of data and knowledge (Disaster Management Information Center)
- Actively participate in the rehabilitation of Aceh Society
- Research, synthesize and disseminate knowledge related to the Tsunami and other disasters
- Participate in capacity building to develop sustainable conditions for disaster risk reduction
- Treat benchmarks and leave a tsunami legacy for future generations.

DRR Frameworks





Multidisciplinary center dedicated to disaster risk reduction from Tsunami, earthquakes and other disasters and to the contribution of a safer society and the development of Tsunami legacy for future generations.

2006

2007

Cooperation: Kobe University, BRR, Hyogo Prefecture, ITS, SDC-Netmarandi, Nagoya University, Kyoto University, Fuji Tokoha University, ADRC, etc.

Research Center for Tsunami and Disaster Mitigation, Ph.D. 2008

- Explore and simplify
- Lesson learned
- Integrated & sustainable
- Help communities
- Place for the researcher who care of disasters
- Explore and transferable indigenous knowledge

2008

Research center, Training and information of Tsunami and disaster mitigation NAD

- Situated between Pacific and Indian Ocean
- NAD is the most devastated area struck by tsunami in the world.
- Integration post conflict
- Potential place for world class researchers to explore science and knowledge of Tsunami disaster
- Misi: **Multidisciplinary center dedicated to disaster risk reduction from Tsunami, earthquakes and other disasters and to the contribution of a safer society and the development of Tsunami legacy for future generations**
- Knowledge transfer to enrich discourses
- National network could be as *agent of change*
- Knowledge and experience in Indonesia will contribute on disaster discourse comprehensively

SDC Cooperation

- Tsunami Model
- Disaster Awareness
- Strategic Planning
- Disaster Campaign

Tsunami and Disaster Mitigation Research Center
Nanggroe Aceh Darussalam

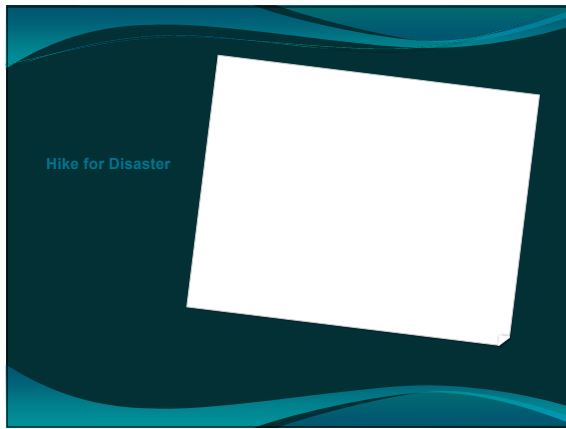
- Integrated approach to planning and risk assessment
- Achieving disaster reduction and multi geohazard preparedness
- Long-term sustainable socio-economic development

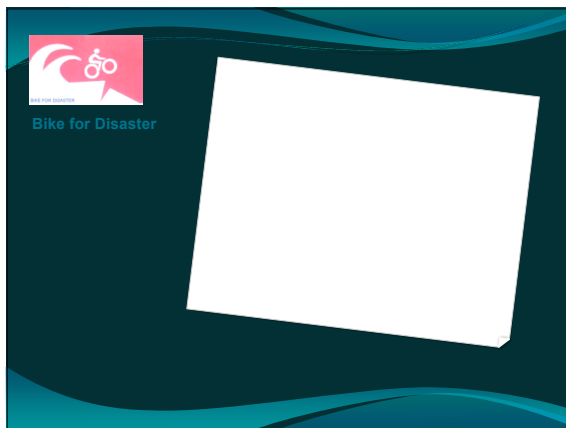


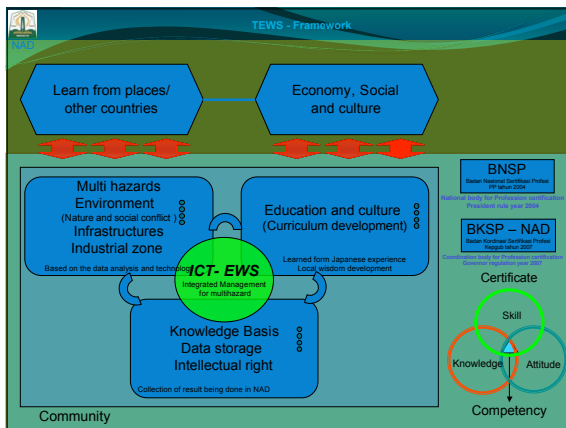
Education

(resource person) Kindergarten, elementary, primary and senior high school
January, March, June 2007. Cooperation with ADRC and Jambo Minda Foundation
Town Watching Program, Kerjasama dengan Fuji Tokoha University









