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#### Metagovernance on Disaster: Learning from Lampung Tsunami in Indonesia

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Abstract. This study intends to explore the way organizations from state, professional, and community work together in disaster countermeasures on Lampung Tsunami, Indonesia in 2018 in three stages disaster countermeasures: mitigation, emergency response, and recovery/rehabilitation. Interviews, three observations, twice focussed group discussions, and documentations were the sources of the data collected between December 2018 up to July 2019. Research result shows: (1) disaster stakeholders developed multi-stakeholders partnerships (MSP) metagovernance marked by by writen Memorandum Of Understandings (MOUs) among stakeholders of disaster with Badan Nasional Penangulangan Bencana (BNPB) yet these MOUs were not used as the basis for further development of integrated approach, standard operating procedures, as well as field operation mechanism and deployement of resources: (2) there were Non Government Organizations (NGOs) performing all functions of disaster countermeasures while others mostly performed only on preparation and response stage to disaster.

Keywords: metagovernance, disaster countermeasures, Lampung tsunami; memorandum of understandings

#### 1 Introduction

As a country that sits on 'the ring of fires', Indonesia has been facing many forms of disaster at many scales of danger. Data provided by BNPB (2019) of the Republic of Indonesia shows the varieties of disaster of massive scale in Indonesia between 2018 and 2019. According to the Board, the incidents are as follows: floods (866), flash floods with landslides (2), landslides (639), tidal waves and abrassions (37), forest fires (396), earthquakes (33), earthquakes with tsunamis (2), tsunamis (2), thunderstorms (1.135), mountain explossions (53), draughts (129).

Among those incidents of disaster, Lampung tsunami on 22 December 2018 (together with Banten area tsunami) was among the most recent major disaster. According to BNPB (http://national.tempo.co.id, 3 January 2019) casualties in both areas were 429 dead, 1.459 wounded, 10 people lost, 36.923 people temporarily became internally displaced and arround 10.000 were permanently homeless due to lost of property from the tsunami. Although there were not any exact data on lost of properties due to that tsunami, an estimation shows that the types of lost and damage were houses, hotels and restaurants, schools, health centres, stores, ships, cars, motorcycles, shelters, ports, ship-docks. Although the lost due to this tsunami was not as big as the previous earthquake in Lombok and earthquake with tsunami in Central

In the study of government and governance, the phenomena of different organizations from different types or organizations with different backgrounds, interests, expertises, skills, regulations, work cultures can be explained thorugh a rarely studied phenomena, metagovernance. According to La Cour and Andesen [8],metagovernance means how a state governs interactive governance from a distance in order to position the various stakeholders into a specific governable terrain. Stark [9], on the other hand, said that metagovernance is self-governing, networks and hybrid arrangements, coordination and steering of governance institutions and processes. He continued that meta-governance may be exercised by any resourceful actors, public or private through regional policy and governance and the increasingly complex governance tasks that resource companies have taken through their participations in an expanded scope of social policy issues.

The metagovernance may appear on two schemes, network governance [9] or multistakeholderspartnership (MSPs). Network governance is government of governance, vital but difficult and contentious governance or network and hibrid arrangements [10]; the organization of self-organization, the regulation of self-regulation, the steering of self-steering, the structuring of the game-like interaction within governance networks, and interaction among actors to influence parameter changes to the overall system [11]. In this regard, metagovernance in the type of network governance pre-requisites a very strong new type of agreed governance. Multi-stakeholders parnership, on the other hand, is a type of metagovernance which links different types of governance, private or public. It means, institutions are mostly directed by their own rules and regulations when entering the partnership and do not surender their basic principles or rules in doing so. Moreover, a scheme of metagovernance could be succeed due to three factors: an inclusive process, a locally adapted design of the standard, and institutionalized compliance management [12].

#### 2 Methodology

This study applies the concept of metagovernance by concentrating on two research questions: (1) how each organization or institution involved in countermeasuring the Lampung tsunami disaster at the end of 2018 and early 2019 perform it's own rule and governance in the field of disaster countermeasure; (2) what kind of metagovernance has appeared from the fieldworks of many organizations/institutions that involved in the tsunami disaster countermeasures and how it works.

Data were collected using interviews, observations, documents, and informal focussed group discussions (FGDs) from December 2018 through March 2019 and extended to July 2019 for additional information. Informen in interviews came from several organizations and institutions: MDMC, South Lampung Government Officers, Penengahan and Rajabasa Sub-District Disaster Task Forces; members of psychological associations, member of Indonesian Doctor Association, Local NGO resource persons, Gajah Mada University students, and volunteers in shelters

Obervations were conducted four times in several areas: (1) on 23 December 2018 in Lampung Province Government Office Reffugee center; (2) on 25 December 2018 in Rajabasa Sub-district refugee center; in the tsunami affected areas along South Lampung coastal areas; in Kalianda indoor tennis hall refugee center in South Lampung; (3) on 2 January 2019 in Bakauheni Sub-district refugee center, in South Lampung Regency Hospital "Bob Bazar", in Rajabasa Sub-district refugee center; in Kalianda indoor tenis hall refuge

basic needs supplies, and recovery includes counselling, data provision for further evaluation for future needs.

