

Mapping Model of Social Vulnerability of Communities Affected By The “Covid - 19” Pandemic (Case Study People In DKI Jakarta)

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Abstract. The “Covid - 19” pandemic has the potential to be detrimental in all aspects of people's lives, not only health aspects but also other aspects such as socio-economic aspects. The impact of social vulnerability can cause people to take three interrelated actions, namely apathy, irrationality, and criminal behavior. We see that in today's social phenomena. Therefore, what happens to society is the culmination of the social trauma faced by society today. First, indifference. Second, irrational actions. Third, criminal acts. The objectives of this research are: (1) To explain the process of compiling a social vulnerability in people who feel the impact of the “Covid - 19”; and (2) To formulate a model instrument for mapping social vulnerability mapping model instrument for people who feel the impact of the “Covid - 19”. The research location is in DKI Jakarta. The research approach used is a qualitative research approach. While the type of research used is the type of descriptive research. In accordance with research conducted by researchers, it is known that the mapping of social vulnerabilities in communities affected by the “Covid - 19”, namely (1) Limited space for social interaction; (2) Disruption of household income; and (3) children experience learning backward. In addition, researchers also formulated alternative designs in mapping social vulnerabilities in order to map the extent of the effects felt by the community for the “Covid - 19” that has occurred so far.

Keywords: Mapping Models; and Social Vulnerability

1 Introduction

The “Covid - 19” has the potential to be detrimental in all aspects of people's lives, not only health aspects but also other aspects such as socio-economic aspects. The effect for people in Indonesia is certainly not much different from people in other countries who are also facing the “Covid - 19”. Social vulnerability is an ongoing reality in society in the face of the “Covid - 19”. Social vulnerability has had an impact on the resilience of the community due to the “Covid - 19”. The impact of social vulnerability can cause people to take three interrelated actions, namely apathy, irrationality, and criminal behavior. We see that in today's social phenomena. Therefore, what happens to society is the culmination of the social trauma faced by society today. First, indifference. Second, irrational actions. Third, criminal acts.

Based on the explanation above, the researcher intends to conduct research that can map the level of social vulnerability that occurs in the community by creating a mapping model based on test applications. Later this mapping model can measure the extent to which people experience socially vulnerable conditions during the “Covid - 19”. The results of this mapping

can later be followed up by conducting social interventions to the community so that they can regain social resilience in their lives.

Departing from the explanation above, the researcher intends to research this mapping model to measure the extent to which people experience social vulnerability during and after the “Covid – 19”. Based on the explanation of the problem above, the researcher formulates this research as follows:

- a. What is the mapping of social vulnerabilities in people who feel the impact of the “Covid - 19” pandemic?
- b. What is the social vulnerability mapping model instrument for people who feel the impact of the “Covid - 19” pandemic?

2 Methodology

This research uses a qualitative research type. Meanwhile, this type of research is phenomenological research. While the location in this study in the DKI Jakarta area. Meanwhile, when this research was carried out in 2021. For the subject of this research, namely the people in DKI Jakarta who were affected by the “Covid - 19”. The research informants were 20 informants spread over the administrative area of DKI Jakarta (excluding the Thousand Islands). As for the data collection techniques in this study using in-depth interviews and literature review.

3 Result and Discussion

3.1 Mapping of social vulnerabilities in communities affected by the “Covid - 19” pandemic

The social-economic life of society in Indonesia, especially in DKI Jakarta, has experienced various impacts from the “Covid - 19”. This of course makes the welfare of the people in DKI Jakarta experience social vulnerability. The socially vulnerable condition felt by humans refers to the characteristics of a person or group and their conditions that affect their capacity to prevent, adapt, and resist the effects of a hazard (Dunning & Durden, 2013).

The socially vulnerable conditions experienced by the community represent an inseparable condition that existed before or before the disaster. Social vulnerability includes social, economic, political and institutional factors (Lee, 2014). From this explanation, it can be concluded that social vulnerability is a condition that leads to anti-social behavior. This situation can occur because of pressure from unexpected and unplanned situations. And social vulnerability can also be understood as the impact of stress experienced by a person or group of people.