Disaster Management Curriculum: Future

- There is no readymade course, needs to be customized to needs and priorities
- Start small, one short course, monitor, evaluate and grow
- Needs a policy decision in the university
- Needs cooperation of different disciplines
- Needs the outreach
- Needs also linkages with other initiatives

Short Course : Disaster Risk Management

Aksi Kerangka Hyogo

- Pengenalan (Introduction)
- Prioritas Aksi 2005-2015 (Priorities for action)
- Organisasi dan institusi Regional (Regional organizations and institutions)
- Strategi Internasional untuk reduksi bencana (The International Strategy for disaster reduction)
- Memobilisasi sumberdaya (Resource mobilization)

Natural Hazards and Disaster Risk Management

- Pengenalan (Introduction)
- Dampak dan hubungan (Impact and Linkages)
- Penilaian kebencanaan (Assessment)
- Kesiapsiagaan (Preparedness)
- Mitigasi dan pemulihan kembali (Mitigation and Recovery)

Pengurangan resiko kebencanaan

- Pengenalan (Introduction)
- Kebijakan (Policy)
- Kebencanaan Struktural (Structural – Disaster)
- Kebencanaan Non struktural (Non Structural – Disaster)
- Pembelajaran kebencanaan (Lesson Learned for Disaster)

Perencanaan kontijensi gempa bumi dan tsunami

- Pengenalan (Introduction)
- Cara pengumpulan data kapasitas lembaga (procedure for the capacity Data collection)
- Cara berkomunikasi dan koordinasi dengan institusi terkait (procedure to communicate and coordination with the related institution)
- Kajian Resiko Bencana, kapasitas dan kerentanan (Disaster risk, capacity and vulnerability)
- Reliabilitas protap dan evaluasi kesiapan pemerintah setempat (The rule of procedure and awareness the local government)

Short Course : Disaster Risk Management

Model komunikasi efektif

- Pesan masyarakat (Communities need)
- Kesan kenyamanan masyarakat (The impression of the communities satisfaction)
- Bagaimana memulai komunikasi (How we start communication)
- Identifikasi dan tukar menukar (Concerns and problems)
- Membantu perkembangan kepercayaan dan kemitraan (Foster trust and partnership between people and volunteers)

Model komunikasi masyarakat

- Appresiasi kearifan lokal (Local wisdom appreciation)
- Diskusi (discussion)
- Kesesuaian Aturan pertukaran pada komunitas (The suitable rule for communities exchange)
- Tukar menukar ide dan aksi (Ideas and action interchangability)
- Meningkatkan kapasitas masyarakat (Enhance community's coping capacity)

Environmental Impact of Disaster

- Dampak kepada lingkungan (Effect to the environment)
- Areal pemukiman dan pertanian (community and agriculture area)
- Ekosistem hutan termasuk Air permukaan danau/sungai (forest ecosystem include the water level for lake and river)
- Ketahanan pangan (Food security) dan epidemiologi
- Sanitasi and health include waste quality (Sanitasi dan kesehatan termasuk kualitas air)

Emergency Response

- Evakuasi (Evacuation - SAR)
- Respon medis dan pengaturan logistik (Medical response and Logistic)
- Kesiapsiagaan transportasi - protokol (Transportation preparedness - protocols system)
- Komunikasi (Communication -infrastructure and procedure) → crisis center
- Tempat pemukiman sementara (Temporary shelters)

Short Course :

Disaster Risk Management

Crisis Command and Control

- Identifikasi skenario
- Kompetensi penggunaan peralatan
- Kompetensi penggunaan software
- Keahlian dalam berkomunikasi
- Diskusi
- Uji skenario dan implementasi

Disaster Law

- Hak dan kewajiban
- Kewenangan lembaga yang berkompeten
- Penjelasan struktur kebencanaan
- Uji publik
- Penilaian kompetensi

Symposium on Giant Earthquakes and Tsunamis, Phuket 2008

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Lesson learned
Integrated & sustainable
Help communities
Place for the researcher
who care of disasters
Explore and transferable
indigenous knowledge

2008

Aceh Government Disaster Reduction Strategy
Muhammad Nazar, Usman Budiman and Muhammad Dirhamsyah
Royal Phuket City Hotel 22-24 Januari 2008



Thank you
Terima kasih
Terimeüeng Geunaseh
