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di

Tempat

Dalam rangka penyampaian informasi mengenai Mitigasi Bencana Gempa dan Tsunami Kota Padang salah satunya adalah penetapan peta bencana resmi untuk Kota Padang, dengan hormat disampaikan hal-hal berikut :

1. Departemen Kelautan dan Perikanan bekerjasama dengan Pusat Studi Bencana Universitas Andalas, APEC dan JSCE telah mengadakan **International Workshop on Official Tsunami Hazard Map** di Padang pada tanggal 25 Agustus 2008.
2. Workshop tersebut dihadiri oleh pemerintah Kota Padang, KOGAMI, LSM, Bapeldada, BMG, Kimpraswil, Dishub, mahasiswa dan instansi terkait lainnya.
3. Narasumber workshop domestik berasal dari Pemerintah kota Padang, Kogami, ESDM, LIPI, ITB, DKP dan BPPT. Sebagai narasumber internasional adalah Prof. Kerry Sieh (California Institute of Technology-USA), Dr. Jose Borero (University of Southern California-USA), Dr. Joern Behren (Alfred Wagner Institue-German), Dr. Stefan Schimmel (Leibniz University Hannover) dan Prof. Fumihiko Imamura (Tohoku University).
4. Hasil International Workshop on Official Tsunami Hazard Map adalah sebagaimana terlampir.

Demikian kami sampaikan, atas perhatiannya diucapkan terima kasih.



**Direktur Jenderal Kelautan,  
Pesisir dan Pulau-Pulau Kecil**

**Prof. M.Syamzul Maarif, M.Eng**

Tembusan :

- Menteri Kelautan dan Perikanan (sebagai laporan)

Daftar Lampiran :

1. Deputi Bidang Pendayagunaan dan Pemasyarakatan Iptek, RISTEK
2. Kepala Badan Geologi, Departemen ESDM
3. Direktur Jenderal Sumber Daya Air, Departemen Pekerjaan Umum
4. Direktur Jenderal Penataan Ruang, Departemen Pekerjaan Umum
5. Kepala Deputi Bidang Teknologi Pengembangan Sumberdaya Alam, BPPT
6. Direktur Jenderal Pemerintahan Umum, Departemen Dalam Negeri
7. Deputi Bidang Pengembangan Regional dan Otonomi Daerah, Bappenas
8. Deputi Pencegahan dan Kesiapsiagaan, BNPB
9. Deputi Bidang Ilmu Pengetahuan Kebumian, LIPI
10. Deputi Bidang Penginderaan Jauh, LAPAN
11. Deputi Bidang Pemetaan Dasar, Bakosurtanal
12. Deputi Bidang Sistem Data dan Informasi, BMG
13. Walikota Padang
14. Rektor Universitas Andalas
15. Last mile Project (Dr. Steffan Schimmel)
16. AWI (Dr. Joern Behrens)
17. Tohoku University (Prof. Fumihiko Imamura)
18. Japan Society of Civil Engineer (JSCE)
19. California Institute of Technology (Caltech)
20. University of Southern California (USC)

## International Workshop On Official Tsunami Hazard Map for Padang Padang, 25<sup>th</sup> of Augusts 2008

The Ministry of Marine Affairs and Fisheries (MoMAF) Republic of Indonesia, The Disaster Study Center – Andalas University, and Asia Pacific Economic Cooperation (APEC) conducted The International Workshop on an Official Tsunami Hazard Map for Padang City on the 25<sup>th</sup> of Augusts 2008. The event was conducted at the Andalas University, Padang Indonesia and was attended by the local government, the central government, NGOs, and scientists from Indonesia, German, Japan, and USA.

The objective of this meeting is to define what kind of Hazard Map that can be used as an official map in Padang.

Several notes from the key speakers whose publishing their versions of hazard map:

1. KOGAMI : They use a tsunami inundation map that is developed by Jose Borrero based on the old source-scenario input based on the megathrust studies by Kerry Sieh & Danny Hilman Natawidjaja et al. Borrero et al used the combine ETOPO 2 and the navigational charts for the bathymetry input, and used the IKONOS plus local ground survey for the topography. Jose Borrero use the MOST for the tsunami modeling.
2. DKP : Evacuation map based on inundation prediction and made based on the Same Level Approximation. The fault source mechanism is based on the estimation by Dr. Dany Hilman that is 1797 and 1833 fault source.
3. AWI : They also try similar source scenario with the ones used by Jose Borrero. However their Inundation model mainly based on many possible scenarios based on a random prediction. AWI develop their own tsunami modeling software, called TSUNAWI. To get better results, AWI requested to use the latest tsunami-source model, developed by Kerry Sieh and D.H. Natawidjaja based on their latest geological and cGPS on the Sumatran megathrust since AWI doesn't do geological research to develop their own tsunami-source model.
4. LIPI-CALTECH : Develop the models on strain accumulations and releases on the megathrust system in the west Sumatra-Bengkulu region based on their latest paleogeodetic and cGPS studies pre and post the September 2007 events. Based on this latest model, they up-dated the source model for the future tsunami event in west Sumatra and Bengkulu region. In addition, D.H.

Natawidjaja showed a preliminary tsunami model, based on this up-dated source model. The tsunami model was made by Dr.Gegar Prasetya (now at the GNS, New Zealand) using the 3DD software. This model shows the tsunami heights is likely to be more than 10 m, and the first waves arrives in Padang less than 20 minutes.

5. ESDM : Hazard map based on topographic and using bathymetry data from Smith & Sandwell. This map doesn't consider land infrastructures.

### Consensus of the meeting are:

1. All participants agree that Padang needs one best official Tsunami Hazard Map that reflects state of the arts in both the scientific source model and also topography and bathymetry data input. This map will be used as a reference for tsunami disaster preparedness.
2. All participant agree that the best available initial source model to simulate tsunami generation as well as bathymetry and topography data are essential to make an official map. Therefore, proposed numerical methods should be examined under the unified condition of source and bathymetry and topography data.
3. Prof. Kerry Sieh and Dr. Danny Hilman Natawidjaja will share their best scenarios of the possible megathrust earthquake events based on their latest studies to scientists or institutions involved on developing hazard map for Padang.
4. The Germany teams (Hanover, DLR, AWI), which is part of the "Indonesia-Germany Last-Mile Project" will contribute to share their latest bathymetric and topographic data from their surveys.
5. Development of the tsunami hazard map for Padang by scientists or institutions should consider the above points (1,2,3,4), anyone or group or institution who tries to develop a tsunami hazard map for Padang without considering the above points will not be considered as a candidate for an official tsunami hazard map.
6. There will be a follow-up meeting in order to discuss and choose the one that will be used for the official hazard map.
7. While the next-generation hazard map is under development, Padang will use an existing hazard map with the worst-case scenario from Borrero at al's model which has been being used as by KOGAMI the reference model for their tsunami inundation map.