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## Synergizing Stakeholders in Reducing Risk of Earthquake and Tsunami-Disaster in the Most Vulnerable Area

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Abstract. Natural disaster is a multidimensional problem in nature caused by multiple factors yet predominantly coming to happen by the acts of humans. Realizing this leads to an indispensable need for synergy between multiple stakeholders. While Indonesia is taken as a case for it is so vulnerable of disaster occurrence, Padang City becomes the most vulnerable area in the world. This article seeks to explain efforts undertaken by the local government and the support from the community, nongovernmental organizations (NGOs), and business sector. The research method used in this article in interpretive qualitative method by data collection through observation, interview, and document review. The informants in this study consist of related offices of the municipal government of Padang, community representative, NGOs, and corporations. As for the result of this research, it shows that there is a synergy between the local government and disaster stakeholders that is evident in earthquake- and tsunami risk reduction activities conducted by the municipal government involving the community, NGOs and business world. The activities include the making of fixed procedure of disaster management, disaster evacuation simulation, disaster training at community and school level, and changes of the recent Padang Municipal Spatial Planning.

Keywords: stakeholder synergy, local government, disaster management

Abstrak. Bencana alam secara alamiah merupakan permasalahan multidimensi yang disebabkan begitu banyak faktor meski lebih sering terjadi akibat ulas manusia. Kesadaran atas hal ini akan membawa pada suatu kebutuhan untuk mensinergikan berbagai pemangku kepentingan. Sementara Indonesia dijadikan kasus karena begitu rentan mengalami bencana alam, Kota Padang menjadi daerah paling rentan. Tujuan dari artikel ini adalah untuk menjelaskan upaya-upaya yang dilakukan oleh pemerintah kota dan bagaimana dukungan dari mayarakat, organisasi nonpemerintah (NGO) dan dunia usaha. Metode penelitian yang digunakan adalah kualitatif interpretatif, dengan pengumpulan data melalui observasi, wawancara, dan telaah dokumen. Informan dalam penelitian ini adalah dinas terkait di Pemerintah Kota Padang, perwakilan masyarakat, NGOs dan dunia usaha. Adapun hasil dari penelitian ini adalah, bahwa adanya sinergisitas antara Pemerintah Kota dengan Stakeholders kebencanaan. Sinergisitas tersebut terlihat dari keterlibatan masyarakat, NGOs dan dunia usaha dalam kegiatan-kegiatan yang dilakukan Pemerintah Kota Padang untuk pengurangan resiko bencana gempa bumi dan tsunami seperti pembuatan Protap Penanggulangan bencana, simulasi evakuasi bencana, pelatihan-pelatihan kebencanaan di tingkat masyarakat maupun sekolah, perubahan Rencana Tata Ruang Wilayah Kota Padang.

Kata kunci: sinergisitas, stakeholders kebencanaan, pemerintah kota, bencana

#### **INTRODUCTION**

Recent disasters have become a multi-dimensional problem; various problems caused by unexpected disasters have opened all parties' eyes to how important the disaster management in the future is; various experts from certain disciplines have studied this disaster as well, including the discipline of Public Administration, one of whom is Hughes (1994) in his Management and Public Administration arguing that crisis/Disaster Management is one of important issues in Public Administration studies. Therefore, disaster problem can be studied not only through one discipline but also through multidisciplinary study.

In relation to disaster, there is an opinion stating that the disasters struck were natural occurrences as the act of god for "the sins of the state" (Quarantelli, 2006 in Kusumasari, 2014). However, the development of knowledge has changed public view about disasters as 'the act of nature'; instead of 'the act of god' (Shaluf, 2007). This change in thought caused by the advancement of science propose new understanding that disasters do not only come from the act of nature and the act of god but also come from the act of humans (Quarantelli, 2001 in Kusumasari, 2014).

In Indonesia, disaster is no longer considered an extraordinary event because it occurs almost at any time, whether it is natural disaster such as earthquake, volcano, flood, hurricane, forest fire, or caused by humans such as building fire and collapse. According to the result of the study by National Disaster Management Agency (hereafter BNPB) (2014), most of the disasters

occurring in Indonesia are due to environmental damage, for example, flash flood occurring in several regions like in Wasior Papua, Pangkalan sub-district in Lima Puluh Kota district. Due to this high level of vulnerability and susceptibility to disasters, policy on disaster risk reduction is one of important matters to minimize property loss and casualties. Based on the data from BNPB (2011), West Sumatra province was ranked 6th in the list of disaster vulnerabilities because of the geographical conditions of several districts and cities located in coastal areas directly adjacent to the Indian Ocean. Therefore, 7 of 19 districts/cities have high levels of vulnerability and susceptibility to earthquake and tsunami threats, namely Padang Pariaman district, Pasaman district, Mentawai Islands district, South Pesisir district, West Pasaman district, Pariaman, and Padang.

