
Capacity Of Firefighters Fire Fighting Officers In The Implementation Of The Sister Village Program (Case Study On Fire Disaster Risk Reduction Efforts In DKI Jakarta)

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ABSTRACT

Fire is one of the dangers that can threaten cities that have dense residential. DKI Jakarta as the capital city of the country with many dense residential areas with a high level of fire risk, this is proven from the data of 948 fires occurred from 2011, they were 1008 in 2012, 486 in 2013, 486 in 2014 696, 1582 in 2015 and in 2016 there were 1139 fires. The trigger of fires in dense residential areas was the lack of resilience in handling the fire disasters, resilience here refers to reducing the vulnerability that becomes a potential fire hazard in residential areas. Community involvement in fire disaster risk reduction is very important, this should be with the capacity of firefighters to be able to initiate the community to be involved in fire disaster risk reduction efforts. This research will analyze the capacity of firefighters in implementing the Sister Village program, identify the capacity of implementing the Sister Village program that was seen from (i) the capacity of firefighters in initiating communities to play a role in efforts to reduce the risk of fire disasters, (ii) Implementation of the Sister Village Program in fire disaster risk reduction efforts, (iii) Community involvement in fire disaster risk reduction efforts in DKI Jakarta. In doing research the capacity of firefighters in the application of the Sister Village Program as an effort to reduce the risk of fire disasters used descriptive qualitative research methods.

Keywords: Fire Handling, Sister Village, Fire Fighting Capacity

INTRODUCTION

Urbanization has caused a very rapid population explosion in the city; this implicates for the buildup of labor in big cities in Indonesia. The large number of residents who choose to settle in big cities has caused the more widespread of the growth of new settlements, both legal and illegal. In densely populated settlements, you will find many uninhabitable houses.

Various problems can arise from these densely populated settlements such as garbage, flood, lack of clean water, and the worst is fire disaster. Most fire cases occur in densely populated settlements. The fact is that many low-income groups live in dense urban settlements (Dahroni: 2008) which are not supported by preparedness in facing fire risk (Wilhelm, 2011). Dense settlements quicken the process of spreading or intensifying the location of a fire disaster to objects that have the potential to burn. In addition to very high material losses, fire disasters can also cause death.

Apart from the physical condition of the building, one of the important causes of fire is the behavior of the residents. Sufianto and Green (2011) had an opinion that other factors that may contribute to the large number of fire incidents are community behavior that can trigger fires (such as cooking behavior, careless use of electric tools, negligence in using lamps, kerosene and candles, harmful smoking behavior, and others). The factor of human negligence who is not aware of their behavior can be one of the triggering factors for fires. Society often does not realize and ignore

the amount of risk that will be faced due to their views and behavior on a risk (Ho in Sagala: 2005). Data on fire cases in DKI Jakarta were quoted from various sources that there were 948 cases of fire in 2011, 1008 in 2012 cases, 486 cases in 2013, 696 cases in 2014, 1582 cases in 2015, and 1139 cases in 2016. The high number of fire cases in DKI Jakarta shows that there are still some problems related to handling the fire disaster in DKI Jakarta.

As published on the *Jakartafire.Net* website, it was stated that fire incidents occurred more frequently in densely populated residential areas. There were at least 80 fire prone to fire spread across 53 sub-districts in Jakarta. But what is equally important is the lack of public awareness of the threat of fire. As a result, when a fire occurs, people are often panic. Moreover, often society do emotional action against firefighters. Therefore, society involvement in fire disaster handling is very important, especially for people who live in densely populated areas.

The concept of *Desa Bersaudara* (Sister Village) was a cooperation that was established between two villages, namely those in the Disaster Prone Area (*Kawasan Rawan Bencana / KRB III*) and a village that is safer or in a Disaster Prone Area (*Kawasan Rawan Bencana / KRB I*). The concept of the Sister Village (*Desa Bersaudara*) in 2013 was declared as one of the formalized programs in disaster management. The development of the concept of Sister Village (*Desa Bersaudara*) is one of the alternative solutions during crisis.