Based on the interviews with several informants, people in DKI Jakarta are facing the disaster of the “Covid - 19”. It was emphasized that during the pandemic policy period, the condition of the community experienced various socio-economic problems. The social vulnerabilities experienced by informants can be categorized as follows:

Limited space for social interaction

The “Covid - 19” has made informants feel that their interaction space is experiencing obstacles and limitations. They find it difficult to meet face to face to stay in touch with distant

relatives and including interacting with their closest neighbors. The condition of the “Covid - 19” has made people unable to live their normal social interactions as before the “Covid - 19”.

Disruption of household income

Household finances have been severely impacted by the “Covid - 19”. The informants interviewed said that they experienced a decrease in their income from what they received during the pandemic. The proportion of households with a greater decline in income are those with children and those living in urban centers. Urban households also experienced a greater decline in income than households in the suburbs. Households across all income groups—from the poorest to the most affluent—reported the same percentage decline in income. There are many households that were previously economically secure and in the middle of the income distribution group then fell into poverty or became vulnerable to poverty.

Informants said that the main contributor to the increase in spending was the increase in the cost of shopping for groceries and other basic necessities. The proportion of households with children who spend more on internet and mobile phones is significantly higher than households without children. Only a few of the main breadwinners have changed jobs due to the effects of the “Covid - 19”. However, almost half of those who change jobs switch from formal sector jobs to informal sector jobs, where employment protection for informal sector jobs is generally low.

Some of the informants felt that they did not have any savings just in case. Meanwhile, there are also informants who pawn their ownership of goods to survive. There are also informants borrowing money informally from family or friends or online loans. Small businesses are an important source of income for many households. There are at least some informants who run micro and small businesses, and almost all of the businesses they run feel the effects of the “Covid - 19”. The main concerns of these micro and small business actors are fewer customers, declining revenues, and increasing operational costs.

Children are falling behind in learning

Almost three out of four parents interviewed by the researchers felt worried about being left behind in learning as a result of disruptions in the child's education process after the “Covid - 19”. Access to a good internet connection is a major challenge for children learning from home, with some informants with children reporting this as their main concern. Households located in areas with poor internet network access often experience internet problems and limited learning tools, such as laptops and mobile phones. Many informants reported having limited time and/or limited ability to support children learning from home.

3.2 Model instrument for mapping social vulnerability in communities experiencing the effects of the “Covid - 19” pandemic

Based on previous research, the researchers then drew up a design description of the social vulnerability mapping model in communities affected by the “Covid - 19”. This design will later be in more detail with the curriculum and modules as well as the implementation of trials during the second year of research. Here's the design:

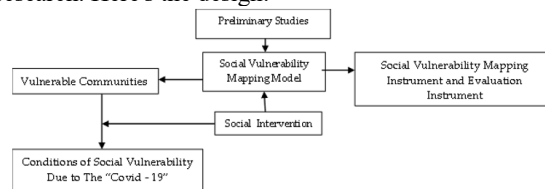


Fig 1. Social Vulnerability Mapping Model Design for Communities Affected by the COVID-19 Pandemic

Based on figure 1, this initial research or preliminary study became the main material for researchers in formulating a design model for mapping social vulnerability in communities experiencing the effects of “Covid - 19”. Later, the next research, the researcher will focus on the formulation and development of the model. Where this model will contain mapping instruments and evaluation instruments.

Here's the explanation:

- a. Social Vulnerability Mapping Instrument
The instrument that will be made is an instrument that can map social vulnerabilities that occur in people affected by the “Covid - 19”.
- b. Evaluation Instrument
The instrument that will be made is an instrument that can assess the success of mapping social vulnerabilities that occur in communities affected by the “Covid - 19”.

Based on the description above, this design can generally describe what the researcher will do in the next research. So that researchers know what needs to be done in the next research. So that the purpose of this research can be achieved as expected.