In relation to the aforementioned data, it is evident that Padang is one of the regions vulnerable and susceptible to earthquake and tsunami. In 2013, Padang is included in the high category and vulnerable to disaster and, ranked 10th at national level and the 1st among all districts/ cities in West Sumatera (BNPB, 2013). The position and condition of Padang located on the pacific ring of fire and in the subduction zone between Indo-Australian plate and the Eurasian plate make Padang one of regions experiencing earthquake frequently; one of which is the great earthquake on September 30, 2009, causing many property loss and casualties. As is known, the earthquake that struck West Sumatra including Padang resulted in thousands of casualties and thousands of homes, public facilities, as well as infrastructure destroyed. The data showed that in Padang there were 316 people dead, 4 people missing, 181 people with serious injuries, and 425 people with minor injuries (BPBD, 2009)

The great number of victims is considered as the result from the lack of preparation (mitigation) to face disasters, especially earthquake, particularly one, potential for tsunami. In addition, according to the data obtained by the Authors, the evacuation route is not yet ready, fixed procedure and the SOP for early warning are also not yet available. The experience last year showed that the 7.9 SR earthquakes that shook Padang caused total traffic jam and severe emotional distress everywhere. Although, Padang has had 2008 Regional Regulation no. 3 concerning Disaster Management; the number of casualties was still high. This is regardless of the mandated early warning system and disaster risk reduction mitigation that requires cooperation with private institutions and communities. The issues withih regulation implementation are the root of this research. Although the local government has also established Regional Disaster Management Agency (hereafter BPBD) as mandated by the Law concerning Disaster Management at regional level, what Padang government has done in terms of disaster management policy and how stakeholders involve in disaster risk reduction resulted in the conclusion that the synergy between related stakeholders in disaster risk reduction is required to minimize losses that may be caused by disasters. Thus, the significance of this study is to explain the role and contributions of continuous cooperation amongst stakeholders involved in disaster risk reduction.

Accordingly, this study examines the synergy of disaster stakeholders in Padang towards the effort of earthquake and tsunami disaster risk reduction. Throughout the study, the roles of each disaster actors in Padang and how they build a good synergy from one another in the effort of earthquake and tsunami disaster risk reduction are elaborated. To explain the aforementioned issue, this study applies several concepts.

The concept of synergy is derived from Greek 'Synergos' which means working together. Lasker, Weiss, and Miller (2001; 5) state that synergy is an authority or a power to combine perspectives, resources, and skills from a group of people and organization. Furthermore, Covey (1997) states that synergy is a combination or a compound of elements or parts that can produce better than what a single element can. In other words, the combination of elements will be able to produce better outputs. Therefore, synergy is the result of the combination of elements to produce better and superior products and it will be easier to build if its components are capable to work well with each other and have similar point of view.

According to Iversen (1997), synergy is a process to integrate the goals and activities of a company or government at different unit in an organization to achieve the goals efficiently and effectively. In terms of theoretical basis, it refers to the concepts of 'competitive advantage, creating, and sustaining performance', While in the implementation, it refers to some basic principles, namely, coordination, integration, and synchronization. In line with Iversen (1997) in Concept of Synergy toward a Clarification, the principles of synergy includes: a. Synergy must be centralized; b. Synergy must be integrated; c. Synergy must be sustainable; d. Synergy uses multi-institutional approach. In the mean time, according to Doctoroff (1977) in Mukhtaromi et al. (2013; 159), the main requirements of an ideal synergy system are trust, effective communication, fast feedback, and creativity.

In conclusion, the concept of synergy can be defined as a cooperation and/or collaboration of parts or groups of organizations to obtain good and superior results through the linkage of each actor's roles which are different but still related to each other. Therefore, all of the components involved in disaster management both government, private, and community are expected to synergize to achieve the targeted goal, namely a disaster-resilient community. Therefore, it can be imagined that a resilient community is a community with a high level of security that may have the ability to design and develop within a disaster risk environment that minimizes its susceptibility by maximizing the implementation of disaster risk reduction measures. Etymologically, resilience means how to get strong and recover after experiencing difficulties, in this case, to be able to recover after a disaster.

Furthermore, disaster management is defined as a systematic process by utilizing administrative decision, organization, operational skills, strategy, implementation capacity and community capacity to reduce the impact of natural, environmental, and technological hazards. It includes all activities including structural/nonstructural measures in avoiding or limiting (mitigation and preparedness) impacts of disasters possible (UNISDR, 2004). Furthermore, one of International developments in terms of disaster risk reduction is the Hyogo conference that launched Hyogo framework for action 2005-2015 calling on all countries to develop an integrated mechanism of Disaster Risk Reduction (DRR) with institutional support and resources available (Pramusinto, 2009, Copalla, 2011, Olawu, 2010). Moreover, there is a paradigm shift in the way of thinking in current disaster management system from "relief and response" to "contingency planning", ultimately leading to comprehensive disaster management (Yodmani, 2001 in Anwar and Hery, 2013).

Studies on disaster have been widely carried out from various perspectives, namely from the perspective of disaster risk reduction management by Haifani (2008), Zikri (2011), Haifani (2008) explains that disaster risk reduction is carried out through disaster mitigation program using sustainable development system in the form of good regional planning program and provision of critical and latest information and communication media. Meanwhile, Zikri (2011) explains that the efforts carried out by the Municipal Government of Padang to improve community preparedness in dealing with the threat of earthquake and tsunami in general have not achieved the desired results. It is proven by the attitude of the Municipal Government of Padang that prioritizes disaster management in the phase of emergency response, uneven education on preparedness, high vulnerability of buildings to earthquake and tsunami, unavailable and insufficient evacuation paths and sites, and early warning systems in need of improvement. Meanwhile, from the perspective of the capability of the government in disaster management, a study entitled Resource Capability for Local Government in Managing Disaster by Kusumasari, Alam, and Siddiqui (2010) find that the capability of local governments in facing disasters is observed from the dimensions of institution, human resource, financial, technical management, proper policy implementation, and leadership. The findings of the study carried out in Bantul District show that the institutional capability of Bantul District in dealing with disaster is notably limited, yet human resource capability is relatively adequate. In terms of policy, there is no policy on disaster management during the earthquake of 2006. Observed from the financial perspective, finance is limited because 80% of APBD of Bantul District is allocated for routine expenditure. In terms of logistic (technical) management, Bantul District is capable to manage well. Bantul District shows responsive attitude by providing adequate assistance for the victims. The perspective of disaster policy based on local wisdom is observed from the studies by Hery Yogaswara, et al. (2012), Imam Zamroni (2011) and (Bevaola, 2012). Hery Yogaswara, et al. (2012) and Imam Zamroni (2011) focus on local wisdom of the communities in Yogyakarta, explaining that there is harmonious relationships between human and fellow human, human and the creator, human and nature and other creatures through the philosophy of Hamemayu Hayuning Bawono. Meanwhile, Bevaola (2012) explains that recovery efforts subsequent to the disaster in Bantul pay attention to local culture and local wisdom, where in principle, the communities must decide how to rebuild their homes; while the local government merely provides assistance in the form of earthquake-resistant buildings. Based on these studies, there has been no specific study carried out to analyze the synergy among stakeholders in disaster management. This is the focus of this study with the locus in Padang.

