

Implementation of Disaster Mitigation Policy for Residential Fires in the City of Banjarmasin

Decky Kuncoro¹, Maulida¹ and Indrawati²

¹Universitas Islam Kalimantan Muhammad Arsyad Al Banjari, Indonesia

²Universitas 17 Agustus 1945 Jakarta, Indonesia

Keywords: Policy Implementation, Mitigation, Fire Disaster.

Abstract: The purpose of this research is to determine the implementation of mitigation policies in Banjarmasin and identify the obstacles encountered in implementing fire disaster mitigation in Banjarmasin. The research method used a qualitative approach with a descriptive research design. Data was collected through interviews, observations, and documentation from four informants using George C. Edward's policy implementation theory. Data analysis involved data reduction, data presentation, and conclusion. The research findings indicate that implementing fire disaster mitigation policies in Banjarmasin has not been entirely successful due to the incomplete dissemination of information to the community of Banjarmasin. As a result, public awareness of fire prevention efforts is still low. Furthermore, implementing Regional Regulation No. 15 of 2012 in Banjarmasin regarding Building Construction Permits is ineffective.

1 INTRODUCTION

According to Law Number 24 of 2007, Article 1, a disaster is a series of events that threaten and disrupt human life and livelihood. Natural factors, non-natural factors, or human factors can cause disasters. As a result, disasters can cause human casualties, environmental damage, property loss, and psychological impacts.

According to the definition contained in the law, a disaster event can be a single event, such as a specific natural phenomenon or a series of biological events that occur almost simultaneously. An example of one type of disaster is fire. A fire is an event that cannot be predicted and occurs unexpectedly at a particular place and time.

Various factors can cause fires. Natural factors, such as lightning striking flammable materials, earthquakes damaging fuel gas lines, or sunlight reflecting onto dry leaves in the surroundings, can contribute to fires. On the other hand, human factors, like uncontrolled burning or acts of revenge, can also be significant causes. Fires may also result from negligence, such as forgetting to turn off stoves, imperfect electrical installations, or exceeding the safe load limit with electrical appliances. Lack of awareness can also lead to fires, for instance,

smoking near fueling stations or discarding cigarette butts indiscriminately.

Fires tend to occur more frequently in urban areas than in rural ones. This is attributed to the higher population growth in urban regions, ultimately increasing the potential for fire incidents. Banjarmasin comprises five districts: South Banjarmasin, East Banjarmasin, West Banjarmasin, Central Banjarmasin, and North Banjarmasin. Covering an area of 98.46 km², Banjarmasin has a population of 672,343 individuals with a population density of 6,829 people/km². (Editor, 2022)

The Fire Department of Banjarmasin City, South Kalimantan, has observed an increase in fire cases every year. Data on fires that occur in Banjarmasin continues to increase from year to year. In 2021, 97 fire cases were recorded in Banjarmasin, with the northern and southern regions being the most frequently reported. The number of cases increased to 106 in 2022, and in 2023, there have been 11 fire cases that caused one death. (Hamdani, 2023)

Since 2019, fires in Banjarmasin have claimed many lives. The recorded fire casualties were 1544 people in 2019, 111 people in 2020, 510 people in 2021, and 581 people in 2022. In addition, the calculation of economic losses due to fires also shows a figure that reaches billions of rupiahs. This indicates that efforts to prevent fire disasters must be improved

to increase community awareness. (Hamdani, 2023)

The number of fire disasters that occur indicates the need for serious attention to fire disasters. Effective mitigation program planning is required to prevent or minimize the potential impact of future fire disasters. Disaster mitigation, as defined in Article 1, paragraph 6 of Government Regulation No. 21 of 2008, is a series of efforts to reduce disaster risk through physical development, awareness, and improvement of the ability to face disaster threats. The main objective of mitigation is to reduce the risk/impact of disasters, especially on the population, such as casualties, financial losses, damage to natural resources, and community knowledge in facing and reducing disaster risks. This is so that people can live and work safely and calmly.

2 RESEARCH METHODS

This research will use descriptive qualitative research methods that involve data in the form of words and images, not in the form of numbers. Data is obtained through in-depth interviews to describe the Fire Disaster Mitigation Policy implementation in Banjarmasin City.

The data sources used consist of primary data and secondary data. Preliminary data is obtained through observations and interviews with informants such as the Head of Service, Head of Section, and the community/CPC representatives. Secondary data is used as a complement and obtained indirectly through various other media, such as books, documents, previous research, articles, newspapers, and other writings. Additional data on implementing Fire Disaster Mitigation Policies in Banjarmasin City was also taken from these sources.

