# Resilience of Urban Poor Community to COVID-19 Disaster in Panjang, Bandar Lampung, Indonesia

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Abstracts: This study aims to explore the resilience capacity of the urban poor in Panjang subdistrict, Bandar Lampung Indonesia in dealing with the COVID-19 disaster in terms of preparedness, adaptation and mitigation capacities. This is a kind of descriptive qualitative research employing in-depth interviews and observation as data collecting techniques. The data analysis comprised data reduction, data presentation, and drawing conclusions. The findings indicated that community resilience to COVID-19 was marked by the capacity for preparedness, adaptation and mitigation involving various components of society, such as civil servants, community leaders, religious leaders, youth leaders and the COVID-19 task force. These components serve as a role model for the urban poor and have a major influence on their efforts to survive during a pandemic. The findings of this research highly emphasize the importance of collaboration between elements of society to increase their resilience capacity in dealing with the COVID-19 disaster and make a real contribution to achieving health development during a pandemic.

Keywords: Resilience Capacity, Urban Poor Community; COVID-19 Disaster, Indonesia.

## 1. INTRODUCTION

The extreme COVID-19 disaster forces us to analyze the social impacts involved, as this global hazard and unforeseen stimulant appears to undermine society's morals, structures and forms of education, the country's regulatory framework, production standards, energy, finance, and economic steadiness (Chapsa et al., 2022; Nicolae et al., 2023). In the event of crisis, the community must be able to employ their resilience capacity by encouraging the growth of different abilities, perspectives, and tools that help people deal with and overcome challenges (Chisty and Rahman, 2020). The community resilience capacity in dealing with disasters can be seen from the capacity of preparedness, adaptation and mitigation in natural disasters (Setiawan, 2014; Ruslanjari et al., 2020) as well as in non-natural disasters, such as technological failure (Ishwitari et al., 2020) and pandemic outbreak (Suherningtyas et al., 2021). In addition, community resilience in facing disasters can be viewed from certain forms of capacity, such as preparedness and mitigation (Thorup-Binger and Charania, 2019; Prihananto and Muta'ali, 2013;), adaptation and mitigation (Maarif, 2011), adaptation and preparedness (Jaswadi and Hadi, 2016), adaptation (Wahyono et al., 2013; Smit and Wandel, 2006; Sibuea and Artiningsih, 2011; Asrofi et al., 2017), and mitigation (Chisty and Rahman, 2020).

Some previous studies have examined the forms of community resilience capacity in dealing with disasters, including the COVID-19. However, only few explored deeply the resilience of urban poor communities in facing the disaster. In this study context, the poor are people who are prone to contracting COVID-19 and one of the poor communities in the city of Bandar Lampung Indonesia is located in Panjang subdistrict. Panjang ranks the highest number of pre-prosperous people compared to other subdistricts in Bandar Lampung. The Central Bureau of Statistics (CBS) confirmed that in 2021 when COVID-19 was at its peak, there were 5111 pre-prosperous people (CBS, 2021). Figure 1 shows the pre-prosperous population per subdistrict in Bandar Lampung City.



Figure 1. Pre-prosperous Population per Subdistrict in Bandar Lampung in 2021

Despite Panjang subdistrict ranks first for the number of pre-prosperous people in Bandar Lampung, the exposure to COVID-19 is relatively low when compared to other subdistricts during the time of the highest spike from 2020-2022. The detailed information can be seen in table 1 below.

NL	Subdistrict	Health center		Cases		
No.			2020	2021	2022	
1	Bumi Waras	Sukaraja	117	245	247	
2	Langkapura	Segala Mider	142	340	302	
3	Tanjung Karang Pusat	Palapa Simpur	70	272	146	
			156	123	59	
4	Teluk Betung Barat	Bakung	45	171	107	
5	Enggal	Kebon Jahe	124	296	207	
6	Panjang	Panjang	98	311	114	
7	Tanjung Karang Timur	Kampung Sawah	95	277	145	
8	Way Halim	Way Halim 1	52	398	312	
		WayHalim 2	92	362	162	
9	Kedamaian	Satelit	119	566	363	
10	Rajabasa	Rajabasa Indah	110	434	348	
11	Tanjung Senang	Way Kandis	153	683	437	
12	Kedaton	Kedaton	126	372	356	
13	Sukabumi	Campang Raya	33	60	34	
		Sukabumi	171	436	239	
		Way Laga	95	18	14	
14	Teluk Betung	KupangKota	29	141	115	
	Utara	Sumur Batu	61	289	101	
15	Kemiling	Beringin Raya	45	307	177	
		Kemiling	121	427	242	
		Pinang Jaya	109	73	50	
16	Sukarame	Korpri	39	123	147	
		Permata Sukarame	106	139	97	
		Sukarame	16	533	246	
17	Teluk Betung Selatan	Pasar Ambon	60	172	137	
18	Labuhan Ratu	Labuhan Ratu	105	486	311	
19	Tanjung Karang	Gedong Air	60	160	133	
	Barat	Susunan Baru	52	229	142	
20	Teluk Betung	Kota Karang Sukamaju	92	82	46	
	Timur		97	63	45	
	Total		2790	8588	5581	