#### **RESEARCH METHOD**

This study applies qualitative method with descriptive interpretative approach (Denzim and Lincoln, 2005). The data are obtained from primary and secondary data. The data collection is carried out through observation, interview and documentation. Observation is carried out through direct involvement in disaster management activities conducted by the Municipal Government of Padang. These activities, include simulation and evacuation of earthquake and tsunami. In addition as author also attend training and seminar on disaster mitigation organized.by the local institutions.

Interviews are carried out with various stakeholders related to disaster both from the government, as well as from Non-Government Organizations (NGOs). Representatives from government officials are the Mayor of Padang, the Chief Executive of Regional Management Agency of Padang, the Secretary of Regional Disaster Management Agency (BPDB), the Head of Division of Disaster Prevention and Preparedness, the Head of Public Works Department, the Head of Manpower and Social Agency, the Head of Regional Development Planning Agency, the Head of Building and Spatial Department, the Head of Regional Financial Management Agency, and the Head of Taruna Siaga Bencana (TAGANA). The NGOs are represented by Jemari Sakato, Mercy Corps and Disaster Preparedness Groups. Secondary data are collected through reviewing literatures and documents from various parties related to disaster management. Data from interview, observations, and literature are then triangulated to achieve the validity of the findings of the study.

In the Data Collection, there are three activities carried out by the author, namely (1) getting-in, in which the authors handle the matters related to the procedures of research permit in the field; (2) getting-along, in which the authors communicate to build trust of the informants as one of the data source in the study; (3) logging the data. The following stage is the condensation of data. In this stage, the authors carry out a review of all data obtained from various sources and the data collection methods described. The authors carry out the condensation of collected data by making abstraction and articulation summary as well as interpretation of meaning of the focus of the study. In the process of condensation of data, the author ignores data or information that is not in accordance with the problems, objectives, and focus of the study. However, the unused results of condensation of data are stored instead of being discarded or ignored due to the possibility of reusing. Therefore, the data presented are authentically related to the domain of the study. Data presentation is displayed in the form of a report sourced from the location of the study.

Data presentation is followed by data analysis, namely the condensed data are interpreted and associated with the focus of the study in order that the report has a rich compilation of information and knowledge related to the domain of the title of this study. Furthermore, the condensed data are described. The author makes a detailed description of the findings of the study in order that the value of articulation and interpretation of data display can be understood. The final stage is to draw the conclusion, in which the author attempts to find the meaning of the data collected. Therefore, the author attempts to find the pattern, model and theme, as well as equation from the data obtained through the aforementioned stages. The advantages of this descriptive qualitative method and its stages are that the final analysis obtained is a fact-based verification and the data are described in the form of findings of the study.

#### **RESULT AND DISCUSSION**

In the effort to conduct disaster risk reduction comprehensively, there are three actors or elements that play roles, namely the government (public sector), private sector, and community. The involvement of these actors is important for the implementation of disaster management. In accordance with the mandate of Law No. 24 Year 2007, Article 16 paragraph (3), it is stipulated that preparedness activities are the responsibility of the Government and local government, while implemented in collaboration with communities and business institutions. Meanwhile, the Government Regulation No. 21 Year 2008 regarding the Implementation of Disaster Management defines that the implementation of disaster management is a series of efforts covering the making of policies regarding development at risk of disaster, disaster prevention activities, emergency response, and rehabilitation.

In mitigating disaster, any stakeholder from the highest to the lowest level must be involved. Any form of institutionalism employed in Padang shall materialize in the form of disaster risk-reduction program, which runs quite well and fully-equipped. This is because almost all institutions running in disaster field are located in Padang. Having that in mind, BPBDPK as the leading sector should be able to manage the existing institutions. It is also recommended that each institution/relevant work unit conduct their own disaster-related activities. The following are classification of work unit, NGO, and private sectors related to disaster activities in Padang: Public Works Department, Spatial Planning and Urban Design Department, Department of Social Service and Manpower, Education Department, Health Department, Regional Financial Management Agency, Development Planning Agency at Sub-National Level, and Regency. In addition, the NGOs include: Kogami, Jemari Sakato, and Mercy Corps; while private sectors include: PT. Semen Padang cooperating with Classy FM. All of these parties were involved in the process of disaster risk-reduction in Padang.