The application of the sister village system is often used in handling volcanic disasters, but researchers trusted that Sister Village can be applied to handle several kinds of disasters in Indonesia, one of them is the handling of fire disasters. The basic concept of this Sister Village was the existence of cooperation between disaster-prone villages as the origin of evacuees and villages outside disaster-prone areas or those were not affected by disasters as evacuees' camps. As one of the knots for disaster preparedness, Sister Village was expected to be able to realize the certainty of places for evacuation, reduce panic and chaos of the evacuation process, facilitate evacuee's services, and reduce disaster risks and ensure that village governance can continue.

The emergence of a disaster happens suddenly, as an unexpected incident that threatens property and soul beyond the capacity of the community. In order to minimize the occurrence of fire disasters, beside the role of firefighters, community independence and preparedness are also needed. One form of building community preparedness is by doing cooperation between communities in disaster areas with other communities that are not affected by disasters (*Sister Village*). Seeing the various problems that still often occur in handling fire disasters that cause large losses both in material and even victims, the researcher wanted to examine the role of firefighters in the application of the Sister Village Program to minimize the occurrence of fire disasters in DKI Jakarta.

METHODS

This research used a qualitative approach supported by quantitative data. The focus of this research was the implementation of the Sister Village program as an effort to reduce the risk of fire disasters in DKI Jakarta, seen from the capacity of firefighters in initiating the society to play a role in fire disaster risk reduction, implementing the Sister Village program, society involvement in an attempt fire disaster risk reduction in DKI Jakarta. The focus of this research was DKI Jakarta as a city that is prone to fire cases. It was recorded that there were 5859 fire cases happened in DKI Jakarta from 2011-2016. Primary data were obtained directly from informants by using form of a list of questions or interview guides that consists of some questions about the capacity of firefighters in implementing the Sister Village program (a case study of fire disaster risk

reduction in DKI Jakarta). Secondary data was data obtained from other sources. This data was obtained from relevant literature such as mass media, both newspapers and the internet. In conducting qualitative data analysis, there were several things that needed to be considered, that the data appeared was in the form of words and not a series of numbers, even though the data had been processed before it was used, however qualitative analysis still used words that are usually arranged in expanded text. This research used data triangulation from sources. Triangulation with sources means comparing and cross-checking the degree of trustworthiness of information obtained through different time and measurement instrument in qualitative research. This can be achieved with the following method (Moleong, 2007: 330-331).

RESULTS AND DISCUSSION

Capacity of Firefighters in an Attempt to Reduce Risk of Fire in DKI Jakarta

Fire is an unwanted incident; it does not know the time or whoever is going to be the victim. The frequent occurrence of fires shows the need of precautions against fires needs to be improved. Fires can be prevented by taking preventive measures and fire countermeasures. In this research, to see the capacity of firefighters, it can be seen from 5 aspects, namely:

1. Knowledge and Attitude Towards Disaster Risk

Knowledge is a major factor and a key to preparedness. The knowledge possessed can usually influence attitudes and concerns. Society of disasters, especially for those who live in coastal areas that are prone to natural disasters. The knowledge and attitudes towards disaster risk in this study are seen from:

- a. **Skill / Ability.** The indicator of this skill is the level of ability and reliability of firefighters in fulfilling the minimum service standards (MSS), especially at the fire countermeasures phase. Informant 1 said that in general the skill level of firefighters was in line with expectations, but still needed to be improved again.
- b. **Creativity.** Developing creativity and release one's potential are indicators that are no less important for firefighters. The role of developing creativity and potential for firefighters is of course very necessary in dealing with emergency conditions or when a fire is occurred. In carrying out their duties, the firefighters of DKI Jakarta have been able to release their potential and creative ideas in helping to complete their work. The activities of firefighting in DKI Jakarta can also be seen from the extent to which firefighters strategize in carrying out their duties, not only for prevention, rescue but also for themselves. To support the creativity development of firefighters, the Pusdiklat (Education and Training Center) routinely conducts training.
- c. **Cooperation.** The indicator of cooperation in a team of firefighters is the most important element and has a very vital role, especially in the fire countermeasures phase. In carrying out their duties, the DKI Jakarta firefighters have worked well together. The high level of accident risk makes firefighters always have to be careful and cooperate each other in carrying out their duties, therefore firefighters are supported with the type of physical and material training in order to maintain the safety of both victims and the safety of the souls of the firefighters themselves.

