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# Strengthening provincial role in disaster preparedness: A case study of the Local Agency for Disaster Management at Lampung

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# ARTICLE INFORMATION

# ABSTRACT

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Keywords: JDIH, produk hukum daerah, e-government, TIK, UU KIP This study explores the preparedness level in Lampung province and answer how it can be strengthened to conduct an effective response to facing disaster, especially by the Local Agency for Disaster Management (*Badan Penanggulangan Bencana Daerah* or BPBD) of Lampung as the main stakeholder of disaster management in the Province of Lampung. This study used descriptive qualitative research method. The findings show that the recent mechanism of disaster management provides an adequate mandates to support implementation at the sub-national level; however it also provides a sign that domestic disaster-related tasks, such as preparedness, have potent dependence on the national level especially due to the lack of ability of the local government to provide resources. The findings suggest that coordination (or collaboration/networking) among various levels of government (hierarchical networking) and between governments at the same level (horizontal networking) are needed to expand resources for effective preparedness to disaster management.

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# 1. Research Background

The recent policy of disaster management in Indonesia have evolved from focusing merely on emergency response to comprehensive and integrated disaster management that involves all elements of society. The policy change is reflected in the eestablishment of BNPB as the main institution of disaster management in the national level, and the Local Agency for Disaster Management (*Badan Penanggulangan Bencana Daerah*, BPBD) at the local level. (Willits-King, 2009; Harkey, 2014). Preparedness is becoming an issue in overall disaster management effort because it has been the key to successful response in many disaster events and has contributed to minimizing the loss of human life, such as in the case of the Tiangshan earthquake (Col, 2007) and the Phailin cyclone (Khanna & Khanna, 2013).

Haddow *et al* (2011) argued that strong government's institution at all administrative levels are believed to be the foundation for successful preparedness, based on assumption that disaster challenges the capacities and capabilities of emergency management operations at all levels of government, especially in disaster-prone countries. However, most countries remain ill-prepared particularly at the local government level. In Asia

region, Cheng (2009) argued that disaster preparedness is much talked about and widely accepted by governments throughout the region, but having truly effective, workable, adequately funded plans at local level is a step that few have yet to take. Similar conditions have happened in Indonesia. Using the Aceh earthquake and tsunami in 2004 as a focus of study, Cosgrave (2007, p.10) argued that the government's response was slow and of insufficient capacity. Similarly, in her research, Hidayati (2012) found that although Indonesia has experienced horrific disasters, the community and local governments are not sufficiently prepared. In the case of Lampung, there is no study available to date that focuses on disaster preparedness at the provincial level of Lampung following the enactment of recent Indonesia disaster management regulations (Law 24/2007) because the locus of disaster studies or researches in the Indonesian context is mainly on areas that have recently experienced disaster and focus on post-disaster analysis (see Van Rossum & Krukkert, 2010; Guarnacci, 2012).

Despite its pessimistic arguments about the role of government, this paper seeks to evaluate the current disaster preparedness in Lampung. Using a qualitative method and the BPBD of Lampung, the lead institution mandated for disaster management at the provincial level, as the *entry point* of study,

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this paper aims to understand the current preparedness policies and practices in Lampung and how they can be applied to conduct an effective response to facing disaster. In an attempt for an effective response, this paper uses a disaster event in India, the Phailin cyclone, as a role model for preparedness, thus providing a foothold for policy learning.

# 2. Literature review

# 2.1. Disaster, management and preparedness

A disaster is a results from the combination of *hazards* (natural and human causal), *vulnerabilities* (socioeconomic and physical), and insufficient *capacities* of individual, community, or organization to reduce the effect of disaster (risk). (Khan & Khan, 2008, p.2). Attempts to lessen the impact of disaster (risk) are known as disaster management or disaster risk management. Disaster risk management can also be defined as the sum total of all activities, programs and measures which can be taken up *before* (mitigation and preparedness activities), *during* (emergency response activities) and *after* a disaster (response and recovery activities) with the purpose of avoiding a disaster, reducing its impact, or recovering from its losses (Khan & Khan, 2008, pp.5).

