

---

## Evaluation of Community Participation and Fire and Rescue Sub-dept. In Fire Prevention Tanjung Priuk District

Ardani<sup>1</sup>, Djaka Permana<sup>2</sup>

Postgraduate Program in the Institute of Social Sciences and Management STIAMI Jakarta  
Correspondent: [ardanic@gmail.com](mailto:ardanic@gmail.com)

Submitted: 6 August 2019. Revised: 25 August, 18 Sept 2019. Published: 30 October 2019.

---

### ABSTRACT

This study aims to determine the level of community participation in fire prevention and management in Tanjung Priuk Subdistrict, the City of Administration against Fire Disasters in North Jakarta, the theory used in this research is the opinion of M. Nuh Minister of Education in the era of President Bambang Yudhoyono in Climbing the Amstein ladder to organize an ideal participation. The research method used is a qualitative method to obtain key data from interviews with legitimate sources that are directly involved in fire prevention and management and are supported by data from field observations. The data is then analyzed by the triangulation process. To find out the level of community participation. The results showed that the level of participation in fire prevention in Tanjung Priuk District had a range of information, consultations and appointments. the training program, which is carried out as an annual program, is provided for the community to provide information one way. In the management process, the community is at the second level of the seventh stage because the community is already a partner in the fire department before the fire department arrives at the fire location, the community has tried to extinguish the fire independently. To increase community participation in fire prevention and management, the Fire Department of the North Jakarta City Administration Office must optimize human resources, as well as other fire management resources, to be able to act also to provide costs for Balakar (Voluntary Fire) every month.

Keywords: Community participation, fire prevention

### INTRODUCTION

Jakarta as a metropolitan city is also in its position as the capital city of the Republic of Indonesia and is the center of all political, economic, socio-cultural activities, as well as national defense and security on a national and international scale, demanded to always improve competing against other cities. Various development activities continue to be carried out in concerning infrastructure, such as transportation and facilities in the form of physical buildings such as office buildings, hotels, apartments, shops, trade, industry, restaurants and residential houses. Law number 22 of 1999 concerning regional government which was replaced by Law number 32 of 2004 as well as Law no 34 of 1999 concerning the Provincial Government of the Special Capital Region of Jakarta which granted broad autonomy and great authority for the Provincial Government of the Special Capital Region of Jakarta to govern itself and develop the potential of the region, has made it possible for rapid economic growth and development in the Special Capital Province of Jakarta.

On the other hand the high growth rate and rapid development of the Jakarta Special Capital Region Province Jakarta has an extraordinary attraction for residents in other regions. For

most other regions, especially the new workforce who want to improve their lot, Jakarta is a place that promises a million opportunities to be achieved. As a result, there has been a massive urbanization that has continued from the past until now which cannot be stopped by any policy that has been taken by the Provincial Government of the Special Capital Region of Jakarta.

The impact of the phenomenon of urbanization is the high population density in the province of the Special Capital Region of Jakarta which leads to the complexity of the arrangement of the city area and its complex problems. Illegal buildings along the riverbanks, the growth of densely populated settlements, other social problems to the level of severe traffic congestion which is a daily sight, is a glimpse of the many urban problems in Jakarta.

The gap between discourse and action, outdated evaluation methods, short time frames, bureaucracy, and power relations, combined with vertically and externally driven communication models, and confusion between information and communication, all preventing donor countries from providing participatory support to the community (Gumucio-Dagron, 2009). As a result, participant approval and registration often becomes difficult (Clark et al., 2013).

In the midst of various urban problems, the danger of fire is always threatening because at any time it can happen and no one can predict when it will come. The level of population density in urban areas, the culture of urban communities, unfair business competition, and high economic activity as well as the low level of awareness of urban communities towards fire hazards are trigger factors that support the potential for fire hazards in the Jakarta area. The existing statistical data of the Operations Section of the Fire Department of North Jakarta City shows unfavorable conditions where the number of fires in the North Jakarta region is classified as high and there is a tendency for the past four years to increase. This can be seen from the data of the last four years the frequency of fires as in table 1 below, where each year the frequency of fires is above one hundred, which also means that the average fire case occurs once in two days in the north Jakarta area. A fact that should be a concern of all parties who show indications as if Jakarta is almost every day there is a Jakarta fire.