Other stakeholders on disaster countermeasures from government institutions are [13]: (1) Board on Meteorology, Climatology, and Geophysics or Badan Meteorologi, Klimatologi dan Geofisika/BMKG with the main mandate for development and implementation of disaster early warning system from some causes, for instance extreme weather, climate change, air quality, earthquake, and tsunami; (2) Center for Volcanology and Geological Disaster Mitigation or Pusat Vulkanologi dan Mitigasi Bencana Geologi/PV MBG with main mandate to develop policies, standardization, technical counselling and evaluation on volcanology and geological disaster mitigation which mean the main mandate is more on prevention and preparation than on response and recovery of disaster with more specifically on preparation of technical policies, norms, standards, procedures, criteria, plans, reports, mapping, and technical recommendations for disaster mitigation as well as researches, investigations, engineering, modelling, and information for public related to earthquake and tsunami; (3) National Institute of Aeronautics and Space or Lembaga Penerbangan dan Antariksa Nasional/LAPAN which has available resources on remote-sensing technology and data, aerospace facilities, satellite data based disaster early warning information system; (4) Transportation Ministry or Kementerian Perhubungan/Kemenhub with main mandate on development disaster-proof transportation facilities as well as recovery of road, bridges and other facilities and recovering connectivity as response to disaster; (5) Ministry of Marine and Fisheryor Kementerian Kelautan dan Perikanan with its main duties on information distribution for fishermen related to disaster, extreme climate and weather as well as marine infratstructure mobilization on disaster); (6) Ministry of Environment and Forestry or Kementerian Lingkungan dan Kehuatanan for policy making and implementation with regards to disaster, especially related to forest and natural; (8) Ministry of Public Works and Housing or Kementerian Pekerjaan Umum dan Prasarana Wilayah for development of policies and provision of facilities in the phase of disaster recovery; (9) Ministry of Social Affairs or Kementerian Sosialfor development of policies for disaster mitigation and preparedness as well as disaster response, recovery and empowerment of victims; (10) Ministry of Health or Kementerian Kesehatan for development of technical policies and implementation of health crisis response to disaster; (11) Police and Military to support other institutions in all disaster stages (prevention, preparation, response and recovery) through the development of Quick Response Unit within respective institution.

The data on government institutions show that there are institutions which perform all disaster countermeasure activities (from prevention, preparation, response up to recovery). There are also institutions which only function on prevention, or preparation and response, but there are institutions involve more in response and recovery. Their system of governance on disaster countermeasures among government institutions is quasi network metagovernance in which there are many memorandum of understandings between each institution with BNPB [13]; however each institution is mostly bounded by its own regulation and standard operating procedures [13] which make coordination is sometimes problematic (FGDs, interviews, and observations between December 2018-February 2019). Resource person from BNPB stated that the Board has tried to develop as good disaster countermeasures as possible, however, institutional barries still exist. She added that although according to the law,her institution is the most responsible one for disaster countermeasure, however, her institution is not only limited in capacity and resource, but also have to deal with other institutions which are much bigger with huge roles and functions. Thus, to reach a common understanding on disaster, how

### 3.3 Governance of the Non Government Organizations (NGO) and Community Based Organizations (CBO) in Countermeasuring Tsunami Disaster

There are much more varied involvements of NGOs and CBOs in tsunami disaster countermeasures than professional groups. A preliminary study of media coverages and onsite- observations as well as interviews and FGDs, show that at least these following organizations conducted disaster countermeasures in one way or the other: Muhammadiyah Disaster Management Center (MDMC); Nahdatul Ulama; Gadjah Mada University Alumni Association (Keluarga Alumni Universitas Gadjah Mada/Kagama) Care; Disaster Response Unit/Deru, Komil, Jangkar Perahu Pustaka, Persatuan Istri-Istri Sarjana Ekonomi Indonesia (PIISEI), Forum Partisipasi Publik untuk Pemberdayaan Perempuan dan Perlindungan Anak (Forum PUSPA) Lampung, etc. These organizations represent different organizational levels, from internasional, such as MDMC, up to national ones such as Fatayat NU, Kagama Care, and PUSPA; to local ones such as Komil, Jangkar Perahu Pustaka, PIISEI.

