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WHEN THE DISASTER TREATMENT IN THE HEAD OF EYES: THE EFFORTS OF MITIGATION POLICY AND REDUCTION OF THE DISASTER RISK IN PADANG CITY

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ABSTRACT

The disaster inspection a few years recently has been an interesting topic discuss, not only by government but also non-government organization and society. The unsuspected various disaster had opened eyes of all side, how important prevention towards disaster is in the future. The way of thinking in the disaster management prevention at this present time had undergone the change from relief paradigm and respond to contingency planning, vulnerability reduction and disaster risk eventually leads to disaster management more comprehensive. Padang city is as one of the cities located in west Sumatra province as a resort that frequently disturbed by the earthquake and tsunami. Based on notification from volcanical directorat and Mitigation of geology disaster (DVMBG) Energy Department and mineral Resources showed that there were 28 areas stated shaking disturbance and tsunami in Indonesia. Padang city is situated at the fire of the ring. Accordingly, this article explained about how is Padang City going to implement The effort of mitigation policy and reduction of disaster risk in minimalizing the resulted impact when the earthquake occurred. Various effort that had ever been done by Padang city among other thing is disaster mitigation such as structural and cultural mitigation. The other effort is empowering disaster prepared people through the disaster prepared group.

Keywords: Policy Implementation, disaster prevention and disaster mitigation.

INTRODUCTION:

Indonesia is situated on the three major straights of different world those are Eurasian tectonic straight, Iindo-Australian tectonic, and pasific straight affected Indonesia as a territory of troubled natural disaster especially earthquake, tsunamy and volcanic erruption (Sutikno in Napsiah, 2015:6). In connected with them that one of such situated city is Padang, West Sumatra. The earthquake happened in September 30, 2009 at 7.6 richter scale quaked West Sumatra Province. The greatest demage affected by earthquake was in 13 of 19 regencies/cities and stroke victims more than 1.100 people. The affected region of the most serious demage were Padang City, Pariaman, and Padang Pariaman Regency. The demage and disavdvantage in West Sumatra was approximately 21.6 quintillions or equivalently US\$ 2.3 billions (Danhas 2011). Accordingly, the government of Padang City began paying attention to the earthquake disaster probabilities occuring in the next time because of regional condition at the troubled disaster.

Besides, the experts research explained that Padang City and West Sumatra generally have high risk towards threat of earthquake with 8,9 richter scale. The potency is at the matching Euroasian straight and Indo-Australia, exactly in Mentawi archipelago. Strong assessment, the earthquake will result in great enough tsunamy wave that can destroy Padang City, such as tsunamy happened in Nangro Aceh Darussalam in the last 2004. Meanwhile, an expert of the earthquake of Indonesian Institute of Science (IIS) Danny Hilman thought that the great threating eaerthquake in the west Sumatra is increasingly nea.. This matter concerning with ongoing the great earthquake potency that isn't free from Mentawai segment. This segment stored the earthquake potency with 30 times over energy greater compared with earthquake in Padang last years. The great earthquake in (subduksi zone) Mentawai is always again and again goes along yearly cycle. The research result showed that the period of great earthquakes in that region ended in 1797 and 1833. While the 2007 earthquake in Mentawai region only lost three quarter of energy amount of accumulated tectonic pressure. The earthquake predicted resulting in tsunamy wave that swept the area in the West Sumatra beach at 5 kilometers circle from the beach edge. Padang is one of the threated city struck by tsunamy impact (vivanews.co.id, 2015).

Accordingly, to avoid the worst probability that is going tobe caused by disaster so the thing todo for Padang City Government is to implement the policy of managing disaster based disaster mitigation, where mitigation (the efforts of reducing disaster impact). Mitigational action can be in specific programming type. This is tobe embodied in order that when the disaster occurs, this program can reduce the people victims and demages. There are two approches to do for Padang City in such mitigational policy, Structural Mitigation (building chekdam, river embankment, barrage, shelter, EWS, map, ect.) and Non Structural Mitigation (making regulation, lay-out, training, socialization (including spiritual mitigation). (BPBDPK Kota Padang, 2015).

DISASTER MANAGEMENT:

According to UNISDR (2009) that the definition of disaster is trouble towards people or community that caused occuring disadvantage and impacting spirit passing away, economy, and environment broadly, that excesses the impacted people abilities to face it by using their own resources.