Table 1. Fire Frequency and Number of Losses Due to Fire  
in North Jakarta City Administration Areas for the Period of 2013 - 2016

Year	Fire Frequency	Number of Losses (Rupiah)
2013	157	85.821.875,-
2014	183	81.979.000,-
2015	247	44.841.100,-
2016	234	32.868.800,-

Source : North Jakarta Fire Sub-dept. Control Section

Besides that, no less important is the evaluation of the prevention efforts themselves. This is in line with the main tasks and functions of the Jakarta Fire Department which are listed in the Governor of Jakarta Special Capital Region Province Decree number 264 of 2016 concerning the organization and work procedures of the Jakarta Fire and Rescue Service Special Province, namely carrying out efforts to prevent and deal with fires and rescue against other disasters.

Related to the problem of evaluation of the process of fire prevention or suppression, one of the determining factors in the success of a fire prevention operation is the response time of the Fire Department. In the strategic plan (renstra) of the Jakarta Provincial Fire Service Special Region of Jakarta in 2017-2017 it is determined as an organizational goal, namely improving service to the community in the field of prevention, suppression and rescue with indicators of organizational performance, namely the speed of service and rescue. Furthermore, there are four

main programs that must be carried out to achieve the stated objectives, namely improvement of facilities, infrastructure for prevention, suppression and rescue; quality and quantity of fire and disaster management services; and increasing community participation in fire management (Nasution, 2011).

Judging from the development of fire the first ten minutes of the combustion process is the best time to carry out fire fighting operations. Because in the first ten minutes of the combustion process the temperature produced by the combustion process is still low and no dangerous and toxic gases that have been produced are the result of the combustion process, so most countries in the world set the first ten minutes or less as a quick reaction of the fire organization Fire.

However, the real conditions that exist today are still far from the expected ideal conditions. This can be seen from the many complaints from the public that the performance of the Jakarta Special Capital Province Organization is still low because it always arrives late to the location of the fire, which makes the fire fighting operation ineffective and the level of loss caused by the fire is high. for example the Muara Baru fire on 28 June 2014 which burned 150 homes and left 500 people homeless. In the case of the fire, firefighters who arrived more than half an hour after the fire broke out with insults from residents who could not contain their emotions. The delay in firefighters coming to the location of the fire backfire for the firefighters themselves because the attitude of the people at the location became unfriendly, it even tends to be anarchist with the fear of destroying the fire brigade unit and the mistreatment of firefighters. This is certainly a limiting factor for the smooth operation of fire fighting.

The Jakarta Provincial Fire Service has set a rapid response to fire fighting services in 15 minutes ([www.jakartafire.com](http://www.jakartafire.com)) with details; (a) The time since receipt of the notification of a fire somewhere, the interpretation of the determination of the location of the fire and the preparation of troops and means of fighting the fire for 5 minutes; (2) travel time from the fire station to the location of the fire for 5 minutes; and (c) the time for the degree of equipment to be allocated until it is ready for a blackout (spraying) operation for 5 minutes. It needs to be understood that in connection with the determination of the response time of 15 minutes is starting from this response time it is planned to determine the location of outages facilities / infrastructure to reach one area with a response time of 15 minutes.

The condition of Tanjung Priuk Subdistrict as a focus in the research area of 2,252 ha, the population of 387,471, the population density of 16,666 consisting of 5 villages, namely Papanggo, Tanjung Priuk, Sunter Jaya, Kebon Bawang and Sunter Agung City Spatial Structure (RTRW) as tertiary activities center, Mayor, Koja Market Area while Risks / Prone to Floods and Fire Social and Economic Conditions are Ports, Industry, Commercial, Railroad and Riverbanks, Utilization of space as Housing Areas, Industrial and Warehousing Areas, Office and Service Areas, Blue Open Spaces (Papanggo Reservoir ), Cultivation Zone and Government Zone, whereas 2 outbound areas are not included in fire and flood-prone areas, namely Sungai Bambu and Warakas sub-districts (Source: District data in 2016 RTRW of North Jakarta City).