2. Policy and Guideline

Natural disaster preparedness policy is very important and it is a concrete effort to carry out disaster preparedness activities. Significant policy effects on preparedness that covers: public education, emergency planning, disaster warning systems and resource mobilization,

including funding, management organizations, human resources and essential facilities for disaster emergency conditions. Policies are manifested in various forms, but it will be more meaningful if they are stated concretely in rules and regulations, such as: SK/Surat Keputusan (Decree) or Perda/Peraturan Daerah (Local Rule) completed with a clear job description. In order to be implemented optimally, operational guidelines are needed.

3. **Plans for Natural Disaster Emergencies and Disaster Warning Systems**

This plan is an important part of preparedness, especially in relation to evacuation, help and rescue, so that disaster victims can be minimized. This effort is very crucial, especially during a disaster and in the first days after a disaster and before government's and from other parties comes.

The indicator sees the plan for a natural disaster emergency carried out by the Fire Service in handling fire disasters during an emergency or when a fire occurs, it can be seen from the Local Regulation of DKI No. 8 of 2008 (Peraturan Daerah Khusus Ibukota Jakarta No 8 Tahun 2008) concerning Fire Prevention and Countermeasures in the second part of article 35 states in the incident of fire, owners and / or users of building management agencies, owners and / or managers of special motorized vehicles and people or business entities that stores and / or produces dangerous materials are required: to do initial measures of rescue soul (life), property, firefighting and site protection; and to inform related agencies.

Before the Service Officer arrives at the place of the fire, the neighborhood committee / neighborhood unit (RT / RW), the Fire Volunteer Line, the Head of Sub-District / Sub-District Heads and related agencies immediately take control and security measures according to their duties and functions.

4. **Resource Mobilization**

Available resources, both human resources (HR), as well as funding and essential infrastructure for emergencies are potentials that can support or otherwise become an obstacle in natural disaster preparedness, therefore resource mobilization is a crucial factor. In looking at the mobilization of resources at the DKI Jakarta Provincial Fire and Disaster Management Service, it can be seen from the number of Human Resources in the Fire Service that has 3003 people with a composition of human resources.

Implementation of Sister Village in the Efforts to Reduce Risk of Fire Disaster in DKI Jakarta

1. **Application of Sister Village in efforts to reduce the risk of Fire Disaster in DKI Jakarta through the Environmental Fire Safety System Program**

The concept of Desa Bersaudara (Sister Village) is a cooperation established between two villages, namely those in the Disaster Prone Area (Kawasan Rawan Bencana III / KRB III) and a safer village in a Disaster Prone Area (Kawasan Rawan Bencana I / KRB I). The concept of the sister village itself has been successfully implemented as an effort to save Mount Merapi disaster in the Special Region of Jogjakarta and its surroundings. Efforts to implement sister villages in Jakarta in efforts to reduce the risk of fire disasters are according to field observations that have been implemented but have not been maximized. Efforts to reduce the risk of fire disasters in DKI Jakarta are carried out through various policies stated in the 2018 City Medium Term Development Plan concerning the 2018-2022 DKI Jakarta Provincial RPJMD.

Society involvement is very important in the implementation of the Sister Village Program

(Desa Bersaudara). Implementation of Sister Village which occurs in efforts to reduce Disaster risk in DKI Jakarta through the Sistem Environmental Fire Safety System program. Environmental Fire Safety System is an integrated system in efforts to prevent and control fires in DKI Jakarta.

The establishment of the Environmental Fire Safety System Program is hoped that the public cares about the potential for fires and makes various efforts to prevent fires in their respective areas. The Environmental Fire Safety System will be used in the community, especially in environments that are considered prone to fires. And the goal in forming an Environmental Fire Safety System is to anticipate early fire prevention for the common interest of preventing fire disasters whenever they occur at any time.