As part of disaster management cycle, the primary goal of preparedness is to develop appropriate strategies for responding when disaster occurs. Perry and Lindell (2003; Col, 2007) define preparedness as the state of readiness to respond to an emergency, mainly based on planning, training, and exercise. Emergency planning requires identifying the hazards, vulnerabilities and demands that a disaster would impose upon an emergency response organization and the resources (personnel, facilities, equipment and materials) that are needed by those organizations in order to meet the emergency demands. Training is useful to improve knowledge and understanding of what to do in a disaster. It can also provide feedback regarding potential problems with a plan. Drills or exercises provide a setting in which operational details can be examined, so that problems are expected and conflicts can be resolved. Furthermore, drills constitute a simultaneous and comprehensive test of emergency plans and resources.

From these definitions, it is clear that as part of disaster management, preparedness is indeed a crucial phase for conducting an effective response and thus minimizing the possible severity effect of disaster. For this reason, preparedness activities (mainly planning, training, and exercises) must be supported with sufficient capacity. In this sense, capacity is understood as the availability of appropriate mandate (i.e. institutions, policies, rules and regulations) and resources such as personnel, financing and equipment/facilities (Montjoy & O'Toole, 1979 p.466; UNISDR, 2008). Such capacity is needed at all levels of government, including the provincial level such as Lampung.

#### 2.2. Role of province as intermediate level government

Studies about the structure and operation of governmental disaster management have found that in an area that is prone to disasters, it is critical that intergovernmental responsibilities be delineated clearly and understood at all levels of government (Haddow and Bullock, 2006), since disaster involves a very complicated, widespread structure (Schneider, 2008 p.717) and sometimes creates fragmentation or "an intergovernmental game of blame" (Schneider, 2008 p.730). Therefore, the issue of intergovernmental system also embedded in disaster management.

The notion of intergovernmental systems implies that disaster management should also exist at the intermediate level. Depending on the specific country context, the phrase intermediate level government could be conceptualized differently in different countries in terms of duties, structure, composition, size and functional responsibilities between governments, as stipulated and formalized in the basic law or constitution of each country. For example, the intermediate level of government in Indonesia is called a province, while in federal nation-states such as United States and India, it is called a state (Kimura, 2011 p.222). In the case of Indonesia, the basic law (Undang-Undang Dasar 1945, UUD 1945) is firm that Indonesia is a law-based state (rechstaat) and has adopted a continental system. In this continental system, all forms of policies are issued as derivatives of law and shall be in accordance with the higher hierarchical policy and regulation (Atmosudirdjo, 2002 as cited in Muluk, 2009 p.196). Therefore, policy implementation is likely to be a top-down approach and highly dependent on the hierarchical guidance of the higher-level government (Pulzl & Treib, 2007 p.94).

Based on UUD 1945, and accommodate in Law (Undang-Undang, UU) 32 on Local Government in 2004, Indonesia is a Unitarian State with a governmental system based in principle on a 'decentralized unitary state'. There are two basic roles of provincial government within Indonesia's decentralization, representing the central government and representing of local people (Kimura, 2011 p.222). Inherently, the provincial governments is an autonomous region that is administratively mandated to provide direct services and goods in its respective territory or jurisdiction; however, the provincial government is also mandated by the government to act as the representative of the central government because it is impossible for the national government to be directly related to all regencies and municipalities throughout Indonesia. In this intergovernmental perspective, provinces act as the missing link for both local and central government (Sudarmo & Sudjana, 2009).

Therefore, considering the wide range of activities and the complexity of roles in disaster management, LaFeber and Lind (2008, p.557) emphasize the notion of having one agency in charge of not only coordinating activities state- (province-) wide, but also serving as a liaison between federal (national) and local (regency/municipality) efforts. In Indonesia, the current leading sector in disaster management policy is BNPB (and BPBD at the local level).