The population in the slum area of Papanggo Village is 453 inhabitants, the population density in the slum area in 2013 is 302 inhabitants / Ha while the Building Density in the slum location is 124 units while the social characteristics / conditions of the slum location consist of Lake Sunter (Slum control process and the development of BMW parks), markets, river banks and landfill stations. The number of residents in the slums location of Tanjung Priuk 2,667 inhabitants population density in slums in 2013 was 289 people / Ha while the Building Density in slums was

125 units while the social characteristics / conditions of the slums consisted of factories / industries, warehousing, railways, train stations, train stations , Bus Terminals, Port Laborers, Street Vendors.

The population in the slum area of Sunter Jaya Village is 1,045 inhabitants. The population density in the slum area in 2013 was 334 people / Ha while the Building Density in the slum location was 148 units while the social characteristics / conditions of the slum location consisted of Lake Sunter (Rehab Process for ski areas), commercial , Industry, Stadiums, riverbanks. The number of residents in the slum location of Kebon Bawang is 522 inhabitants. The population density in slum areas in 2013 was 279 people / Ha while the Building Density in the slum location was 121 units while the social characteristics / conditions of the slum location consisted of Commercial, Government Area, Harbor, Terminal, Dormitory Complex Police, Military, Snake Market, city riverbanks and dead end times.

The population in the slum area of Sunter Agung Village is 1,974 inhabitants. The population density in the slum area in 2013 was 290 people/Ha while the Building Density in the slum location was 119 units while the social characteristics/conditions of the slum location consisted of riverbanks. Markets, Traders and Factories.

Slum population and location, social characteristics plus the condition of narrow environmental roads and the number of portals installed for environmental safety of people who take advantage of the opportunity by theft so that fires occur are inhibiting factors to reach the scene, not to mention if there is a fire, public awareness that has not Maximum viewing only impedes the blackouts.

Fire incident is a form of disaster that causes losses to living things. The frequency of fires that occurred in Tanjung Priuk Subdistrict in 2017 was 52 times from 271 times of the frequency of fires that occurred in the City of North Jakarta Administration. Most objects that were burned were a house 21 times followed by rubbish (9 times), warehouses / besmen / beds (7 times). The area that often experience fires are Papanggo.

Table 2. Frequency of Fire Occurrence in Tanjung Priuk Subdistrict According to Kelurahan in 2017

<b>Kelurahan</b>	<b>Number</b>
<b>Tanjung Priuk</b>	7
<b>Sunter Jaya</b>	7
<b>Sunter Agung</b>	13
<b>Warakas</b>	4
<b>Papanggo</b>	14
<b>Kebon Bawang</b>	2
<b>Sungai Bambu</b>	5
<b>Total</b>	52

Source : Fire and Rescue Sub-Department for City Administration of North Jakarta

Data in the North Jakarta Fire Department said that from 2015 there were 247 cases of fires caused by 130 causes of electricity, 15 cigarettes, whereas 12 cases of stoves exploded, lamps or candles 0 and another 90 examples of them were deliberately burned, burning garbage, dried alang grass and so on. The public still does not care and is not yet effective against Fire Prevention. In a number of fires, the community did not participate and did not take part in fighting in the blackouts, they only gathered on the street so that officers were obstructed in the blackout operations. The description above is clearly arranged in the form of an image as follows:

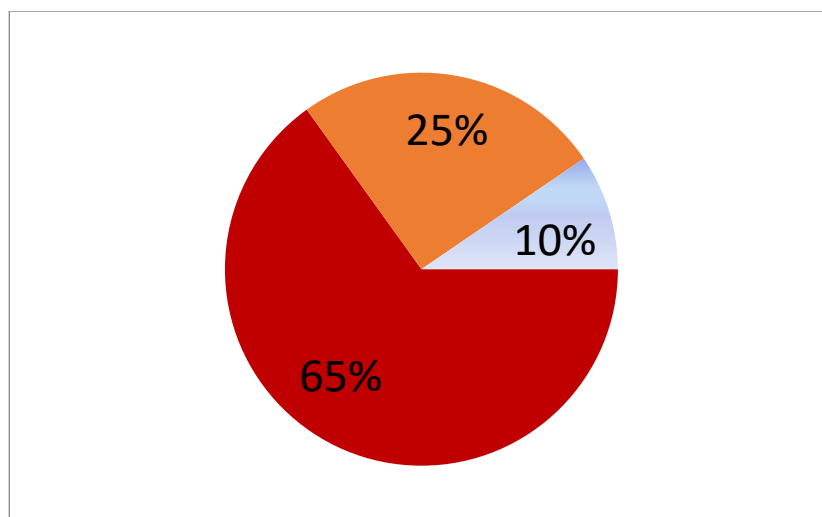


Figure 1. The Percentage of causes of fires in 2015

Information : Electricity = 65%

Stove = 25%

Others = 10%

Source: Service tribe of North Jakarta Administration City Fire Department

Besides that, not all buildings and houses have a fire protection system and the community still lack of knowledge of fire prevention and mitigation efforts is one of the factors that lead to fires. Urgent construction without calculating the distance between one building and another, the use of flammable building materials, aging and unprotected electricity installations, high population density, the location of distant water sources also worsens the conditions above. These factors cause a number of areas in North Jakarta to be a fire-prone area.

From the above facts it is necessary to conduct research to find out the efforts of the Section of Prevention and Participation of the People to the Department of Fire and Disaster Management of North Jakarta City Administration in increasing public awareness in order to prevent and overcome fires in this case in densely populated settlements. In addition it is necessary to conduct an in-depth evaluation of the factors that influence the lack of public awareness in fire prevention and control. Furthermore, for future development it is necessary to formulate a strategy to improve performance in fire fighting services by the Section of Prevention and Community Participation of the North Jakarta City Fire Service Department in order to improve services to the community in the prevention and prevention of fires in the Province of the Special Capital Region of Jakarta.

## METHOD

This research is a descriptive qualitative research approach. Descriptive research was conducted to examine the reality of the field in order to get a factual and accurate picture of the object to be studied.

This research is focused on how the level of participation of the community in fire prevention and control in the North Jakarta City Administration area which finally can be obtained the clear information about the effectiveness in anticipating fires that occur, so that it will minimize the threat of fire in the environment.

By using qualitative research, the researcher is very closely related to contextual factors, so in terms of sampling it is captured as much information as possible from various sources. The second purpose of the informant is to explore the information that forms the basis and design of the theory that is built.

Questions in in-depth interviews are asked to informants, the individuals who are believed to have and master the research topic chosen purposively, by using informants as the key to knowing the prevention and participation of the community in fire prevention in the fire prevention and rescue department of the city of North Jakarta.

## RESULT AND DISCUSSION

The degree of manipulation and therapy. In this section, the ruling authority intentionally removes all forms of public participation. At the Manipulation level, they choose and educate a number of people as representatives of the public. Its function is that when they propose various programs, the public representatives must always approve it. While the public was not informed at all about it (Radianti, Lazreg, & Granmo, 2015). At the Therapy level, they tell the public a little about some of the programs that have been approved by public representatives. The public can only listen.

*Tokenism* (Delusif). Which has a range of Informing, Consultation and Placation. In Tokenism, the ruling authority creates an image, no longer blocking public participation. The reality is different. They still execute the original plan. When they are at the Informing level, they inform the various programs that will and have already been implemented. But only communicated in the same direction, the public has not been able to carry out direct feedback communication. For the Consultation level, they discuss with many public elements about various agendas. All suggestions and criticisms are listened to. But those in power decide whether or not public suggestions and criticisms are used.

*Delegated Power* level. They delegated some of their authority to the public. For example, the public has a veto in the decision making process. The highest level is Citizen Control. The public is more dominating than them. Even to evaluate their performance. Ideal public participation is created at this level. At this level, the community has not yet achieved it, because in implementing fire prevention and control, it is the responsibility of the North Jakarta City Fire and Rescue Service Office. The community is the object of service and the government is a servant or subject of service and is still a partner.

Many factors make residential areas vulnerable to fire threats. Among buildings on the average residential area is made of flammable materials. Furthermore, the distance between buildings is also very tight. Thus if a fire occurs it is generally difficult to control and tends to expand and expand (Subarudi, 2002).

No less important is the public awareness of the threat of fire hazards as well as being one of the causes of residential areas prone to fire. The low level of public awareness of the threat of fire is reflected in the behavior of the community is often negligent towards the danger of fire. The Fire Department even mentioned that community negligence was the main cause of the fire. Negligence in the use of electricity causes frequent electrical shortages which result in a fire. In addition, negligence in the use and maintenance of stoves is also a major cause of fires in settlements (Hakim, 2009).