Each actor runs its function separately yet interrelatedly to each other. This is the point of departure for BPBDPK as the coordinator in disaster mitigation by mobilizing those institutions to cooperate in reducing the risk of earthquakes and tsunamis in Padang, particularly on the pre-disaster phase, and minimizing any imminent natural disaster. The synergy in question is how BPBDPK with its existing authority is able to unify different perspectives, utilize the existing resources, and manage the skills of each actor in the framework of disaster risk reduction.

The role of BPBDPK as the leading sector of disaster mitigation is based on the Regulation of BNPB Head number 23 Year 2008 regarding Guideline of Regulating BPBD, standing for Regional Disaster Mitigation Agency, a regional unit founded to mitigate regional disaster. The fourth chapter of the regulation expounds the agency's function as both commander and executer. Therefore, its work relation with relevant institutions can be done through coordination, command, or control.

BPBD is highly coordinative with other institutions during pre-disaster phase, which is apparent in: (a) planning of policy and disaster-mitigating strategy; (b) planning of disaster mitigation; (c) determining minimum standard necessity; (d) arranging the procedure of emergency disaster; (e) disaster riskreduction; (f) mapping out disaster-prone areas; (g) planning of disaster mitigation budget; (h) logistics/ resource supply on disaster mitigation; and (i) education and training, simulation on disaster mitigation. The coordination can be done through working together with other relevant organizations based on existing regulations. On the other hand, international coordination both local and NGOs must be implemented within the consent of BNPB and existent regulation. On the other hand, joint meetings on disaster mitigation should be held once a year whenever necessary. This applies with either municipal or provincial BPBD, and any relevant organizations.

In terms of emergency disaster, the governor/regent/ mayor appoints a commander within the consent of the Head of BPBD. He will then have to control any disastermitigating operational activity and is fully responsible to the Head of the Region. Oppositely, the commander of emergency disaster mitigation possesses a thorough authority to instruct relevant institution, regarding: (a) manpower supply; (b) equipment supply; (c) logistics supply; and (d) rescue. He also authorizes to activate and improve the Operational Controlling Center into a Commander Post. On the other hand, BPBD, being the executor, must coordinate and integrate with other regional work units or vertical institutions. This is done by addressing the policy of disaster mitigation and existent regulations (Minister of Home Affairs Regulation Number 46 Year 2008 on the Guideline of Organization and Work Flow of BPBD).

In Padang, of three functions, the implementation of new function, i.e. executing function, seems to have been conducted by BPBDPK. On the other hand, the function of command and coordinator has not operated as supposed. The head of the agency must run disaster mitigation activities that have been allocated under the Budget Plan of BPBPDK. Those activities include socialization, KSB member training, leaflet making, signs maintenance, and earthquake simulation.

On the other hand, the coordination conducted by Regional Fire and Disaster Management Agency (BPBDPK) with related offices and departments is considered still weak. It is evident in the fact that the programs organized by each related Regional Government Work Units (SKPD) are still partial because each SKPD creates its own programs while in fact it can synchronize several programs related to disaster, for example, the disaster simulation programs at community and school level exist in several SKPDs i.e. in the Social Service and Manpower Department, Education Department, Health Department, and Local Disaster Management Agency (BPBD) itself. According to the Authors, one program run by BPBDPK is adequate while other related offices and departments can participate in coordination with BPBD, so that the budget post for similar activities can be used for other activities. That is why the synergy between related parties is required in the effort of disaster risk reduction. As for the role of each party, it can be seen below.

The Public Work Department has main duties and functions set in the Regulation of Padang Mayor No 58 Year 2012 concerning the Elaboration of Main Duties and Functions of Public Work Department. The regulation stipulates that the duty of the Public Work Department in term of disaster management mitigation is to be a provider of facilities and infrastructure, such as providing temporary shelters (TES) at several disaster-prone points, constructing evacuation routes for earthquake and tsunami-now being constructed for 12 routes-also monitoring the construction of earthquake-resilient buildings and evaluating multistorey buildings built before the 2009 earthquake to determine whether the building is still feasible to use or not; if it is still feasible then it could be used as temporary shelter otherwise it's better to be torn down. Thus, for disaster management mitigation activities, the Public Work Department is the technical team who works based on planning or proposals from other agencies. The relation of each party's work can be described as follows: should the Education Department have an earthquake-friendly school building program, then the implementation of the school construction belongs to the work of the Public Work Department. What Education Department should do is simply proposing inputs and includes it in its budget. Another example is, in relation to the development of the earthquake and tsunami evacuation routes, that the planning is made by the Spatial Planning and Urban Design (TRTB) Department while the implementation is executed by the Public Work Department; so that this activity is included in the Budget Post of TRTB. Thus, SKPDs are related to each other in dealing with disaster.

Education Department has main duties and functions as stated in the Regulation of Mayor Number 53 Year 2012 on the Elaboration of Main Duties and Functions of Education Department. In the regulation, it is explained that one of the main duties and functions of Education Department in terms of earthquake disaster management mitigation is to educate students and teachers at school. Education Department of Padang has been providing socialization and learning materials to students and teachers which now have reach the phase of socialization and education. Education Department cooperates with Regional Fire and Disaster Management Agency (BPBDPK) to conduct socialization. In this case, school represents Education Department prepares students and teachers to receive material about disaster, and do the training in the form of earthquake simulation involving students and teachers. Meanwhile, in education phase, Education Department attempts to include disaster mitigation activities in school curriculum through three ways namely through making it integrated with the subject, include it in local content subject, and making it integrated with extracurricular activities. The phases which are currently done in Padang is at the phase of extracurricular activities and integration in related subjects such as physics, geography, and biology. For extracurricular activities live sports, the integration in the subjects is included in discussion in one of subchapter of subjects. In accordance to the results of the interviews with the Head of Elementary Education, Education Department of Padang:

"The leading sector of mitigation disaster activities is Regional Fire and Disaster Management Agency (BPBDPK), while Education Department is helping the agency by conditioning students and teachers to participate in the activities held Regional Fire and Disaster Management Agency (BPBDPK) in terms of socialization activities or earthquake simulation activities. Those activities are all being held by Regional Fire and Disaster Management Agency (BPBDPK) because we, Education Department itself, have no disaster mitigation activity as special program. Moreover, Moreover, disaster curriculum is still limited to some subjects related to extracurricular activities because we cannot make it regular subject since it is not regulated in the 2013 curriculum."

Based on the result of the interview, we can conclude that disaster mitigation activities are the collaborative activities by Regional Fire and Disaster Management Agency (BPBDPK) and Education Department. Furthermore, disaster learning materials in schools in Padang are included in extracurricular activities and integrated with several subjects, even though in fact this activity is still considered weak because it is considered not enough to only include disaster program in extracurricular and make in integrated with subjects. Although Padang has already had Regional Regulation concerning on disaster curriculum implementation, namely Regional Regulation of Padang no. 5 Year 2011 concerning on the education implementation of Padang, on local curriculum section article 50 letter f regarding the knowledge and ability about disaster awareness, and other regional needs. Opportunities of Padang to include disaster curriculum in local content powered by the regulation are widely open. Accordingly, it is expected that there will be more materials and presentation times so that students can have a better understanding about disaster. This condition is possible since Padang is a city vulnerable to natural disasters, especially earthquake, so that it is needed to introduce it to students from the beginning because children are included in group vulnerable to disaster risk in addition to the elder and disable people. Therefore, the disaster learning materials integrated with local content subject becomes a necessity. Furthermore, the education about disaster is one of the five priorities of Hyogo Framework for Action 2005-2015 (HFA) emphasizing on the importance of using knowledge, innovation, and education to build safety culture and resilience at all levels. In the long term, they are expected to build disaster preparedness for effective disaster responses at all levels (Astuti and Sudaryono, 2010).

Social Service and Manpower Department has main duties and functions set in the Mayor's Regulation no. 55 year 2012 regarding Elaboration of Main Duties and Functions of Social Service and Manpower Department. The regulation stipulates that one of the main duties is conducting counseling and socialization activities to disaster-prone communities, such as women, poor communities, and the disabled. The socialization involves the elements of Disaster-preparedness Cadets (Tagana) under the coordination of Social Service and Manpower Department. The socialization is conducted by the department to the disabled, such as the deaf and the blind. As stated by the Head of Social Service and Manpower Department as follow:"The role of Social Service and Manpower Department, in terms of disaster management mitigation, is to conduct socialization activities to women, children, and the disabled, as well as the poor community."

In general, the role of Social Service and Manpower Department concerning disaster management is required in the disaster and post-disaster stage. During disaster/emergency alert the Social Service and Manpower Department provides public kitchen, temporary shelter, and rescue teams, and after disaster, they conduct recover activities for the victims. Postearthquake trauma healing needs to be done in order to mentally recover the affected victims.

Spatial Planning and Urban Design Department has main duties and functions set in the Regulation of Mayor no. 59 Year 2012 on the Elaboration of the Main Duties and Functions of Spatial and Layout Planning Department. The regulation states that some of the functions of Spatial Planning and Urban Design Department concerning disaster management policy are planning on earthquake evacuation routes and Spatial and Regional Plans, as well as issuing building permits. Spatial Planning and Urban Design Department plans to build 12 routes spreading from west to east of Padang. The responsibility of the implementation of the evacuation routes program is on Public Work Department and Regional Fire and Disaster Management Agency (BPBDPK), while the revision of Regional Spatial Planning conducted by Spatial Planning and Urban Design Department is in collaboration with Development Planning Agency at Sub-national level. Regional Spatial Planning is turned into more disaster-friendly to respond to changes occurring to space allocation, especially after Padang earthquake in 2009. Whilst for the building permit, Spatial Planning and Urban Design Department recommends the development of buildings while also initiates the establishment of Regional Regulation of Padang No. 7 year 2015 concerning Urban Design. There are regulations to Urban Design, especially buildings for public services owned by the government.

The Development Planning Agency at Sub-National Level (Bappeda) retains main tasks and functions as written in the Mayor Regulation Number 44 Year 2012 regarding the Description of Main Functions and Tasks of the agency. The regulation stipulates that the agency's function includes planning on regional development, and funding on disasters. Relating to the policy of disaster mitigation, the agency and relevant SKPD shall evaluate the regional spatial planning of Padang. One of the adjustments to the municipal prioritized program for 2014-2019 is a green-city planning that is sustainable and disaster–mitigation-based.

The Local Government Finance Office (BPKD) has the main functions and tasks as stipulated in the Mayor Regulation Number 63 Year 2012 regarding the descriptions of main tasks of the agency. On the regulation, the agency's task includes planning for funding all activities in Padang, including disaster activity. The 2016 budget directed to disasters is as of 2 billion rupiahs.

The Health Department has the main functions and tasks as stipulated in the Mayor Regulation Number 54 Year 2012 regarding the description of the agency's task. On the regulation, one function includes conducting trainings to medical team in order to prevent disaster from happening. Therefore, it is necessary for them to make preparation prior to disasters.