# 3. Research method

The paper employs the concept of preparedness within the disaster management framework. Additionally, since it pertains to the role of the provincial level, it also links with the intergovernmental system (decentralization). Indonesian Qualitative research is used because it can provide a context for an understanding -of the time, place and circumstances, thus enabling practitioners to make comparisons with their own contexts. It is also grounded in people's experiences, thus the possibility of identifying new, relevant questions becomes more likely (Phillips, 2001). The data were collected and analyzed based on the qualitative data analysis process described by Powell and Renner (2003). Data were collected through interviews with key persons at BPBD Lampung in 2013. In addition, this paper analyzes secondary data (literatures and documents) collected from various sources such as BPBD annual reports from 2010-2013, Indonesian regulations, and studies on disaster management, particularly those focused on preparedness and intergovernmental issues. BPBD of Lampung is chosen as the unit of analysis because it is mandated to function as a focal point of disaster management in its respective areas. Questions concerning the implementation of preparedness are based on indicators of the fifth priority of HFA's (UNISDR, 2008).

#### 4. Research context, finding and analysis

### 4.1. Research context

# 4.1.1. Province of Lampung

Lampung province was once Lampung Residence, which was affiliated with the residency of Sumatra Selatan Province. On March 18, 1964 with the enactment of Regional Regulation (*Peraturan Daerah*, Perda) No. 3 Year 1964 which became UU No. 14 Year 1964, Lampung Residence was officially validated as Lampung Province (Province of Lampung, n.d.). According to Indonesia Statistics (*Badan Pusat Statistik*, BPS) census at 2010, the province had a population of 7,596,115. Its area reaches 34.623,80 km<sup>2</sup>, and administratively subdivided into 13 regencies and 2 autonomous cities (BPS, 2012).

In terms of disaster, Lampung is located in Sumatra Island, a disaster-prone area in Indonesia that is commonly known as *the Ring of Fire*, where 90% of the world's earthquakes occur (USGS, n.d.). Right beneath it, a 1900-km-long fault that runs the entire length of the island known as Sumatran Fault, which presents a major seismic hazard for the area (Sieh & Natawidjaja, 2000).

Specifically in Lampung, two remarkable disasters have been the Liwa earthquake and the Krakatoa eruption. On February 16, 1994, an earthquake measuring 7 on the Richter scale struck Liwa, the capital of Lampung Barat regency. BNPB data (2010a, p.8) established this as the fourth biggest death toll (1207 people) caused by an earthquake in Indonesia; however, other data claimed the total death toll in Liwa's earthquake was around 200 people (see Widyanto et al, n.d.). The historical volcano blast of Krakatoa, which occurred in August, 1883 also had disastrous consequences; 36.417 people died and the aftereffects deeply influenced the geographical shape of Indonesia and world's climate (Spignesi, 2006). Despite the death toll, Liwa's earthquake and Krakatoa eruption both indicates that disaster is a prominent problem in Lampung. According to data concerning the events and impacts of disasters by the BNPB (2010b; BNPB, 2011), Lampung is categorized as highly disaster-prone area with some of indicates dominant disaster hazards including (1) earthquake; (2) tsunami; (3) volcanic eruption; (4) flood; (5) drought, and; (6) soil movement.

#### 4.1.2. Disaster management in Indonesia

Disaster management policy has a long history in Indonesia. The early practices of Indonesian disaster management began in 1966 and were characterized by ad hoc, temporary policies in response to specific natural disasters. The government would form a team or a body/agency immediately after a disaster occurred whose primary responsibility was national-level coordination and provision of emergency relief. These policy characteristics applied until the late 1970s. Later on, the word "disaster" was attributed not only to natural phenomena, but also to human activities, such as mass casualty transport, including workplace accidents. It also included social disaster i.e., social conflict among groups or communities. Consequently, disaster management required action across sectors, disciplines, and actors in the implementation process. However, the mandated agency in disaster management typically still had limited authority and resources to use, and was generally burdened by the responsibility of national government (BNPB, 2012 pp.8-11). The limited role and resources was obviously demonstrated in the case of Aceh in 2004 as more than 200.000 deaths were recorded and the provincial and local government in Aceh were paralyzed

(Cosgrave, 2007; Comfort, 2007). At that moment it was evident that Indonesia was unprepared to take initiative to face the devastating impacts of a disaster.

