

A Guideline to Incorporate Geological Hazard Information to Spatial Planning for Local Governments in Indonesia

Andiani Andiani (Indonesia) and Sulamith Kastl (Germany)

Key words: Education; Spatial planning; spatial planning; local government, Indonesia, geological hazards; guideline; mitigation; disaster risk reduction, disaster prevention, georisks, cooperation

SUMMARY

A GUIDELINE TO INCORPORATE GEOLOGICAL HAZARD INFORMATION TO SPATIAL PLANNING FOR LOCAL GOVERNMENTS IN INDONESIA

Andiani¹, Sulamith Kastl²

1) Geological Agency, Ministry of Energy and Mineral Resources Indonesia

2) Federal Institute for Geosciences and Natural Resources, Germany

Indonesia is the meeting place of three tectonic plates, namely the Indo-Australian Plate, the Eurasian Plate and Pacific Plate. The intersection of the three tectonic plates contributes to the frequent occurrence of geological disasters, such as volcanoes, earthquakes, tsunamis and mass movement, which are causing the loss of lives and impact property, economics and development outcomes of the country. One reason for the negative impacts and the occurrence of geological disasters are the unpredictability and the severity of phenomena, while urban areas are at utmost risk. Nonetheless, losses can be minimized by the utility of urban and rural spatial planning as an important tool for the reduction of geological risks. This fact has been contributing to the Law No. 26/2007 on Spatial Planning, which obliges to consider geological disasters in spatial planning. Anyway, these rules have not yet been implemented sufficiently by most districts in Indonesia. One reason is the lack of knowledge about georisk-sensitive spatial planning. Guidelines exist from the

A Guideline to Incorporate Geological Hazard Information to Spatial Planning for Local Governments in Indonesia (8877)

Andiani Andiani (Indonesia) and Sulamith Kastl (Germany)

FIG Working Week 2017

Surveying the world of tomorrow - From digitalisation to augmented reality

Helsinki, Finland, May 29–June 2, 2017

urces (Germany) supported the Geological Agency of Indonesia on the mitigation of geological risks, focusing on different topics of geological disaster risk reduction in Indonesia. It showed the need of a simple guidance to local governments, promoting political decision making towards disaster risk reduction via spatial planning, referencing to existing political frameworks and giving technical guidance for the utility of different information levels of geological hazard data. Therefore, in 2014 the “Pedoman Penetapan Informasi Bahaya Geologi untuk Penataan Ruang” / “Guideline for the Implementation of Geological Hazard Information in Spatial Planning” has been developed to approach some of the problems that local governments face in the implementation of a georisk-sensitive spatial planning. The resulting guideline has been developed by a stakeholder participation approach, using cooperation with the Ministry of Home Affairs of Indonesia and also the German Academy for Spatial Research and Planning, besides reviewing the product with other national and subnational entities. Since the distribution of the first edition of the guideline, feedback from other national and local institutions and governments show, that the approach, to step back and create a simple comprehensive document, using best practice samples and introducing to non-technical matters of spatial planning such as community participation has been an important procedure. It helps to prepare local governments towards future challenges of georisk-sensitive spatial planning and disaster risk reduction and to enable authorities to implement and discuss existing policies, to finally reduce the impact of disasters especially of the effected population.

A Guideline to Incorporate Geological Hazard Information to Spatial Planning for Local Governments in Indonesia (8877)

Andiani Andiani (Indonesia) and Sulamith Kastl (Germany)

FIG Working Week 2017

Surveying the world of tomorrow - From digitalisation to augmented reality

Helsinki, Finland, May 29–June 2, 2017