4 Conclusion

In accordance with research conducted by researchers, it is known that the mapping of social vulnerabilities in communities affected by the “Covid - 19”, namely (1) Limited space for social interaction; (2) Disruption of household income; and (3) children experience learning backward. In addition, researchers also formulated alternative designs in mapping social vulnerabilities in order to map the extent of the effects felt by the community for the “Covid - 19” that has occurred so far.

References

- [1] Adger, W.N., Kelly, P. M., Ninh, N.H. (2001). Living with environmental change: social vulnerability, adaptation and resilience in Vietnam. New York: Routledge.
- [2] Benson C , Twigg J, Rossetto T. (2007). Tools for mainstreaming DRR: guidance notes for development organizations. Geneva-Switzerland: Provention Consortium.
- [3] Birkmann J. 2006. Measuring vulnerability to natural hazards. towards disaster resilient societies. United Nations University: New York.
- [4] Cannon, T., Twigg, J., Jennifer R., (2003) . Social Vulnerability, Sustainable Livelihoods and Disasters. Report for DFID.
- [5] Cutter, S.L., Boruff, B.J., Shirley, W.L. (2003). Social Vulnerability to Environmental Hazards. Social Science Quarterly. Vol. 84. (2), pp.242-261.
- [6] Dunning, C.M. & Durden, S. (2013). Social vulnerability analysis : a comparison of tools. USA: Institute for Water Resources.
- [7] Dwyer, A.; C. Zoppou; O. Nielsen; S. Day; S. Roberts. (2004). Quantifying Social Vulnerability: A methodology for identifying those at risk to natural hazards. Geoscience Australia Record 2004/14.
- [8] Flanagan, B. E., Hallisey, E. J., Adams, E., & Lavery, A. (2018). Measuring community vulnerability to natural and anthropogenic hazards: the centers for disease control and prevention's social vulnerability index. Journal of environmental health, 80 (10), 34–36.
- [9] Flanagan, Barry & Gregory, Edward & Hallisey, Elaine & Heitgerd, Janet & Lewis, Brian. (2011). A social vulnerability index for disaster management. Journal of Homeland Security and Emergency Management.

- [10] Hettige, S., Haigh, R.P., Amaratunga, D. (2018). Community level indicators of long term disaster recovery. *Procedia Engineering*. 212, pp. 1287-1294.
- [11] Lee, Y.J. (2014). Social vulnerability indicators as a sustainable planning tool. *Environmental Impact Assessment Review*, 44, pp.31–42. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S0195925513000802>, diakses pada 3 Juni 2020.
- [12] Neuman, W. Lawrence. (2006). *Social research methods: qualitative and quantitative approach*. Needham Heights. MA: Allyn & Bacon.
- [13] Ramzi, Muhammad. (2013). LKP: Rancang bangun aplikasi penjadwalan mata pelajaran berbasis web pada SMK negeri i cerme. Undergraduate thesis, STIKOM. Surabaya: <http://sir.stikom.edu/100/5/BAB%20III.pdf>. Diakses tanggal 21 Oktober 2020.
- [14] Sanjaya, Ginanjar Tegar dan Budhi Sumboro. (2015). Rancang Bangun Aplikasi Penjadwalan Kuliah Stmik Aub Surakarta Berbasis Web. Surakarta: <http://jurnal.stmik-aub.ac.id>. Diakses tanggal 21 Oktober 2020.
- [15] Spielman, S.E., Tuccillo, J., Folch, D.C. et al. (2020). Evaluating social vulnerability indicators: criteria and their application to the Social Vulnerability Index. *Nat Hazards* 100, 417–436 (2020).
- [16] Tate, Eric. (2012). Social vulnerability indices: a comparative assessment using uncertainty and sensitivity analysis. *Natural Hazards*. 63.10.1007/s11069-012-0152-2.
- [17] Thomas D. S.K. (2013). *Social vulnerability to disasters*. Florida: CRC Press