When the fire is uncertain, demanding firefighters to act quickly and appropriately, community participation is crucial. When seeing the location of the fire station that is still far

away, congestion everywhere, one solution is to maximize community participation / role in fire prevention and prevention. Community participation in areas that are densely populated and prone to fires greatly helps reduce the risk of fires that can spread and expand instantly (Wu & Wu, 2011). However, the effort to raise awareness of the role of the community requires quite a long time, especially if seen from the busy lives of the Jakarta people. Namely by providing training and knowledge about fires. The efforts to empower the community in fire prevention to handle fire hazards effectively and efficiently. In the DKI Jakarta Provincial Governor Regulation Number 93 of 2014 concerning Community Participation in Fire Prevention and Management.

In order to involve community participation in fire prevention and control in residential areas, an Environmental Fire Safety System Program (SKKL) was formed. SKKL is a community-based voluntary organization in the Rukun Warga (RW) as a forum for participation and a sense of community responsibility in the RW environment in overcoming the threat of fire hazard.

The task and function of the SKKL is to assist the community in efforts to protect buildings, occupants, property, and the environment from the threat of fire hazards and provide fire information to the Fire and Rescue Office of North Jakarta City Administration. Besides that, SKKL also has the duty to conduct early extinction before the Fire Officers come to the scene of the fire. To involve the community's participation, coaching needs to be done including covering the prevention and control of fires carried out by the Fire Department. Because to prevent and extinguish fires, need knowledge or expertise and skills. In addition, in accordance with the Jakarta Special Capital Region Regulation Number 8 of 2008 concerning Prevention and Management of Fire Hazards Article 55 Paragraph 2 which states that the SKKL consists of Balakar, infrastructure and facilities as well as Permanent Procedures. Furthermore, what is meant by BALAKAR based on DKI Jakarta Provincial Governor Regulation Number 93 of 2014 concerning Community Participation in Fire Prevention and Management Article 7 Paragraph 1 states that Balakar is a fire volunteer container formed from, by and for citizens based on the Rukun Warga Environment. And a civil society organization to implement the SKKL. The formation of the Balakar organization is entirely left to the people who in its implementation were facilitated by the Service Office.

In article 11 of the Governor Regulation No. 93 of 2014 regulates the duties of BALAKAR which include; (a) conduct prevention and control of early fires in their environment; (b) help supervise and maintain fire infrastructure and facilities in its environment; (c) reporting a fire; and (d) reporting activities that pose a fire threat.

To support the implementation of the tasks, Balakar uses facilities and infrastructure, among others, mentioned in article 12; (a) guard post; (b) water reservoirs or other water sources; (c) small fire extinguishers; (d) heavy fire extinguishers; (e) movable manual fire extinguishers; (f) early fire extinguishers; (g) fire pump motor; (h) fire engine motorcycle; (i) fire bikes; (j) smart alarm; (k) handy talky (HT); and (l) block. Fires will be more quickly treated as early as possible so as to minimize material losses and casualties caused by fires (Subarudi, 2014).

The notion of participation is defined as a person's mental or emotional involvement or feeling in a group situation that encourages him to contribute to the group in achieving a shared goal (Tannous et al., 2018). With the participation of someone in the organization, it encourages a person to get involved far away and contribute in the form of thoughts, materials (funds), and energy for the success of the organization's goals (Craig, Creegan, Tait, & Dolan, 2015).

## CONCLUSION

The level of participation of the people of the North Jakarta city administration in fire prevention and control is at varying levels. The level of community participation in fire management is at a high level, namely the citizen power level of partnership because the community has become a partner in the extinction, in the sense that before officers come to the crime scene the community has first tried to extinguish independently and worked together, and the community is the one who first notify the fire, the location of the fire.

Community participation in fire prevention is still low at the second level, called Tokenism (pseudo) which means receiving Fire Prevention and Training but does not carry out the recommendations in training, for example it has been recommended to replace the electrical wiring in each house that does not meet SNI standards but is not done, then the community does not spread the knowledge of Fire Prevention and Management to other community members as well as to people outside the environment.

