

Geological Influence on Human History

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An earthquake of magnitude $M=9.1$ took place slightly west from the Aceh west coast (Northern part of Sumatra) on December 26, 2004. It triggered a huge tsunami. As of February 14, 2005 350.000 people are reported dead or missing. It proved again and again that Indonesia is an earthquake-tsunami prone country and that Indonesia is not ready to face a natural disaster of that dimension since an integrated and systemic mitigation program is non existent. Historical records show that since 1600 not a single century went by without an earthquake with a big tsunami occurring along the west coast of Sumatra. An integrated mitigation program on natural disasters is therefore imperative.

The natural disaster which struck Aceh will change the attitude and socio-political orientation of Indonesians, especially, the Acehnese with regards to what nature can do, and what the world community can do in terms of social-and-human solidarity. Geological and past historical records show that the Hindu Mataram state in Central Java was completely annihilated and destroyed by a gigantic paroxysmal eruption of Mt. Merapi which is situated north of present day Yogyakarta. For one century Central Java was in "darkness". Only after a hundred year a new civilization emerged, the second Mataram state which was Islamic in character. This great event was assumed to take place towards the end of the first century. Researches are underway to determine more accurately the date of the eruption which obliterated Central Java.

An international cooperation should be initiated to dig into past historical records on rapid as well as on slower geological processes which changed the course of human history.