Environmental Fire Safety System Program which is implemented in each area with the aim of carrying out tasks properly and correctly, built togetherness with units and ranks of the Fire Environmental Resilience System and more importantly guided and built up compactness of the Fire Environmental Resilience System unit by not sorting and choosing that was states the provisions in Perda No. 8 of 2008 concerning Fire Countermeasures Management in the DKI Jakarta Province, as stated in Article 2 Chapter II concerning General Prevention that every resident must actively try to prevent fires, both for their own necessity and for the public necessity. The SKKL (Environmental Fire Safety System) program in DKI Jakarta was expected to be implemented up to the level of Hamlet (Rukun Warga / RW) as targeted in the work program of the DKI Jakarta Fire and Rescue Service, namely all RWs in the DKI Jakarta area can be socialized inaction of the Environmental Fire Safety System program for the next 5 years.

2. Barriers to Application of Sister Village in efforts to reduce the risk of Fire Disaster in DKI Jakarta through the Environmental Fire Safety System

Although the Sister Village Program through the Environmental Fire Safety System Program has been implemented, there were still a number of obstacles. Lack of human resources and budget are the main obstacles in the implementation of the Environmental Fire Safety System program. Society participation in the implementation of Environmental Fire Safety System is very dependent on the awareness of the society itself, as well as the awareness to become a member of Fire Volunteer Line or is called Balakar (Barisan Relawan Kebakaran). Because Balakar is truly voluntary, therefore many balakar members do not focus on their main tasks. When Balakar members are apprenticed at the fire station, they only got food, because of that, they sometimes have other jobs such as sellers and ojek (motorcycle drivers), they will be less focused because they have to make a living for their families.

The large number of members who retire while there was no recruitment of civil servants in the Fire and Rescue Office of DKI Jakarta Province, causing a shortage of Human Resources. This deficiency has prompted the DKI Jakarta Provincial Fire and Rescue Agency to recruit firefighters with contract employment status or commonly known as PJLT personnel. The contract workers were selected from members of the Balakar. But when he became a contract worker, his level of care was reduced because he felt in a safe point

3. Society Participation in the Effort to Reduce Risk of Fire Disaster in DKI Jakarta

Society participation is a form of concern that is expected by fire prevention and rescue units in DKI Jakarta, in carrying out programs from the DKI Jakarta Fire Service, inviting youth and community and religious leaders in the formation of an Environmental Fire Resilience System that is facilitated and socialized by the Fire Department through all Sub-

District Offices located in the District area, in this process, what is offered to the community is warm and enthusiastic.

CONCLUSION

The capacity of firefighters in the Sister village program as a form of disaster risk reduction. The sister village program in DKI Jakarta province is one part of the disaster management during pre-disaster phase as seen in the criteria for preparedness, early warning, and mitigation. In general, the capacity of firefighters in the sister village program has been running quite well, this can be seen based on the following findings:

1. Capacity building efforts at the individual level are quite good. With the Fire Volunteer Line (Balakar) it has the function of empowering the community in increasing awareness about the Fire Disaster. Society knowledge in the buffer village regarding fire disaster management is still very varied and there is even no minimum standard of technical knowledge that must be possessed by fire disaster volunteers. Skills development was carried out by involving many other actors in order to build a more comprehensive capacity, however, the technical skills of disaster volunteers are not evenly distributed, depending on the extent to which individuals will develop themselves according to their respective needs.
2. The implementation of the Sister Village had been going well but still experienced several obstacles, namely: inadequate human resources and budget owned by the DKI Jakarta Provincial Fire and Disaster Management Agency.
3. Society participation is a form of concern that is expected by fire prevention and rescue units in DKI Jakarta, in carrying out programs from the DKI Jakarta Fire Service, inviting youth and community leaders and religious leaders in the formation of an Environmental Fire Resilience System that was facilitated and Socialized by the Fire Department through all Sub-District Offices located in the District area in this process, which is offered to society members, got a warm and enthusiastic welcome.

From the conclusions in this research, there were several recommended suggestions, namely:

1. There needs to be an increase in education and training, especially for officers from the DKI Jakarta Provincial Fire and Disaster Management Service, Training for Balakar, and Society who are living in Fire Prone areas.
2. The Sister Village program should be implemented in all disasters that occur in the DKI Jakarta Province area.
3. There must be more space to increase society Participation in reducing the risk of fires that occur in the area where they live.

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