The data collection techniques used in this research include interviews, observation, and documentation. Not understanding or not using data collection techniques can result in researchers not getting data that suits their research needs. (Sugiyono, Metode Penelitian Administras, 2021)

3 DISCUSSION

3.1 Fire Disaster Mitigation Policy Implementation Process

Based on the "policy implementation model" according to George C. Edward in Widodo (Widodo, 2010), The research focus of this study is

to see what factors are faced by the Banjarmasin City Fire and Rescue Service in overcoming disasters. 4 factors influence a policy, namely:

3.1.1 Communication

1) Transition dimension and good communication channeling will also produce an exemplary implementation. Based on the results of an interview with the head of the Planning Section and explained that:

"Communication of fire disaster management carried out by the Fire and Rescue Service runs well and is structured. Moreover, communication about fire disaster mitigation in Banjarmasin is carried out in ways such as socializing with the community, educating on introducing fire fighting too early childhood and delivering through television broadcasts. Although this communication runs well, it still needs improvement."

2) The dimension of clarity: the communication received by policy implementation must be clear and not confusing or unambiguous. Based on the results of an interview with the head of the Planning Section and explained that:

"This socialization aims to broaden people's knowledge of the dangers of fire, and we also simulate how to handle fires and use fire extinguishers APAR."

3) The dimension of consistency, giving orders to implement a communication must be consistent and straightforward to run. Based on the results of interviews with the head of the Planning Section and explained that:

"The implementation of this program runs well and is structured. We broadcast the program on RRI television every Friday at 15.00."

In conclusion, the informants did not experience any problems, although there are still shortcomings in communication that need to be improved so that fire management becomes more effective. The purpose of this communication is so that both implementers and field workers can carry out the program properly according to what has been determined. However, the socialization of mitigation carried out by the Fire and Rescue Service has not yet reached the community as a whole because the informants interviewed never heard or knew of the socialization: *"I do not know that the DPKP conducts socialization to the community and I also do not know if there are other places where socialization activities are held."*

The importance of conducting this socialization is to ensure that the community has better awareness and capability in dealing with disaster threats. In addition, this socialization aims to reduce the number of casualties and losses caused by fires. However, based on the results of interviews with the community, the DPKP still has not conducted a comprehensive socialization of fire disaster mitigation to the community.

3.1.2 Source

a. Human Resources

Based on the interview results, the Planning Section's head explained, "Human resources are the main capital in carrying out the duties and functions of the Banjarmasin City Fire and Rescue Service. Human resources in the Fire and Rescue Service total 82 people, including 19 ASNs and 63 Fire and Rescue Personnel; for fire and rescue personnel, we are divided into three shifts; in 1 shift, there are around 20 people. For training last year, we carried out twice for the ANS and the handling personnel, including the private BPK-BPK. We are involved in this training, and the trainers we bring are directly from Jakarta. We plan that this training will continue".

The results of an interview with the head of the Banjarmasin City DPKP Secretary section also support this statement:

"For the problem of direct training, we are brought in from Jakarta, and training is not only for employees in the Fire and Rescue Service but for the private CPC we also participate."

From the results of these interviews, researchers concluded that the human resources in the Banjarmasin City Fire and Rescue Service still need to be improved, which requires staff with the necessary skills and abilities to be adequate. Regarding training for Banjarmasin City Fire and Rescue Service employees, researchers see no problems.

Table 1: List of ASN Employees Based on Education.

No	Education	Total
1.	S2	3 Person
2.	S1	8 Person
3.	D3	1 Person
4.	SLTA	7 Person
Total		19 Person

Sumber: Arsip DPKP Kotaa Banjarmasin

b. Budget Resources

Based on an interview with the Head of Planning, he explained that:

"Our budget comes from the local government budget (APBD) of Banjarmasin City, but our budget is tiny, only 11 billion, and even that is deducted from employee salaries".

The results of an interview with the head of the Banjarmasin City DPKP Secretary section also support this statement:

"very minimal budget resources provided by the Banjarmasin city government's APBD, employee salaries alone are not to mention other needs."

The budget allocation is used to support operational activities by the main tasks and functions of the Banjarmasin City Fire and Rescue Service, as can be seen in the following table:

Table 2: Realization of Regional Expenditure of the Fire and Rescue Service of Banjarmasin City in 2022.

Description	Budget 2022	Realization 2022	%	increase/decrease
operating expenditure	7.711.534.946,00	7.120.097.636,00	92,33	100%
capital expenditure	3.150.009.400,00	2.805.491.200,00	89,06	100%
Total	10.861.544.346,00	9.925.588.836,00	91,36	100%

Sumber: Arsip DPKP Kota Banjarmasin

It can be said that with a realization of 92.33% for Operating Expenditures and 89.06% for Capital Expenditures, and the total realization of budget use of 91.38% of the total budget expenditure of the Banjarmasin City Fire and Rescue Service is effective, efficient, and remains effective in the use of budget allocations in this fiscal year 2022.