After 2004, the government acknowledged the need to empower local government by emphasizing the primary duty and responsibility of the local government in disaster management. Parliament passed UU No. 24 Year 2007 on Disaster Management which claimed to comprehensively consider the elements of disaster prevention, preparedness, and response. It also expanded the scope of disaster management in Indonesia from emergency response (reactionary) to adopt both comprehensive and integrated emergency management (Willits-King, p.10). One of the important mandates of the UU 24/2007 is the establishment of the BNPB. BNPB is assigned to provide guidance and direction in phases of disaster management (pre-, during- and post-disaster). It is worth mentioning here that one specific task of BNPB was to establish the BPBD in the provincial and regency/municipality levels, as mentioned in Article 19 (1). As of May 2013 there were 33 BPBDs at the provincial level and 403 (of 497) regencies/municipalities in Indonesia were represented (BNPB, 2013 p.17).

Through UU 24/2007, a set of government regulations (*Peraturan Pemerintah*, PP) were stipulated such as PP No 8, 21, 22, and 23 Year 2008. In its implementation, disaster management becomes a priority for national development and spelled out the need for budget sharing between the national government budget (*Anggaran Pendapatan Belanja Negara*, APBN) and the local government budget (*Anggaran Pendapatan Belanja Daerah*, APBD). Three forms of funds in Indonesian disaster management are contingency funds, on-call budget and grants. Contingency funds are specifically provided to support preparedness activities. The on-call budget can be used during emergency response, while grants are used for activities in rehabilitation and reconstruction. All three forms of funds can be allocated and used by a local government through its BPBD.

From this historical background, it is evident that disaster management policy in Indonesia has evolved into a comprehensive disasters policy. This evolution of disaster policy confirms Birkland's (1999) idea that disasters are "focusing events leading to policy agenda change" (pp.17-23), and how, "disasters serve as both a feedback mechanism and reminder to policymaker of the importance of continued efforts to make good policy" (p.181).

# 4.2. Research finding and analysis

#### 4.2.1. Strengthening capacity

#### 4.2.1.1. Mandate

Within Indonesia's disaster management framework, BPBD is a specialized institution that handles disaster management at the sub-national level, in provinces and regencies/municipalities. BPBD The existence of at the provincial and regency/municipality levels must be legalized through local regulations or decrees of the head of the region (governor, regent, or mayor). In Lampung, the provincial government has stipulated and enacted Perda Number 14 Year 2009 on Administration of Non-Structural Organization as a unit of the Lampung Provincial Government, thus making BPBD as the Local Apparatus Working Unit (Satuan Kerja Perangkat Daerah, SKPD). The arrangement of BPBD through regulation (Perda) has many consequences, such as: BPBD has an equal status with other SKPD and is expected to work effectively in terms of coordination across-organization and among levels of government. Another consequence is that disaster management has also become one of the priorities of provincial development, as the seventh priority program, second mission in Lampung Medium-term Development Plan (*Rencana Pembangunan Jangka Menengah Daerah* or RPJMD) 2010-2014 as mentioned in Governor Regulation (*Peraturan Gubernur*, Pergub) Number 41 Year 2009, thus included in planning documents such as: the Provincial Government Working Plan (*Rencana Kerja Pemerintah Daerah*, RKPD) and Agency Work Plans (*Rencana Kerja SKPD*), and budgeting documents such as: APBD and Working Plan and Budget (*Rencana Kerja Anggaran* or RKA).