The government's aid in mitigating disasters is apparent in their seriousness to prepare the institution having interests in mitigating disasters. The Ministry of Social Service through the General Director of Social Aid and Security has established Disasterpreparedness Cadets (Tagana). The establishment is a form of government's response toward the public demand of disaster-preparedness component. Tagana was established on March 23, 2004, by a flock of thinkers who care about disasters, whose position is as volunteers with varying skills. The aim is to raise public awareness on handling the disaster and encourage active public participation. Furthermore, it also prepares general kitchen, disaster logistics supply, earthquake simulation, and socialization of disaster to the disabled and the elderly.

On the other hand, as a follow-up response of Law Number 24 Year 2007 regarding Disaster Mitigation, in 2011 the Disaster Preparedness Group (KSB) for 2,080 people in 104 districts. It was initiated by BPBDPK, along with JemariSakato, Mercy Corps and Kogami. Until now, they have been provided with education and training by the government by BPBDPK in Padang. It is the milestone of BPBDPK in the disaster mitigation.

KSB plays a role as an advance team in the disaster mitigation. It socializes and improves public capacity in the sector of disaster. It becomes the vanguard in the prevention of disaster and directly touches-down society by making earthquake evacuation roadmap. Therefore, its existence helps BPBDPK in transforming the activities of disaster mitigation that has been planned by BPBDPK.

Meanwhile, the legislative office (Commission IV of DPRD Padang) plays a key role in disaster mitigation. It supervises disaster-related activities through socialization during recess time. It constantly coordinates and communicates with people regarding the next steps for disaster mitigation. While BPDPK creates programs, DPRD controls and allocates them. Besides, the Regional Representatives Council (DPRD) also collects aspiration and complaints from the society; thus preparing anything necessary before pushing them to relevant work units such as Public Works Agency and Spatial Planning and Urban Design Department. In an interview with the commission IV secretary of DPRD Padang, one staff claimed:

"We have struggled to get what BPBDPK has commanded us in terms of disaster grant. Moreover, we have socialized our program to schools and the public. In the future, it is hoped that people know what they should do when an earthquake strikes. We also encourage relevant SKPD to accordingly finish evacuation road, street signs, and shelters."

Relevant NGOs in this disaster mitigation in Padang includes JemariSakato, Kogami, and Mercy Corps. JemariSakato is an Agency providing dire concern regarding disaster risk-reduction program in Padang. Its activities are vulnerability and capacity assessment, conducted in 2009. It cooperates with Mercy Corps with the assistance of UKAid, READY program and KSB; the fund is disbursed from USAid and Prepare of West Sumatra. Generally, that program was given support by the States and England, as well as Mercy Corps.

JemariSakato's other activities were assisting BPBP Padang in establishing KSB in each Padang district. This means educating them to broaden their knowledge, knowing that they are the ones who will pass that knowledge whenever disaster occurs. Having that in mind, JemariSakato did more non-structural mitigations through education and advocacy to people whose houses are prone to earthquakes and tsunamis.

JemariSakato advocated people by reminding them of three underlying pillars: the government, the citizen, and the representatives, enabling it to be known by all layers of society. Education and advocacy were done through knowledge sharing, training, vulnerability and capacity assessment (VCA), as well as drafting documents regarding their geography. The documents are used to organize workshops to learn the condition of their areas. Once the documents are revised and fixed, they are archived for future necessity. JemariSakato also conducted Assistance Program for administrative villages from which selected programs are accommodated by the municipal government. The assistance was given by integrating it with several local government programs and by planning what activities will be carried out in order to improve their capacity in disaster management, how to deal with disasters, recognizing disaster characteristics, providing technical understanding and training should disaster occur, training people on evacuation, not only educational but also technical. The activities undertaken are workshops and hearings with the government, and they are incorporated into government programs.

At the local government level, JemariSakato educates BPBDPK. The education under the assumption that the newly-positioned staffs of BPBD are naïve on the concept of disaster; JemariSakato transfers the knowledge concerning disaster mitigation efforts, provides reinforcement in the form of seminars and workshops attended by BPBD and related SKPD.

In the mean while, Kogami was born on September 21, 2005, (de facto in April 2005) after the Aceh tsunami, out of concern from some volunteers and academicians concerned about the earthquake and tsunami disaster. Kagami as one of the non-governmental organizations in West Sumatra also initiated the birth of KSB and BPBD. Some activities conducted by Kogami in order to mitigate disaster management in Padang are to socialize and educate the community about the earthquake and tsunami disaster. Kogami volunteers come to the community and schools, disseminating information on the necessary efforts to reduce the risk of earthquake and tsunami disaster. In doing these activities Kogami was frequently opposed by the community. As revealed by the Director of Kogami:

"During socialization and giving education to public, some of our volunteers were treated badly. Our advices were refused; some of us were even driven away. They are traumatic of the earthquake in Padang. They say no need to mention the earthquakes and tsunami again, they are afraid the disaster shall indeed come again. People get phobia of disaster, hence come the refusal."

Despite of the public refusal, Kogami walked on by. They kept doing disaster advocacy and education to schools from varying levels. They also visited the disabled, organized trainings to build the personnel capacity of BPBDPK, and relevant SKPD.

Another institution involved in the program was Mercy Corps, an American-based international NGO, which, together with BPBD, initiated KSB in Padang. Its role was to provide trainings and technical assistance to the people through establishing KSB. It gave capacity building trainings to members of KSB and BPBD. Mercy Corps cooperated with JemariSakato, creating SOP in administrative village level. Mercy Corps organized basic training of disaster mitigation, of using communication tool, provides simulations, and direct people to make earthquake prevention methods.