Table 1. Distribution of COVID-19 Cases in Bandar Lampung

From Table 1, we can see that the spread of COVID-19 in the Panjang sub-district in the last three years from 2020-2022 totaled 523 cases and was in the lowest fifth positions out of 20 other sub-districts in the city of

Bandar Lampung. Panjang underwent relatively low exposure to COVID-19. The data covers years of 2020 and 2021 due to the highest-level severity in phase 1, namely from November 2020 to January 2021 and phase 2, from May to July 2021 (Antara News.com, 2021).

This unique fact is the main attraction for researchers to explore the extent of resilience capacity practiced by the poor people of Panjang subdistrict through preparedness, adaptation and mitigation efforts in dealing with the COVID-19 disaster.

# 2. LITERATURE REVIEW

# 2.1. Community Resilience

Community resilience is the ability of humans to be ready to face, and able to overcome and even become strong in facing various obstacles of life (Grotberg, 1999). According to the fourth report of the International Plant Protection Convention (IPPC) (2007), community resilience means the ability of a system to deal with disturbances and the ability to adapt to threats and changes that occur in the system and its environment. Meanwhile, Dodman and Ayers (2009) define community resilience as the ways or steps taken by the community not only to face and overcome disturbances but also how to deal with challenges that can exacerbate the condition of a system. Another opinion was put forward by Dulkadir et al. (2016) who defined community resilience as the ability to develop strength in facing and overcoming all challenges, threats and obstacles both directly and indirectly in ensuring survival.

Community resilience refers to the community's capacity to develop existing strengths to deal with disasters and try to return to life as it was before the disaster (Lucini, 2014). Referring to the statement of the United Nations Office for Disaster Risk Reduction (UNISDR), community resilience capacity is a combination of the strengths of all elements of society, both community groups, social groups or organizations that can reduce the impact or risk of disasters (UNISDR, 2004). Capacity refers to the strength possessed by communities, societies and organizations in managing and suppressing the impact of disasters so that they can increase community resilience (Gil-Rivas and Kilmer, 2016). Resilience capacity emphasises people's ability to survive with their awareness of economic, social and environmental conditions by developing existing strengths (Di et al., 2019). The capacity of community resilience in dealing with disasters is the ability of the community which includes behavior, efforts, strategies, actions carried out by all components of society in dealing with and minimizing disaster risk. In other words, disaster management capacity is a part of the community's resilience capacity in dealing with disasters and conversely the community's resilience capacity in facing disasters is a part of disaster management (Twig, 2007).

Based on some of the concepts above, it can be concluded that the capacity of community resilience in dealing with disasters is the ability of the community to carry out strategies, behaviors and actions to survive in the face of incoming disaster risks, minimize the risks of incoming disasters and try to restore conditions to predisaster conditions by developing various forces and efforts to overcome them. Resilience can be realized well when community components have good ability or capacity to deal with disturbances that occur (Monica and Rahdriawan, 2014). Community resilience will be strong when the capacity carried out by the community in dealing with disasters is also good and strong (Rasanen et al., 2020). The strong capacity of community resilience capacity will certainly minimize the impact of the disaster (Legionosuko et al., 2019). Therefore, community resilience capacity is an important element so that disaster risks can be suppressed, and the community is stronger in facing future disasters (Septikasari and Ayriza, 2018). It can be concluded that there is a relationship between community capacity and resilience in facing and overcoming disasters.

## 2.2. Resilience Capacity Facing the COVID-19 Disaster

Suherningtyas et al. (2021) made indicators of the form of community resilience capacity in dealing with the COVID-19 disaster, which includes preparedness, adaptation and mitigation. Preparedness capacity is the ability of the community to carry out disaster prevention through basic knowledge about it, its origin, mode of transmission, characteristics, and how to prevent it through personal and environmental hygiene activities. Meanwhile, adaptive capacity is the ability exercised by the community to make adjustments to the changes that occur as a result of a disaster (Smit and Wandel, 2006). Mitigation capacity is the community's ability to minimize disaster risk through physical and non-physical development (Suherningtyas et al., 2021).