Furthermore, of the many policies enacted to support the implementation of disaster policy in Lampung, two important policies are Perda No. 13 Year 2011 on Disaster Management and Pergub No. 40 Year 2012 on Standard Operational Procedure of Disaster Management. Perda 13/2011 was enacted to strengthen the capacity of BPBD Lampung by mandating functions of coordinating, facilitating, implementing, and preparing the regional mechanism and equipment for disaster by involving other disaster-related stakeholders. This includes acknowledging and disseminating tasks, roles and responsibilities among levels of government (Article 38). The enactment of Pergub 40/2012 served as a guideline in technical coordination. In the preparedness phase, for example, the role of conducting and arranging school-based simulation lies on provincial education agency. Similarly, the authority to coordinate preparedness for forest fires is under the authority of the forestry agency. In both cases, BPBD acts as a supporting institution. Hence, the existence of BPBD is not to merge or take over all disaster-related roles of other institutions, but rather to coordinate and/or to provide support for other institutions. As for BPBD of Lampung, its activities in the stage of preparedness are: preparation and try-out for disaster emergency plans; organization, counseling, training, and rehearsal; composition of accurate data, information, and update on disaster emergency response fixed procedures; and provision of materials, goods, and equipment.

In summary, by enacting and stipulating a set of regulations in line with the national mandates, the government of Lampung has made disaster management (and preparedness) as an integral part of its regional development priorities which has implications for the provincial government's obligation to provide support i.e. budgeting and staffing. However, the study found some important notes that need to be underlined on the implementation process of preparedness activities: within four years, BPBDs have devised contingency plans and tabletop exercise for all (six) types of potential disasters in Lampung; however, the BPBD of Lampung has never conducted a joint drill that involved BPBD or any stakeholders at the regency/municipality level for the contingency plan. Training, rehearsal and drilling are conducted by BPBD Lampung only within the scope of the stakeholders at the provincial level.

#### 4.2.1.2. Resources

In 2012, Darwanto conducted a research study that aimed to understand to the extent investments in disaster risk reduction (DRR) in Indonesia are contributed to by the national income accounts. Involving 28 regional governments, not including Lampung, the study found that the average investment in DRR, including preparedness, was less than 1% of each total regional budget, while the majority investment in DRR was less than 0.5%. A similar condition can be found in Lampung. The budget of BPBD from 2010, the first fiscal year since the establishment of BPBD as SKPD in 2009, to 2013 shows that the averaged investment in preparedness is less than 0.5% in comparison in both of total BPBD's budget itself, moreover to APBD. It indicates that even though the government of Lampung has invested some funding for preparedness purposes, it still spends less than the expected ratio, which is supposedly around 0.5% or above (Oktara, 2014).

In this condition, cohesive financial support by BNPB is surely needed to support preparedness activities. For example, in 2012 BPBD was allocated funding from APBD amounting to IDR 450 million or around 11% of the total BPBD budget of IDR 3.8 billion, while the portion of the preparedness budget provided by BNPB was more than IDR 1 billion: notably, this was more than 200% of the budget allocated from APBD.

In addition to funding, BNPB also provides support in the form of logistics and equipment to BPBD Lampung. Provision and preparation of emergency logistic and equipment is one of activities in preparedness conducted by BPBD, however the data shows that most of BPBD's equipment is provided by BNPB. Again, this indicates the dependence of BPBD on BNPB.

Another important resource is Staffing. According to the organizational structure of BPBD, preparedness is sub-division of Prevention and Preparedness Division. The total of personnel in preparedness sub-division is five Public Servant, one structural officials (head of sub-division), and four staff members. According to BPBD's official, this condition is far from ideal, and the solution would be to backed up with 5 conjunct contract-employees from other provincial agency. Moreover, regarding human resources, one problem in BPBD is staff mutation/rotation, which can hinder the continuation of activities.

The discussion above shows that the enactment of *Perda* and *Pergub* by the provincial government of Lampung serves as the basic pillar for the availability of mandate and resources for BPBD as the focal point in local disaster management. Despite some flaws of financial dependency and logistic procurement to BNPB, and lack of staff, Lampung does have capacity in implementing disaster management, including in preparedness phase.