The private sector involved in the program was PT.

Semen Padang, one of BUMNs in Padang. It plays a key role in mitigating disasters in the city and passing information to the people regarding earthquake prevention method. The socialization also involves Classy FM, a self-claimed disaster-alert radio, which entails a number of disaster-related talk shows. Furthermore, the corporation also allocates its grant through earthquake simulations at schools nearby and communication radio training, drawing Mercy Corp and USAid as its partners. PT. Semen Padang also has Fast Reaction Team (TRC), actively joining training and simulation and literally reacts fast when disaster occurs.

Thus each stake holder involved in disaster mitigation has its own roles, so that they can support each other. This is where BPBDPK should play its role as coordinator: how BPBDPK can encourage and coordinate with related SKPD concerning activities undertaken in the framework of disaster mitigation. These activities are expected to be interconnected so as to provide great effects and stimulation to the overall disaster mitigation activities. What happened in Padang at present is that BPBDPK as coordinator in the implementation of disaster management has not been able to carry out its function well; its implementing function is more dominant. Whereas with great potential and existing authority, BPBDPK can only stir and coordinate related SKPD to carry out its activities to form a synergy. The synergy between stakeholders of disaster in Padang has not run properly because BPBD as the leading sector of disaster in Padang has not been able to perform its function as coordinator in disaster risk reduction. Thus, each component perform their respective functions without a single unity

The possible participation of several related SKPD in disaster mitigation activities is among other to stir Public Works Department to build and complete the development of Earthquake and Tsunami evacuation line, while the Social Service Department helps provide logistics for disaster victims; the Department of Education may socialize and implement disaster curriculum in schools, while TRTB Department make rules regarding Urban Design and development in red zone. In the mean time Bappeda plans budgeting and reviews the spatial planning to ensure it is safe against earthquake, while Health Department conducts training for medical personnel. Hence, the synergy between institutions in carrying out their respective duties and functions for more integrated and directed disaster risk reduction management can be established.

#### CONCLUSION

In the effort of disaster risk reduction, the synergy between Padang government and disaster stakeholders is considered capable of giving solutions for disaster programs/activities in Padang. However, BPBDPK has not performed optimally in executing its duties so that the disaster programs are more likely to be partial. The existing programs, however, can actually be well coordinated by various parties with BPBDPK as its coordinator. Moreover, what Padang government has done so far has shown a quite encouraging result, indicated by some programs already running in terms of disaster management mitigation, such as the making of fixed procedure of disaster management, disaster evacuation simulation, and disaster training at community and school level, and changes of Padang Spatial Planning. All these activities are supported by all stakeholders working on disaster sector.

Accordingly, we suggest Padang municipal government, particularly BPBDPK, to cultivate skills in executing coordinating function dealing with disaster to build a good synergy with related disaster stakeholders. This is important considering the number of actors involved in disaster management. In addition, Padang government should also consider the existence of Disaster Preparedness Groups (KSB) already established in every village in order that they can be optimally empowered in the terms of disaster risk reduction since they are the spearhead of disaster risk reduction as they are the party directly dealing with the community.

There is a concept of synergy that the author elaborates through the exploration of the involvement of stakeholders in earthquake and tsunami disaster relief in Padang. This study generates a new concept to develop related to disaster management in the form of governance, interpreted as collaborations between elements in disaster management, namely government, private sectors, and the community.

For further research, the author suggests that there should be a study about the capability of the organizations of regional apparatus in implementing disaster management policy, particularly the organizations that become the leading sector of this policy. It is proven by the findings of previous studies that BPBD is not functioning properly in disaster management in the Region. It is important to study, considering the strategic role of BPBD as the benchmark of disaster management in the regions.

#### REFERENCES

- Alhadi, Zikri, (2011), Upaya pemerintah Kota Padang untuk meningkatkan kesiapsiagaan masyarakat dalam menghadapi ancaman bencana gempa dan Tsunami (suatu studi Manajemen bencana), Tesis, Jurusan Adm dan Kebijakan Publik, Pascasarjana, FISIP UI, Jakarta
- Anwar, Herryal Z dan Hery Harjono, (2013), Menggapai Cita-cita Masyarakat Tangguh Bencana Alam di Indonesia, Bandung: Andira dan LIPI
- Ayu Mukhtaromi, Mochammad Saleh Soeaidy, Ainul Hayat, (2013), Sinergi Pemerintah Daerah Dan Lembaga Adat Dalam Melaksanakan Pelestarian Kebudayaan, (Studi pada Budaya Suku Tengger Bromo Sabrang Kulon Desa Tosari Kecamatan Tosari Kabupaten Pasuruan), *Jurnal Administrasi Publik* (*JAP*), Vol. 1, No. 2, pp. 155-163.
- Charter, W. N. (2008). Disaster Management : *A Disaster Manager's Handbook*. Mandaluyong City, Manila: Asian Development Bank.
- Coppola, D. P. (2011). *Introduction to International Disaster Management*. Burlington, MA: Elsevier.