The Banjarmasin City Fire and Rescue Service received a direct expenditure budget allocation of Rp.10,861,544,346, with details by activity as follows:

- 1) Planning, Budgeting, and Performance Evaluation of Regional Apparatus is budgeted at Rp 2,167,800,-.
- 2) The budget for the Financial Administration of Regional Apparatus is Rp. 2,933,180,336,-.
- 3) Budget for Personnel Administration of Regional Apparatus reached Rp 28,900,000,-.
- 4) General Administration of Regional Apparatus budgeted at Rp 479,121000,-.

- 5) Procurement of Regional Property to Support Regional Government Affairs received a budget of Rp 82,145,000.
- 6) Provision of supporting services for Local Government Affairs obtained a budget of Rp 24,326,250-
- 7) Maintenance of Regional Property Supporting Regional Government Affairs gets a budget of Rp. 278,626,800,-.
- 8) The budget for Fire Prevention, Control, Extinguishing, Rescue, and Handling of Toxic Hazardous Materials within Districts/Cities is Rp. 5,948,671,160,-.
- 9) The budget for Fire Protection Equipment Inspection reached Rp. 6,841,400,
- 10) Fire Incident Investigation received a budget of Rp 3,999,900,-.
- 11) The Community Empowerment in Fire Prevention budget is Rp 903,614,000,-.
- 12) Organization of Search and Rescue Operations for Human Endangerment is budgeted at Rp 169,950,700,-.

The budget that can be realized for organizing 26 (twenty-six) Sub-activities and 12 (twelve) Activities in 2 programs is 91.38%, with the details as follows:

From the interview results, the researcher concludes that the budget provided by the Regional Budget (APBD) is Rp 10,861,544,346. Meanwhile, the Banjarmasin City Government's APBD for the year 2022 is Rp 1.8 trillion. The Banjarmasin City Fire Department receives 17% of the city's budget from this budget. The allocated budget significantly influences the success of policy implementation, especially when resources are limited, and the budget can impact the success of policy implementation. Therefore, the Banjarmasin City government needs to reconsider its budget allocation.

c. Equipment Resources

Physical resources can also be a crucial element in implementation. An executor may have an adequate team, a clear understanding of their tasks, and the authority to carry out the work. However, without buildings, equipment, supplies, and even the necessary green spaces, the success of the implementation will not be achieved. Based on the interview results with the head of the Planning Department, it is explained that:

“With facilities and infrastructure in the form of office buildings that we occupy and the facilities

of 4 4-wheeled official vehicles, five 2-wheeled official vehicles, office inventory items, and other supporting office facilities. For the Technical Implementation Unit, we have 2 Fire Fighting Tank Cars, 2 Pick Up Cars, 2 3 two-wheel vehicles (Tossa), Fire Pumping Machines, Fire Fighting Floating Pumping Machines, Rubber Boats, Personal Protective Equipment (PPE), and other fire fighting and rescue equipment. However, most of these facilities and infrastructure are not functioning optimally and exceed the economic life limit; the facilities and infrastructure are also unfit for use and damaged.”

From these interviews, the researchers concluded that the infrastructure system needs to be improved continuously because it will make providing services to the community more accessible. Adequate facilities and infrastructure will support the implementation of blackout and rescue activities for the community.

d. Sumberdaya Kewenangan

Therefore, Edward III in Widodo (Widodo, 2010) states that the main policy actors must be given sufficient authority to make their own decisions to implement the policies under their authority. Based on the results of an interview with the head of the Planning Section and explained that:

“The authority possessed by DPKP is related to counseling the community, socialization of fire disaster management, and lessons on how to use fire extinguishers in the community; the issue of fire is certainly a shared responsibility, including the community.”

From the interview results, the researcher concludes that the role of the Fire and Rescue Department is a critical factor in addressing existing fire disasters. Moreover, the direct involvement of the Department and the community in mitigating disasters is a definite step towards finding solutions to the issues at hand.

3.1.3 Disposition

The factors of concern to Edward III in Agustinus (Agustinus, 2006) regarding disposition in policy implementation consist of:

- 1) Bureaucratic appointments

Based on the results of the interview with the

head of the Planning Section and explained that:

“Our recruitment system follows regulations from the Ministry of Manpower. The Fire and Rescue Service of Banjarmasin City also carries out several activities that are empowering and educational socialization to the citizens of Banjarmasin City about fire prevention and management, as well as data collection of fire protection equipment in buildings in the Banjarmasin City area. Those who carry out the socialization themselves are, of course, our party, which directly controls and implements it in the field; the policy maker is compiled by the head of the department and his subordinates. Therefore, all community members, volunteers, and employees must participate in disaster mitigation training programs to improve their skills and abilities.”