# 4.2.2. Strengthening response

Preparedness is not only about strengthening institutional capacity. It also implies the needs to channel it for response activities (Tierney 2001 pp.27-28). The many definitions of preparedness imply that preparedness can be measured by the level of response conducted in facing a disaster (Col, 2007; UNISDR, 2008). It can also be measured by lessons learned from previous disasters, called event-related policy implementation (Birkland, 2006 p.181-182). Both approaches are best conducted from local-experience of a disaster (i.e. Schneider (2008) study about hurricane of Katrina) or conducted as a comparative study with others experiences (i.e., the study conducted by Col in 2007). However, since the two major disasters in Lampung, the Krakatoa eruption in 1883 and Liwa earthquake in 1994 are not well documented, especially with regard to the level preparedness and the response conducted by the provincial government at that time, the only remaining choice is to learn from other experiences. In this discussion, the case of Phailin in India, which were used as the global model of effective response (Khanna & Khanna, 2013), is presented to illustrate how a government institution conducts a response to a disaster based on preparedness activities.

The case of Phailin in India shows that the greatest factor contributing to the minimal loss of human life resulting from Phailin cyclone was the implementation of mass evacuations. Several factors account for this impressive mass evacuation, namely communication, coordination and resource allocation. It also provides evidence of how the intergovernmental preparedness and response should function, including the important role of specialized agencies of disaster, equivalent to BNPB and BPBD in Indonesia, to perform those crucial factors (Ariyabandu & Leoni, 2013).

In Lampung, disaster institutions and organizations already exist and preparedness activities are already conducted, such as setting up emergency (contingency) plans, training and drilling in rehearsal for disaster response, and dissemination of disaster information. However, the effectiveness of this activities is still questionable for several reasons: *First*, BPBD of Lampung is indeed able to foster the existence of BPBD in 14 local governments within its jurisdiction; nonetheless, a joint drill/rehearsal that involves BPBDs at the regency/ municipality level for each contingency plan has never been conducted. BPBD Lampung has only conducted drills among stakeholders at the provincial level. This condition means the plans have never been measured and are only "good on paper." Similarly, a joint drill between provincial-level BPBDs has not yet been conducted.

Second, in 2013 BPBD conducted activities to build a network of stakeholders in Lampung by forming a forum. According to BPBDs official, there were already 10 similar provincial DRR Forum in Indonesia and one at national level (National Platform) as of 2013. BPBDs' activities to build a network indicate that collaboration or networking is important to accommodate all disaster-related interest and information; however, the only stakeholders involved are provincial-level institutions, thus it need to be expanded to an inter-provincial network, and an inter-regency/municipalities network needs to be fostered, as shown in the case of Phailin.

Globally, collaboration (or coalition and networking) between local governments in the field of disaster is not a new issue. In 2003, Laurence O'Toole set forth the concept of *network organization* in response to environmental changes that are difficult to predict. In order to survive, to effectively achieve the objectives, and to be able to control important resources, then cooperation or partnership with other organizations becomes the main alternative to resolving various related issues. Similarly, Goldsmith and Egger (2004) noted that to enhance the delivery of public goods to meet a policy goal, a government can create a network of multiple government agencies.

Furthermore, learning from Japan's experience of trans-local government coalitions in disaster-related policy, Samuel (2013) claimed that the earliest forms of trans-provincial policy networks in Japan already existed in the Tokugawa-era especially in the event of a natural disaster. He also concluded that horizontal linkages could encompass five different functions and produce some benefits. The first is communication, as local governments learned that they could rely on each other for new policy ideas as well as on higher levels of government. Second, a regional mechanism of collective demands can facilitate the acquisition of resources from the central government. Third, a horizontal coalition can also be built to support central government plans and programs, and sometimes such programs also initiated by local interests. Fourth, a coalition of local governments can function in opposition to central policy. The fifth function is proposition, as localities often generate new policy ideas well ahead of the central government (pp.153-154). Even so, the UU 24/2007 and Perda 13/2011 which supposedly act as frameworks for comprehensive and integrated disaster management at the national and provincial levels, do not provide specific issues regarding this kind of relation, particularly networking of provincial-level BPBDs.