In many disasterous occuranes, the role that government does in terms of public policy and public administration to manage disaster is very important and great. There are various important paradigm changes tobe noticed in reducing disasterous risk (Pujiono, 2007).

- 1. From emergency respond tobe disaster management : disaster management can not focus only on emergency management anymore (emergency respond) when the disaster has occured, except more to reducing the overall disasterous risk of the risk observation, prevention, mitigation, readiness, respond, rehabilitational restoration and reconstruction.
- 2. From natural disaster tobe general disaster : characteristic of a region can make it susceptible towards natural disaster. But also it is proper tobe observated that the danger and disaster occured isn't merely anyway caused by nature frequently occured and caused extraordinary impact. Therefore, it is necessary to broaden encompassing research in order tobe disasterous definition which is more general rather than just natural disaster.

- 3. From generous action tobe completing basic right of the people. Protecting people from disasterous impact isn't merely action of the government kindness anymore towards their people, but is also as responsibility of the state institution to complete basic right of the people.
- 4. From the government responsibility tobe shared responsibility : disaster management is some way complex with the result that couldn't be merely burdened to the government but also tobe altogether affairs. How the government finally holds the last implemented responsibility.

Provisionally, disaster management is a systimatic process by using administrative decision, organization, operational skill, implementation capacity, strategy, and capacity of the people in reducing impact from natural threatment, environment, and technology disaster. This included all activity, including structural measurements/non-structural in avoiding or limiting (mitigation and readiness) impact from disaster that will probably emerge (UNISDR, 2004.)

Mean of disaster management has undergone evolution in terms of time. In Capra's study, word (and words-aloy) is starting point to the concept. In the very latest catagory, the term of "disaster management" is often defined as an old paradigm that responds disaster reactively. Closing to the matched terminology that is emergency management. Although common society (and certainly some of an old disaster literature) often similarized with reducing the disaster risk or disaster risk management (DRM), nevertheless, the similarization is an unexact simplification and doesn't appreciate conceptual development about disaster itself.

Term such as DMR actually is very popular in disasterous studies in United States post 1970s (like Center of Disaster Study of Delaware University). In it's development globally, since the promulgating international decade of disaster reduction (UNDDR) and then followed by International Strategy of Disaster Reduction (ISDR), the term of DRR is more powerful to give massage to the anticipative aspect, preventive, and mitigative, is the practice of disaster reduction ex-ante. At the same time, the terminologies like DM isn't popular anymore and part of status quo(Encyclopedia of International Development, 1st edition, 2006.)

The next international development Hyogo companionship that planed Hyogo's framework for action 2005-2015 called for all countries to arrange mechanism of the solid disaster risk reduction (DRR) with institute support and provided resources. The significance of systimatic steps in managing disaster so the conference of natural disaster reduction in Yokahama Japan 1994, decided what mentioned by Yokohama's principles was ten strategic steps of natural disaster management involved :

- 1. Need of the risk analysis
- 2. Need of preventing and being alert in disaster management
- 3. Prevention and preparation of disaster management should be intergrated in development planning at national and local level.
- 4. Need of capacity improvement to prevent and reduce the risk of disaster occurance.
- 5. Need of an early warning system during the disaster is occuring
- 6. Prevention of disaster occurance needs to engage people participation, local government, national and international.
- 7. Trouble condition could be reduced by using model and development planning design focused on the target group by giving education and training for whole community.
- 8. Need of sharing technology and information which is necessary in order to manage disaster among international community.
- 9. Need of living organism protection
- 10. Every country has it's own responsibility to protect it's people.

By promulgating of the law No.24 year 2007 about disaster management, so that various significant changes occured on the efforts of disaster management in Indonesia, either at national level or local one. If it was in advance the efforts of disaster management in Indonesia characteristicaly emergency responsive only, so by means of the law No.24 year 2007 involved the all disaster phases. The law No.24 year 2007 consists of 12 articles, those are: researching i), general devision ii), goal iii), responsibility and government authority iv), institute structure v), duty and right of the people vi), role of International corporation and corporate world vii), disaster management organization viii), fund aid and disaster management and sanction and fine regulation.

In general, the regulation is able to give security for the people and Indonesian zone in away of disaster management in case of characteristic, frequency and understanding towards trouble and disaster risk.