# 3. METHODS

This is a type of qualitative research (Djamal, 2015) with historical research approaches (Black and Ubbes, 2009) and phenomenology (Denzin and Lincoln, 2009). This research aimed to examine, describe and reveal a fact, event or phenomenon that occurred in the past objectively and systematically, namely when the COVID-19 spike with the highest level of severity was in phase 1, from November 2020 to January 2021 and phase 2 from May to July 2021 (Antara News, 2021). This study analyzed and described the phenomenon of the resilience capacity of the poor people of Panjang subdistrict in dealing with it.

## 3.1. Research Area

The research was conducted in Panjang subdistrict of Bandar Lampung, Lampung, Indonesia. Based on the Regional Regulation of Bandar Lampung Municipality Number 04 of 2012, concerning the Arrangement and Formation of Villages and Subdistricts, the geographical location and administrative area of Panjang Subdistrict comes from some geographical and administrative areas of Panjang Subdistrict and Teluk Betung Selatan Subdistrict with the following boundaries: To the north, it is bordered by Sukabumi Subdistrict. To the south, it is bordered by Teluk Lampung. In the east, it is bordered by Lampung Selatan Regency. In the west, it is bordered by Bumi Waras Subdistrict. The detailed information can be seen in Figure 2.





Panjang is one of the subdistricts in the city of Bandar Lampung which has the highest number of poor people compared to other sub-districts in Bandar Lampung, namely 4121 people in 2020 and increased to 5111 people 1734

in 2021 (CBS, 2022). The poor were chosen as objects in this study because people have a high vulnerability to the COVID-19 disaster (Whitehead et al., 2021; Hidayat and Pandjaitan, 2021). Even though Panjang subdistrict is the community with the highest poverty rate, the data on its exposure is among the five lowest compared to other subdistricts in Bandar Lampung City (Bandar Lampung Health Office, 2022).

# 3.2. Data Collecting Techniques

The research data were collected in various ways, such as Focus Group Discussion (FGD) (Bungin, 2015), indepth interview and observation (Kumar, 2002), and documentation (Sugiyono, 2017). The FGDs was conducted for the poor and for community components other than the poor. The information included the efforts of resilience performed by the poor which consisted of preparedness, adaptation and mitigation capacities in dealing with the COVID-19 disaster and what forms of community support or assistance in helping the poor. This study also used in-depth interviews and observations of the people of Panjang sub-district who lived in areas prone to COVID-19 to assess their responses and resilience strategies to the negative impacts of the disaster.

## 3.3. Selection of Informants

The informants were selected through a purposive sampling technique based on the criteria and research objective. The criteria include, among others, people who are categorized as poor according to the Central Bureau of Statistics, poor people who carry out resilience capacity in dealing with the COVID-19 disaster. The were 20 informants, including 10 people from the urban poor and 20 people from other community elements directly related to the handling of, such as government apparatus, youth leaders, religious leaders, and the COVID-19 task force.

# 3.4. Data Analysis

Data analysis was divided into three stages, namely data display, data reduction, and conclusion drawing (Miles et al., 2014). Substantively, data analysis is directed at answering research questions on the resilience capacity of the urban poor in dealing with the COVID-19 disaster. The community resilience can be seen from the indicators of preparedness, adaptation and mitigation by adopting the analytical framework from Suherningtyas et al. (2021) as can be seen in Table 2.

Preparedness	Description
Community activity to seek knowledge	The community is actively seeking basic knowledge of COVID-19 through
about the COVID-19 disaster	various available sources.
Understanding information on COVID- 19, its origin, transmission, prevention and the impact it has caused	The community understands the basic knowledge of COVID-19.
A series of activities to prevent the	The community carried out several series of COVID-19 prevention activities
COVID-19 disaster through personal and environmental hygiene	through personal and environmental hygiene activities.
Adaptation	Description
Adaptation of health protocols in daily	The community is making adjustments to implement health protocols in their
life	daily lives.
Adaptation of the management and	- There is assistance provided in surviving the COVID-19 disaster.
utilization of assistance from the government	- The community manages and makes the best use of the assistance provided
and external parties	so that they can meet their basic needs during a pandemic.
Work adaptation (Work from Home) and	The community makes adjustments to time and activity restrictions in Work
school adaptation (School from Home)	from Home and School from Home.
Mitigation	Description
Formation of a COVID-19 task force in	COVID-19 task force and center are available in every village.
each sub-district	

Table 2. Indicators of Preparedness, Adaptation, Mitigation Capacity

Construction of infrastructure facilities in the prevention of COVID-19		Infrastructure facilities for the prevention of COVID-19 are available.		
	Availability of access to information on health facilities	There is access to information on health facilities so that people know when they need these health facilities.		