#### 5. Discussion

As the fifth priority of HFA, strengthening preparedness for disaster response at all levels is mainly concerned with two objectives: 1) increasing capacity to predict, monitor and be prepared to reduce damage or address potential threats and; 2) strengthening preparedness to respond in an emergency and to assist those who have been adversely affected. Achievement of these objectives must be supported by formal institutional, legal and budgetary capacities (UNISDR, 2008, p.1-3).

With regard to the institutional capacity as the first objective, with the availability of mandates and resources as indicators, the paper found that provincial governments have the capacity to practice preparedness activities within their jurisdictions, particularly due to the existence of BPBD as a permanent organization within provincial government in form of SKPD. As SKPD, BPBD integrate their activities (including preparedness) into the provincial development plan to ensure support from the APBD and human resource. However, this study also reveals that although the BPBD Lampung has been able to conduct preparedness activities through its abundant hierarchical mandates, due to its limitations in resources, most activities of BPBD were supported by BNPB, namely BNPB's contingency fund, technical assistance and logistic supports.

For the second objective, based on the literature studies of the Phailin cyclone in India, which serves as a role model for effective preparedness, the study found that intergovernmental relation is the key to three crucial factors that transform preparedness activities into effective response: communication, coordination, and resources allocation. Unfortunately, the framework of disaster management in Indonesia simply focuses on creating effective coordination in the hierarchical governmental system (vertical relationship) and ignores the importance of relationship between governments (and organizations) at the same level (horizontal relationship), as seen in BPBD's activities, which are mainly conducted within the provincial-level institution.

The overall framework works through a top-down mechanism that flows from the central to the local government in line with the framework of the decentralized unitary state that is the foundation of the governmental system in Indonesia. On the one hand, decentralization can be effective in the process of implementation of disaster management at all levels of government because the national government is obligated to provide mandates and resources, and this makes it easier for local government to implement such policies, as shown in Lampung. On the other hand, decentralization creates dependency of the local government on national resources (which can be limited), since the only framework provided (through the mandates) for disaster management is a vertical relationship.

Therefore, future intergovernmental architectures in disaster management need to consider a horizontal relationship. Horizontal relations are useful not only to expand (as a new source) resources (and minimize the resources gap) but also to ensure the flow of information and to implement preparedness in daily activities (with other jurisdictions). Even though Indonesia's disaster management framework, UU 24/2007 nor Perda 13/2011, does not specifically address the issue of a regional governmental network, opportunities exist with the form of BPBD Lampung as SKPD because horizontal governmentrelation in Indonesia's decentralized framework, as mentioned in PP Number 50 Year 2007 on *Implementation Procedure of Regional Cooperation*, can only be carried out by SKPD.

#### 6. Conclusion

To conclude, strengthening the provincial role in disaster preparedness should not solely consider channeling mandates and resources in vertical relations between the provincial and national, or provincial and local governments (regency/municipality). It should also consider the horizontal relation across jurisdictions, such as how preparedness activities can be conducted through networking among provinces and fostering a network of local governments (regency/city). In a broader framework, this network at the sub-national level will eventually support capacity at the national level. In fact, as shown by scholars (O'Toole, 2003; Goldsmith & Egger, 2004; Samuel, 2013) and the empirical case of Phailin, trans-local or trans-provincial networks presents another solution for strengthening institutional capacity for disaster preparedness. Such cooperation could be a pool of knowledge sharing on common governance and governmental problems related to disaster, minimize the gap in resources and information between regions, and be useful in mobilizing resources to support the affected area in the event of a disaster.

In Indonesia, such relation have already been established for other activities, e.g., Forum Mitra Praja Utama (6 provincial governments) was established in 1988 to focus on urbanization, transportation, employment and economy. In Japan, for example, trans-provincial networks were initiated in the Tokugawa-era that were called *oen kyotei* or assistance agreement (Samuel, 2013, p.153). The implementation of such a horizontal relationship can take the form of forum or joint secretariat in general or specific disasters, such as a Forum of Disaster at Sumatera Region, Joint Secretariat of BPBDs in Sumatra Region, or Sumatra Forum for Preparedness.

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