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The Influence of Mentawai Tsunami to Public Policy on Tsunami Early Warning

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Tsunami hit Mentawai Islands on the night of October 25, 2011. All the affected are in Mentawai Municipality Administration which consists four main islands, Siberut, Sipora, Pagai Utara (North Pagai) dan Pagai Selatan (South Pagai). As the epicenter of the earthquake was south-west to the islands, the damaged areas concentrated on the west coast and became severe to the south.

From the prespective of tsunami warnings, on Mentawai event the requirements for an effective early warning were only partially fulfilled. In order for an early warning to save lifes, it should be (1) true and reliable, (2) timely and provide sufficient time evacuation, (3) able to reach every single individuals without exceptions, (4) clear and understandable, and (5) followed and obeyed. For Mentawai-case, first requirement was achieved. Some of the survivors even witnessed the running-text on television informing the potency of tsunami generating. Part of the second requirement was also effective, although due to geographical condition, time for evacuation were very limited. Unfortunately, the rest of warning requirements failed and live losses were more than 400 people.

There were two other important facts which confirmed by surveys carried out by experts shortly after the tragedy. Firstly, the earthquake was not felt very shaking, especially in comparison to nearby event on September 12, 2007 and November 30, 2009 where tsunamis were absent. This fact lead to the suprising existence of tsunami earthquake which was not recognised before in the west of Sumatera Island.

Secondly, it can also be seen in the event the absence of local wisdom in saving lifes. In the contrary to Aceh tsunami, December 2004 when local wisdom saved many lifes at Seumeulue Island, there is no such mechanism can be observed in Mentawai.

The facts above then provided important inputs for policy making process. The process was initiated by defining policy environment, its key actors and target groups and how all of these elements inter-related. Before it is formulated, the dynamics of the public policy was also considered to reduce the contradiction with the existing one. It is clear that root of the problems are the poverty in the areas which leads to high vulnerability. Therefore, government institutions are encouraged to set-up plans within their own mandates to overcome the problems should tsunami hit again in the future. A formal legal basis in the form of President's Instruction was then urgently needed to underline and emphasize the synergy among institutions to strengthened tsunami early warning in Indonesia.