To increase community participation in preventing and overcoming fires in dense residential settlements, a solid commitment and coordination is needed by the government, especially in the implementation of programs and activities that support the achievement of the desired ultimate goal of reducing fire events.

Resolving fire problems in dense residential settlements should be done by solving the problem at the source through: increasing knowledge and public awareness of the impact of fires in settlements, improve the ability of the community in fire prevention, improve community skills in efforts to combat fire, improve fire fighting facilities and infrastructure, provide salaries to Balakar members.

Optimizing the power of firefighters to be a foster father to every RT in the whole area of North Jakarta so that the existence of firefighters will be closer to the community and the community is easy to consult.

Increase coordination with other related organizations (stakeholders) such as: PLN to control the electricity network, PAMJAYA for water supply needed for blackouts. While suggestions can be submitted to other researchers in order to increase the repertoire of knowledge about the role of the community in the prevention and prevention of fires in dense residential settlements.

## REFERENCE

- Clark, D. J., Kolas, A. G., Corteen, E. A., Ingham, S. C., Piercy, J., Crick, S. J., ... Hutchinson, P. J. (2013). Community consultation in emergency neurotrauma research: Results from a pre-protocol survey. *Acta Neurochirurgica*, 155(7), 1329–1334. <https://doi.org/10.1007/s00701-013-1748-3>
- Craig, J. A., Creegan, S., Tait, M., & Dolan, D. (2015). Partnership working between the Fire Service and NHS: Delivering a cost-saving service to improve the safety of high-risk people Health Services Research. *BMC Research Notes*, 8(1), 1–5. <https://doi.org/10.1186/s13104-015-1120-1>
- Gumucio-Dagron, A. (2009). Playing with Fire: Power, Participation, and Communication for Development. *Development in Practice*, 19(19), 453–465. Retrieved from <http://www.jstor.org/stable/27752086>
- Hakim, I. (2009). Kajian Kelembagaan dan Kebijakan Hutan Tanaman Rakyat: Sebuah Terobosan dalam Menata Kembali Konsep Pengelolaan Hutan Lestari. *Jurnal Analisis Kebijakan*



Evaluation of Community Participation and Fire and Rescue Sub-dept. In Fire Prevention Tanjung Priuk District  
Ardani, Permana

*Kebutanan*, 6(1), 27–41. <https://doi.org/10.20886/JAKK.2009.6.1.%P>

Nasution, Y. (2011). Mitigasi Kebakaran melalui Masyarakat. *Kesmas: National Public Health Journal*, 6(4), 179–184. <https://doi.org/10.21109/kesmas.v6i4.97>

Radianti, J., Lazreg, M. Ben, & Granmo, O. C. (2015). Fire simulation-based adaptation of SmartRescue App for serious game: Design, setup and user experience. *Engineering Applications of Artificial Intelligence*, 46, 312–325. <https://doi.org/10.1016/j.engappai.2015.06.012>

Subarudi. (2002). Sistem Kelembagaan Pencegahan Dan Pengendalian Kebakaran Hutan. *Riset LIPI*. Retrieved from <http://www.dbripteck.lipi.go.id/cgi/penjaga.cgi?tampildetil&publikasi&1119940920&94&&1119940920&>

Subarudi, S. (2014). Analisis Kelayakan Sosial, Finansial Dan Pasar Produk Hutan Tanaman Rakyat: Studi Kasus Di Kabupaten Dompu, Nusa Tenggara Barat. *Jurnal Penelitian Sosial Dan Ekonomi Kebutanan*, 11(4), 323–337. <https://doi.org/10.20886/jsek.2014.11.4.323-337>

Tannous, W. K., Whybro, M., Lewis, C., Broomhall, S., Ollerenshaw, M., Watson, G., ... Franks, E. (2018). Home Fire Safety Checks in New South Wales: an economic evaluation of the pilot program. *Journal of Risk Research*, 21(8), 1052–1067. <https://doi.org/10.1080/13669877.2017.1281336>

Wu, X. T., & Wu, L. P. (2011). Evaluation of the fire emergency rescue capability in urban community. *Procedia Engineering*, 536–540. <https://doi.org/10.1016/j.proeng.2011.04.693>