PARADIGM CHANGE AND DISASTER MANAGEMENT SYSTEM:

The main change and very huge influence towards disaster management system in Indonesia by promulgating of the law No.12 year 2007 is paradigm change from emergency responsive tobe alert disaster, the disaster is no longer reputed as something tobe accepted off hand, nevertheless might be prevented and anticipated, especially disaster occurance, victim and it's impact. The paradigm change is certainly followed by disaster management system change practiced by government for a long time. Disaster management is alaso devided into the action, responsibility and authority for the central and local government through development activity, people security, and aid safety for disaster management. Besides, this regulation also explains about obligation and responsibility of the people, international corporation, and corporate institution as well. This regulation explains also about defrayall that becomes responsibility of the central and local government and so does aid from the people. There is also law sanction for whom block state security away in the persuit of performing development activity. In other word, this law forces the all parties to view and arrange disaster management system more seriously and becomes undevided part in the state implementation system.

While according to Smith (2007), there are two paradigm concepts used in researching disaster of social scientific perspective, these are behavioral paradigm and structural paradigm. The behavioral paradigm stresses on causing geography of the disaster and using technology to reduce demages caused by disaster impact. This paradigm protects disaster becoming occurance no particular occurs and stresses on significance of the human behavior in preventing disaster. Nevertheless this paradigm doesn't pay any attention to social condition that is disasterous trouble region. On the contrary, the structural paradigm stresses on social structural effect where individual and group live adheringly (Bolin, 1998, Smith, 2007). An important approach in structural paradigm is susceptability approach focuses on space dimension of social stratification and economy in relating to the disaster (Bevaola, 2014a).

After the disaster management authority managed also by the local in general then the duty and function of the local government in disaster management involves the following matters (Solway, 2004) in Bevaola (2014b:3)

- 1. to know, identification and investigation of disaster susceptable area
- 2. To do understanding for the people and make sure that all members of society are aware of natural disaster impact and susceptability in their area.
- 3. To identify the rute evacuation and safe place location and refugees' location.
- 4. To keep relation with vary stakeholder in planning, health and welfare by giving mitigational policy and disasterous preparation.
- 5. To allocate the duty, authority and provided resources
- 6. To carry out the educational program and people awareness through working activity with the schools of the same place.

Therefore, the disaster management engaged governmental level as a whole, nongovernment and organization as well based on people playing the important role in disaster managerial process. The late a few years in a view that there must be pre-disaster mitigation or an action to avoid or reduce the impact of disaster.

Figure 1. Circle of Disaster Management (Carter, 2008)



At the figure above explained that disaster management involves stage of prevention and mitigation (mitigation and prevention managerial planning), being prepared (contingency planning, early warning, and preparation planning), alert emergency (restoration, rehabilitation and reconstruction).

THE EFFORTS OF PADANG CITY GOVERNMENT IN DISASTER MITIGATION:

There are explanatory types of policy implementation of the disaster mitigation as follow:

PROVIDING EARLY WARNING SYSTEM:

Erarly warning system of the earthquake disaster and tsunamy has been important tobe provided concerning this instrument is able to detect earlier than the earth straight movements, up to give signal and warning to the people when the earthquake occured together with tsunamy. For Padang City, the basic principle of policy implementation of providing the early warning system is regulation of Mayor Padang No.14 year 2010. With the regulation then stakeholders in this case BPBDPK implemented the mentioned mandate in the regulation. So that, Padang City is as one of the troubled disaster region so there has been hung an instrument of tsunamy early warning system generally known as Ina TEWS (Indonesia Tsunami Early Warning System). The aim of establishing Ina TEWS is giving an early warning to the people when there is indication of being tsunamy earthquake threatment will be occuring in Padang City. With the regulation then stakeholders in this case BPBDPK implemented the mentioned mandate in the regulation. So that, Padang City is as one of the troubled disaster region so there has been hung an instrument of tsunamy early warning system generally known as Ina TEWS (Indonesia Tsunami Early Warning System). The aim of establishing Ina TEWS is giving an early warning to the people when there is indication of being tsunamy earthquake threatment will occur in Padang City. Ina TEWS is a comprehensive tsunahy early system. By hanging the instrument it is expected then it'll be able to give the people an early warning when the earthquake disaster with tsunamy occurs (BMKG, 2012).