#### 4. RESULTS AND DISCUSSION

In accordance with the objectives of this study, this section explores in depth the extent of resilience efforts made by the poor people of Panjang subdistrict against the COVID-19 disaster. This refers to the fact that when the spike was high, exposure to it in Panjang area was relatively low compared to several other sub-districts in Bandar Lampung. This means that all the complexities involving the experience of the poor in carrying out their resilience capacity in dealing with disasters are an important part of what is studied in this phenomenological study. In other words, the main focus of this study lies in describing the efforts and experiences of each individual in carrying out resilience capacity in the face of the COVID-19 disaster.

## 4.1. Results from Preparedness Capacity

According to the National Board for Disaster Management (NBFDM), preparedness capacity is a series of activities carried out as an effort to prevent, eliminate or reduce disaster threats (NBFDM, 2016). In this capacity, several things have been done, including (1) actively seeking information about COVID-19 from various available sources such as TV, social media, online media, radio, the government and the community. From this activity they gained knowledge and understanding of the virus, the history of its origin, its causes, the mode of transmission as well as how to prevent and overcome it, (2) carrying out personal and environmental hygiene efforts by washing hands, bathing and changing clothes after traveling, cleaning house and their respective living areas, (3) participating in vaccinations to prevent the spread of COVID-19.

#### 4.2. Results from Adaptation Capacity

Adaptive capacity is the community's ability to respond to changes as a result of disasters by reducing potential disaster risk and utilizing socio-economic resources, technology and access to information related to these changes (Smit and Wandel, 2006; Kumalasari, 2014; Suherningytas et al., 2021). In this capacity, several efforts were made by the informants, among others, (1) making adjustments to implementing health protocols (4M) such as using masks, washing hands, keeping distance and avoiding crowds, (2) making adjustments to find alternative jobs to fulfill basic needs because some of the informants' income decreased during the pandemic, (3) making adjustments to School From Home (SFH) for their children to avoid transmission of the virus, (4) made adjustments to work time restrictions, so that people can reduce the frequency of interacting directly with other people, (5) making adjustments by the best use of the assistance obtained for business capital, buying nutritious food once in a while, stocking health protocol tools, and purchasing internet quota, in order to prevent and minimize the risk of spreading the virus, (6) making adjustments to carry out religious activities from at home, or continue to carry out worship activities in places of worship but with strict health protocol, and (7) making adjustments by using social media a lot as a means of interaction and communication in order to limit the distance between face-to-face meetings.

#### 4.3. Results from Mitigation Capacity

Mitigation capacity is a series of activities to minimize disaster risk through physical development as well as awareness of increasing capacity to deal with disasters, as well as other efforts in order to minimize disaster risks (NBFDM, 2016; Suherningtyas et al., 2021). According to Law No. 24 of 2007, mitigation can be carried out structurally and non-structurally. Structural mitigation is mitigation that is carried out in the form of physical development, while non-structural mitigation is mitigation that is carried out in the form of non-physical development, but all of these forms are carried out in order to break or minimize the risk of the spread of COVID-19. The mitigation capacity carried out by poor community informants is divided into two, namely physical and 1736

non-physical adaptation capacities. In this capacity, the efforts that have been made include (1) carrying out physical development in the form of building hand washing facilities in the home environment, making masks from cloth so they can be used repeatedly, and making hand sanitizers made from homemade soap, (2) carrying out non-physical development in the form of concern for the poor for other poor people who are exposed to covid, which is carried out in the form of providing food assistance to people who are carrying out independent isolation, delivering residents who are exposed to the virus to the health center, reporting people who have detected the virus to the Neighborhood Association or local task force , as well as participating in outreach and training to increase knowledge about COVID-19 organized by the government.

#### 4.4. Discussion

From the research results, the information was obtained that the Panjang poor community is a community that has resilience in facing the COVID-19 disaster by carrying out preparedness, adaptation and mitigation capacities. This strengthens the findings of Suherningtyas et al. (2021) which state that the resilience of urban communities in facing disasters is by carrying out preparedness, adaptation and mitigation capacities in dealing with disasters and the resilience of urban communities will be high if various forms of resilience capacities are carried out properly.