These organizations applied different governance systems both in regulating their internal structures and in cooperation with other external actors. The internationally reknown MDMC has formal structures as it.s larger community based organization, Muhammadiyah such as regulations for membership, for structures, for codes of conducts, for transparency and accountability principle, for funding principle, etc. It has clear institutional vision and mission, permanent office address, clear programs, clear structures and organisators (ttps://www.republika.co.id/berita/nasional/sang-pencerah/pm367i368/mdmc-satusatunya-timmedis-indonesia-terdaftar-di-who; 25 July 13:38). It functions in all disaster stages, from prevention up to recovery and rehabilitation (Source: interview 23 January 2019). Others mostly involve merely in the stage of disaster response (source: observations on 25 December 2018 and 1 January 2019) or preparation and response by Kaagama Care, NU, Deru (source: obervations on 1 January 2019 and 2 February 2019; FGDs 2 February 2019).

# 3.4 Multistakeholder Metagovernance: Governance of Governance System between Government, Professional and NGOs/CBOs Institutions on Disaster Countermeasures

What can we learn from the previous result and analysis? Was there network metagovernance hibrid arrangements [10]; or the organization of self-organization, the regulation of self-regulation, the steering of self-steering, the structuring of the game-like interaction within governance networks, and interaction among actors to influence parameter changes to the overall system [11]? Is there any metagovernance in the type of network governance which shows a very strong new type of agreed governance among three types of organizations (government, professional, and NGOs/CBOs). Or do we see more multistakeholders parnershipsgovernance which links different types of governance [14] which means institutions are mostly directed by their own rules and regulations when entering the partnership and do not surender their basic principles or rules in doing so.

In the stage of *prevention*, development of early warning system, vulcanology and geological disaster mitigation, remote-sensing technology and data as well as aerospace facilities, disaster-proof transportation facilities, disaster sensitive schools buildings and hospitals were performed differently and separately by different organizations from government sector and NGOs/CBOs sector. There were coordination meetings and MOUs between BNPB with other groups. (Source: interview, 23 January 2019). On the *preparation* stage (trainings, procurement of supplies, development of respective standard operating

schedule and distribution of emergency operational areas of duties, perform functions that were unique to their respective organizations' and associations' capabilities and capacities well as helping and supporting each other in providing services for tsunami victims and survivors (source: FGD with South Lampung Regency Government on 4 February 2019). The FGD also shows that locally adapted of common standard was partly adopted for the decision regarding unit price for temporary housings of the victims and survivors which was set at 16 million rupiahs per unit. This means that all temporary housings provided by government, NGOs or other fund sources must meet this unit price. This price standard was set to guarantee that all temporary housings meet certain minimum criterias. This locally adapted of common standard was yet applied for other aspects, such as shelters' condition, emergency kit, food and beverages, infant and women specific needs, and a lot more.

Institutionalized compliance management was also still missing from the disaster countermeasures. Although according to Law number 24/2007 regarding BNPB, this agency is the coordinator of prevention, preparation, response and recovery to disasters, decides that the statues of any disaster (whether it is national, provincial, or local) are equipped with funds, manpower, logistics, warehaouses and a Quick Response Unit to Disaster, yet it can not really manage compliance of other stakeholders in countermeasuring tsunami disaster in South Lampung, especially from many small NGOs and CBOs during emergency response stage. There were many temporary shelters for survivors run by these organizations and by other local initiatives which were far from meeting minimum standards, especially temporary shelters on top of hills surrounding the tsunami disaster area. Due to traumatic experience with the tsunami, many survivors declined order to stay in temporary shelters provided by government and big NGOs and preferred to stay on top of hills with almost non existent of protection from rain and heat as well as wind, no sanitation, no electricity. BNPB could not manage compliance due to minimum two factors: South Lampung tsunami disaster was declared as local disaster which means that BNPB did not have any direct intervention for the disaster countermeasures and that there was no agreed standard of compliance to be managed and institutionalized.

#### 4 Summary and Suggestions

Multistakeholders partnership meta-governance or governance by involving partnerships from multi-institutions (state, professional, and the society) occurred in the response to the tsunami disaster in Lampung, 2018. However, the partnership of stakeholders in disaster countermeasureshas not been able to overcome the problem of disaster countermeasures marked by the lack of awareness of the society about the tsunami disaster, and disaster countermeasures has not been resolved to date until the weak coordination of disaster countermeasuresamong the related agencies such as governance agencies, professional associations, and society organizations. The result of the research indicates that:

 There are memorandum of understandings (MOU) written among disaster countermeasures stakeholders, especially between BNPB with other stakeholders of disaster countermeasures; however the MOUsare not used as a basis for further development of an integrated approaches, standard operating procedures, mechanism of field operations, and the distribution of resources in disaster counter measures. [14] M. Beisheim, A. Ellersiek, L. Goltermann, and P. Kiamba, "eta-governance of partnership for Sustainable Development: Actor's Perspective from Kenya," J. Public Adminstrartion Dev., 2017.