MAKING PERMANENT PROCEDURE OF DISASTER MANAGEMENT:

The alertness of Padang City Government in the earthquake and tsunamy disaster mitigation is being important, this case saw the earthquake occurance in the last 2009, where it was earthquake the Padang government was less alert. This case was seen from the weak coordination inter institution in disaster victim management. So that, Padang City with the basic principle of making permanent procedure of disaster management of Padang City mentioned in the regulation of Major Padang No. 25 year 2011 which is explaining about commando structure of alert emergency, task mechanism at the time of the alert emergency and field operational responsibility.

SHAPING AND EMPOWERING PUSDALOPS:

There had been done by Padang City government was shaping and empowering operational control center. This matter was very important in terms of significancy of sending disasterous information to authoritative parties until the disasterous data resources could be accurate. Standing on the earthquake disaster occurance in the last 2009 in Padang City, the transformational information about amount of victims unclear, as each institute had it's own data, so that the stakeholders who needed the data were confused of the provided sinchronous data, then handling victims was late.

GIVING SOCIALIZATION AND PROVIDING SIMULATION OF TSUNAMY EVACUATION:

The action of Padang City government in disaster managerial socialization done for the people who stay at Padang seaside resorts, and for general other people like pupils. This matter had been done because of Padang earthquake experience in the last 2009, most of victims were children. What is more, socialization of the earthquake and tsunamy prepared disaster had also already been done in some of strategic points in the center of city. Either sort of evacuational path billboard, temporer evacuational place, and direction (sidnage). The people Self Supporting Organization such as

community of the alert earthquake and tsunamy (KOGAMI) are also engaged in socializing and educating people in facing disaster. Meanwhile accomplished simulation also towards people like students in Padang City who worked together with Organization of Alert Rapid Action. The preventive activity of disaster mitigation will also engage the young communities in Padang City, in order that all walks of life can be synergy to one each other in improving alertness towards disaster.

EMPOWERING PEOPLE OF THE ALERT DISASTER THROUGH ALERT DISASTER GROUP:

Shaping the alert disaster group is done at every village in Padang City, there are about 104 KSB in the all Padang Town recently. Each KSB engages village government elements, PKK, Karang Taruna. There is KSB Forum in every district as communicational coordinating institution inter KSB in the engaged villages; and there is KSB Forum at the town level for the all KSB. Accordingly, there are about 2.080 persons of the 104 KSB in Padang City that will help to socialize the disaster mitigation concept and help victim at the time of disaster occured. They are all at once members of disaster managerial volonteers. With the KSB it will be able to give the people information quickly so that the disaster risk can be reduced.

MAKING MAP AND INFORMATION OF EVACUATION DIRECTION:

Padang City local government spreaded the maps to evacuate earthquake troubled disaster location and tsunamy wave impact. What is more, the map also involded safe area for refuge. The tsunamy evacuational map is a shape of disaster alertness done by administrative city by giving a mount of directions for city inhabitants. There is trouble in a map of the regional amount signed by cheny red. Whereas the safe location is signed by yellow colour and it is at the elevated place. The green current vector gave the city inhabitants directions to flee for themselves life.

BUILDING TSUNAMY EVACUATION SHELTER:

Bulding shelters was initially planned in the areas distanced between 500 M from the edge of beach. Building evacuation path and shelter is something important concerning the arrival of disaster. Therefore, Padang City is indeed needs a lot of shelters. Because of limited government ability, the established buildings functioned tobe shelters like schools, offices, hotels, banks, campuses, and ect. There are the established shelters in Padang City suh as Public Senior High School I Padang,, Public Vocational Senior High School 5 Padang, Public Junior High School 7, Public Junior High School 25 Padang, Public Elementary School 23/24 Padang, Inpress Market I, Self Shelter, Escape Building, and Governor Service. With shelters building the people hope then that they will be evacuated easily when the tsunamy wave disaster occurs in Padang City.

CONCLUSION:

Disaster mitigation policy that is implemented by Padang City Government could be told running well up to the present time, in this case proven from provided various policy in disaster mitigatin, all of them had been alraedy done well. And now how the government and people tobe synergy to one each other in implementing provided policy and keep on doing socialization and simulation in overcomming danger probabilities and earthquake threatment that is going to attack violently.

SUGGESTION:

It is necessary for Padang City Government to improve and give serious paying attention toward danger or threatment of the next attack violently disaster, by keeping on doing socialization and simulation toward people, pupils in terms of disaster.

Putting disasterous theme into the local contents curriculum, so the children are early introduced with disaster.

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