From the interview findings, the researcher concludes that, so far, the bureaucratic appointment system has been well-directed, with adequate supervision coordination by the Fire and Rescue Department of Banjarmasin City.

2) Incentives

So, this is an effort to meet personal or organizational needs. Based on the results of the interview with the head of the Planning Section and explained that:

“in that case, we only provide ASN salaries and allowances; there are 21 ASNs who are paid salaries and allowances. The total salary of our employees is around Rp. 4 billion..”

From these interviews, the researcher concluded that there was no incentive problem, only in the form of ASN Salary and Allowance Provision. Based on data obtained by researchers regarding salaries and allowances for 21 ANS with a budget of Rp 2,933,180,336 and realized at Rp 2,647,219,946.

3.1.4 Bureaucratic Structure

The same applies to the extent of clear operating standards related to mechanisms, systems, and procedures for policy implementation, division of primary tasks, functions and authorities, and responsibilities among actors. In addition, the

disharmony of relationships between implementing organizations and one another also affects the success of policy implementation. Based on the results of an interview with the head of the Planning Section and explained that:

“Operational procedures for fire management, rescue, and evacuation certainly exist. In carrying out their duties, members must follow and comply with the operational procedures that have been implemented. The disaster volunteers in charge of handling are thorough while serving and patient in handling community complaints; there is also no difference in service to the entire community. However, the response time of 15 minutes from receipt of information/reports to arrival at the location of the Banjarmasin City Fire Department only meets the target of 75%.

From the results of these interviews, the researchers concluded that the Fire and Rescue Service is good in terms of SOPs; it just needs to be improved regarding response time.

3.1.5 Inhibiting and Supporting Factors for Mitigation Policy Implementation in Banjarmasin City

Several obstacles can be concluded from analyzing the implementation of fire disaster mitigation policies in Banjarmasin City. One is the lack of comprehensive socialization from DPKP to the people of Banjarmasin City, so public awareness of fire prevention efforts is still low. In addition, the absence of a post in each sub-district results in long distances for firefighting and rescue members, so the expected response time of 15 minutes is still not well met.

In collecting data on fire protection infrastructure in 2022, many buildings and structures in Banjarmasin City are not equipped with fire extinguishers such as fire extinguishers and sprinklers. This causes difficulties in extinguishing fires in the event of a fire, especially in tall buildings, so that the fire can grow and the occupants of the building find it challenging to get out.

The equipment and supplies owned by DPKP are also still inadequate, both in quantity and quality, so the services provided by firefighters to the community are less than optimal. In addition, the unavailability of a remarkable rescue car also delays members going to the scene because they have to spend time preparing rescue equipment that is not yet available in less suitable cars, such as pick-ups.

Most facilities and infrastructure owned by the

Banjarmasin City Fire and Rescue Service have passed their economic age, so their function is less than optimal. Many facilities and infrastructure are not fit for use and are damaged, thus hampering the implementation of services to the community.

On the other hand, there are supporting factors for mitigation in Banjarmasin City, such as the number of CPC/PMK organizations that assist in extinguishing and rescuing in various areas. In addition, the involvement of parties such as DPKP, local government, and the PUPR Office also supports mitigation efforts through socializing with the community, making spatial plans, and granting Building Permits (IMB).

In addition, handling fire and rescue complaints from the public is well-served, and there is adequate support from leaders and government agencies. The availability of funds or budget in the APBD is also essential in implementing the programs that have been prepared.

4 CONCLUSION

It can be concluded that the implementation of Fire Disaster Mitigation policies in Banjarmasin City has not been entirely successful and is still less than optimal. This can be seen from the communication carried out through socialization to the community, simulation of the use of fire extinguishers, and education for early childhood. However, this communication has not been thoroughly conveyed to the people of Banjarmasin City. Resources are still less than optimal because humans in DPKP still need to be improved, budget resources obtained 17% of the city budget, equipment resources in the form of equipment and equipment owned are still inadequate, and authority resources already have their respective duties. Disposition is optimal, as seen from the appointment and selection of DPKP personnel by the recruitment system following the Ministry of Finance regulations. And incentives in the form of ASN Salary and Allowance Provision. The Bureaucratic Structure is optimal, as seen from the DPKP activities that have implemented the applicable SOPs. The disaster volunteers in charge of handling are thorough while serving and patient in handling community complaints. However, DPKP's response time only meets the target of 75%.

Mitigation policies in Banjarmasin City have been implemented well. However, it is still not optimal because several supporting and inhibiting factors must be considered and become material for future improvement.

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