- Denzim, N. K., & Lincoln, Y. S. (2005). Handbook of Qualitative Research (3 ed.). (N. K. Denzim, & Y. S. Lincoln, Eds.) Thousand Oaks, California: Sage Publications.
- Doctoroff, Michael. (1977) Synergistic Management. New York, AMACOM Press.
- Haifani, Akhmad Muktaf, Manajemen Resiko Bencana Gempa Bumi (Studi Kasus Gempa Bumi Yogyakarta 27 Mei 2006), Seminar Nasional Iv, Sdm Teknologi Nuklir, Yogyakarta, 25-26 Agustus 2008
- Hughes, O. E, (1994), *Public Management and Administration*: an Introduction. New York: Martin's Press
- Indiyanto, Agus & Arqom Kuswanjon., (2012) "Konstuksi Masyarakat Tangguh bencana" Kajian Integratif Ilmu, Agama dan Budaya, Bandung: Penerbit Mizan Media Utama.
- Iversen, M. (1997) Concept of Synergy-toward a clarification. Departement of Industrial Economics and strategy, Copenhagen Business School.
- Jufriadi, Akhmad dan Hena Dian Ayu, Akhmad Afandi, M. Rahman, Raehanayati, Sandy Vikki Ariyanto, Ika Karlina Laila Nur Suciningtyas, (2012) Sosialisasi "Pengurangan Resiko Bencana" Di Kecamatan Tempursari Kabupaten Lumajang Sebagai Upaya Pendidikan Mitigasi Bencana dalam jurnal ERUDIO, Vol. 1. No. 1, December 2012 ISSN: 2302-9021
- Kusumasari, Bevaola dan Quamrul Alam, (2012), Bridging The Gaps: *The Role Of Local Government Capability And The Management Of A Natural Disaster In Bantul, Indonesia. Nat Hazards (2012)* 60:761–779, Monash University, Caulfied East, Vic, Australia
- Kusumasari, Bevaola, (2014), Manajemen Bencana dan Kapabilitas Pemerintah Lokal, Yogyakarta: Gava Media
- Kusumasari, Bevaola, dan Quamrul Alam, (2012), "Local wisdom-based disaster recovery model in Indonesia", *Disaster Prevention and Management*, Vol. 21 Iss: 3 pp. 351–369.
- Kusumasari, Bevaola; Alam, Quamrul; Siddiqui, Kamal. (2010). Resource capability for local government in managing disaster. *Disaster Prevention and Management*, Vol. 19. No. 4, pp. 438-451.
- Neuman, Lawrence W. (1997), Social Research Methods: *Qualitative and quantitative approaches*. *London:* Allyn and Bacon
- Olowu, Dejo. (2010). The Hyogo Framework for Action and its implications for disaster management and reduction in Africa. JAMBA: *Journal of Disaster*

*Risk Studies*, Vol. 3. No. 1, pp. 303-320.

- Peraturan Daerah Kota Padang No. 3 Tahun 2008 Tentang Penanggulangan Bencana.
- Peraturan Daerah Propinsi Sumatera Barat No. 5 Tahun 2007 Tentang Penanggulangan Bencana.
- Peraturan Pemerintah No. 21 Tahun 2008 tentang Penyelenggaraan Penanggulangan Bencana.
- Peraturan Pemerintah No. 22 Tahun 2008 tentang Pendanaan Penanggulangan Bencana.
- Peraturan Pemerintah No. 23 Tahun 2008 tentang Peran Serta Lembaga Internasional Dalam Penanggulangan Bencana.
- Pramusinto, A., (2009). Pembangunan dan reformasi di bidang penanggulangan bencana di era otonomi daerah. dalam A. Pramusinto, & E. A. Purwanto, *Reformasi Birokrasi, kepemimpinan dan pelayanan publik: kajian tentang pelaksanaan otonomi daerah di Indonesia. Yogyakarta*: Gava Media-JIAN UGM-MAP UGM.
- Roz. D. Lasker, Ellisa E. Weiss., and Rebecca Miller. (2001), "Partnership Synergy : A Practical Framework for Studying and Strengthening the Collaborative Advantage". New York Academy of Medicine.Published by Blacwell Publishers. USA.
- Shaluf, I. M. (2007), Disaster Type. Disaster Prevention and Management, Vol. 16, No. 5, pp. 704-717.
- Stephen R. Covey (1997), *Tujuh Kebiasaan Manusia* yang Sangat Efektif, (Terj.) Budijanto, dengan judul asli The 7 Habits of Highly Effective People, (Jakarta : Bina Rupa Aksara, 1997), h.21.
- Sudibyakto, Arry Retnowati, Emy Dwi Suryanti, Dyah Hisbron, (2012), Menuju Masyarakat Tangguh Bencana, Tinjauan dari fenomena multi-bencana di Indonesia, dalam Agus indiyanto dan Arqom Kuswanjono, 2012, *Konstruksi Masyarakat Tangguh Bencana, Bandung*: Mizan dan CRCS UGM
- Undang-Undang No. 24 Tahun 2007 Tentang Penanggulangan Bencana
- Yogaswara, Herry , Laksmi Rachmawati, Fitrianita dan Ulil Amri, (2012), Kajian kebijakan Pengurangan risiko bencana yang berbasiskan kearifan lokal: Pembelajaran Perda No. 8 Tahun 2010 Provinsi Daerah Istimewa Yogyakarta, dalam Herryzal Z. Anwar, 2012, Menyingkap Tabir Fenomena Bencana Seismik di Indonesia: Perspektif Pengurangan Risiko Bencana Gempa Bumi dan Tsunami, Bandung: Andira dan LIPI
- Zamroni, M.Imam, Islam Dan Kearifan Lokal Dalam Penanggulangan Bencana Di Jawa, Jurnal Penanggulangan Bencana, Vol. 2. No. 1, Juni 2011