The urban poor in Panjang subdistrict carried out various forms of community resilience capacity in dealing with the COVID-19 disaster. They cannot be done alone, because the poor have limitations in making these efforts. This is due to their busy work, so it is very difficult to get information or knowledge about it. Besides, the poor people perceived that COVID-19 was not something scary, but what was more frightening for them was when they could not eat and fulfill their needs due to the impact of it. Apart from that, economic limitations make it difficult for them to meet the more complex needs of life during the covid pandemic amid the life difficulties that plagued them.

However, even though on the one hand the poor have limitations in making efforts to prevent and minimize COVID, on the other hand they have the power of social capital, both social capital that comes from the poor community group and social capital that comes from outside the poor community group so that they can have resilience in facing the virus.

The vulnerability of the poor in dealing with the covid disaster is relevant to the results of research conducted by CCMU (2020) and Santia (2020) stating that the poor had a vulnerability to the COVID-19 disaster due to their high mobility to work making it difficult to find information about COVID-19, the perception of COVID-19 is not right and also due to economic limitations making it difficult to meet the need for nutritious food that is useful for the body's immune system and to meet the need for health protocol tools that must be implemented during the COVID-19 pandemic.

The urban poor in Panjang have resilience in facing the COVID-19 disaster because of the strength of social capital that shapes it, namely in the form of internal strength of the poor community itself and external forces. Internally, the Panjang poor community has a high bond of solidarity that has been formed for a long time. This is due to their habit of living close together in a narrow scope so that they are used to meeting and the existence of the equality of the poor so that they have a desire to help each other in overcoming problems together. Various forms of solidarity are given, such as exchanging information or knowledge about COVID-19-19, giving each other food assistance if there are other poor people who are experiencing self-isolation, and reporting or delivering if there are poor people who are exposed to COVID-19-19.

This research is in line with the findings of Afdilla (2019) which state that social capital is a force in disaster management which can be measured by strong solidarity support between community members and then coupled with the active role of the village head in seeking assistance, so that the disaster can be handled properly. Putnam (1993) states that the elements that form social capital can be in the form of beliefs, values and norms as well as social networks that are interconnected in forming social capital. Even though the social capital that was carried out was natural disasters, it can be linked to the COVID-19 disaster because disaster according to Law No. 24 of 2007 1737

is any event that disrupts human life and livelihood both caused by natural factors such as earthquakes, floods, landslides, non-natural events such as technological failures, modernization failures, disease outbreaks, and social disasters such as horizontal conflicts and horizontal conflicts.

From the results of this study, it is clearly illustrated that poor people are synonymous with low knowledge, limited economic capacity, slums, overcrowding (Ishwitari et al., 2020), but they can carry out the resilience capacity to face the COVID-19-19 disaster well as evidenced by good exposure. relatively low compared to other sub-districts in Bandar Lampung City (CBS, 2021 and 2022).

This study reconstructs the findings of Suherningtyas et al. (2021) that the resilience of the poor in dealing with the COVID-19 disaster can be achieved when the community carries out preparedness, adaptation and mitigation capacities supported by the strength of social capital in shaping it. Social capital is an important component that is not only needed by the poor but society in general because community resilience can be well formed if there is social capital strength in it (Chong et al., 2018). In addition, social capital can function as a force in disaster management (Sanyal and Routray, 2016) including handling the COVID-19-19 disaster (Azzahra and Sulandjari, 2022).

#### CONCLUSION

The resilience of the urban poor in Panjang subdistrict Bandar Lampung Indonesia in facing the COVID-19 disaster is marked by preparedness, adaptation and mitigation efforts. This resilience capacity can be carried out properly because of the strength of social capital from the poor community groups themselves with their high bonds of social solidarity to jointly help make efforts to prevent and minimize COVID-19 coupled with the strength of social capital from external groups of the poor, such as community leaders, government officials local government, COVID-19 control unit, related offices or agencies, private sector and volunteers. Poor people want to establish relationships with external community components because of their inability to carry out resilience capacity independently. In addition, because of the trust formed from the values and norms that they have so far, one of them is the value of openness where the Panjang poor have good social relations with other components of society and the government in overcoming various problems.

The implication of this research is that the form of resilience of the poor in surviving the COVID-19 disaster can also be applied to other areas, especially those that are vulnerable to the disaster. Apart from that, it is hoped that this form of community resilience capacity can become part of public policy for handling the disaster with a participatory community approach so that the goals of sustainable health development will be more easily realized.

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