

## URBANIZATION IN THE DKI JAKARTA AREA CREATES SLUM SETTLEMENTS

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Accepted: 01 December 2022. Approved: 27 December 2022. Published: 27 December 2022.

### ABSTRACT

Increased urbanization always occurs in urban centers, this can affect changes in the form of bad regional planning such as the emergence of slum settlements. DKI Jakarta Province is the area with the fastest urbanization in Indonesia. Many residents from various regions come with various motives and different reasons, so it is very urgent for residential areas in DKI Jakarta which are very small and limited. The residential environment that is not supported by supporting facilities and high population mobility has caused many inappropriate settlements to be formed in DKI Jakarta Province. Inappropriate settlements or commonly referred to as slums are very influential on the level of environmental health in the region itself. Therefore, this study aims to determine how much influence urbanization has in creating slum settlements in the DKI Jakarta area with qualitative methods to collect data. In addition, what impact will happen to the population and the environment in DKI Jakarta Province if slum settlements continue to form? So that later it can provide solutions to problems that are following the contents of the existing problems.

### Research Paper

### PREVENIRE: Journal of Multidisciplinary Science

**Keywords:** Urbanization, Slums, DKI Jakarta.

### INTRODUCTION

The city is a place for the growth and development of all life activities such as economic, social, educational, and so on quickly. Developments that often occur rapidly in big cities in Indonesia slow down economic growth (Harahap, 2013). Therefore, the development of all life activities that occur in a particular city is connoted as a driving force for residents in rural areas or other areas to come and settle in the city to improve their standard of living (Ainurrofiq, 2018). Cities are known to play various activities to fulfill community needs both in technological development and economic growth (Kuddus et al., 2020). The process of high population growth in the region in particular can be called

urbanization. DKI Jakarta Province is one of the cities that has experienced quite high urbanization, the population growth is above the average (Simangunsong & Hutasoit, 2017). The population continues to increase with the high cost of living causing many population problems, especially regarding residential areas. Residential facilities and infrastructure in the Jakarta area which cannot accommodate the large population, have an impact on environmental aspects in the form of air pollution and unplanned expansion of areas (Legarias et al., 2020).

Slums are residential area that is formed due to a large number of residents in an area. Slum settlements are areas that are usually marked by their shape which are close to each other, disorganized, and tend to be dirty and

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unhealthy because they were built without adequate planning and facilities (Shaojun, 2018). These settlements are used as an alternative for urban residents who cannot buy or rent residential areas available in the Jakarta area. This is a problem that arises due to urbanization in the Jakarta area.

Slum settlements are a form of influence of urban residents on the environment of Jakarta. Usually, these settlements form along riverbanks or pile up under bridges and other places that should not be proper places to live. Urban residents living in slums are of course residents who are left behind in terms of the economy, so it is very feared that other impacts will emerge from the existence of slums. Slum settlements can have quite a big impact on the Jakarta area because the shape and structure of the settlements are very disorganized and dirty. Slum areas are usually built with makeshift building materials such as used goods or plastic waste, so they are very dangerous for health and safety. In addition, they usually carry out MCK (bathing, washing, and toilet) activities in rivers, which can cause quite high water pollution.

Therefore, in order not to have an even bigger impact, it is necessary to have an appropriate and efficient problem-solving strategy for slum settlements, for example, such as building decent housing at affordable prices for the less fortunate and providing outreach that can make residents aware of the impacts. From the formation of slum settlements, and the final step, if residents continue to maintain these slums, the government can evict slums to avoid worse environmental pollution. This study aims to find out how urban residents influence the environment through slum settlements specifically in the DKI Jakarta area (Legarias et al., 2020). Measuring how much influence urban residents exert can help determine what efforts are effective and focused so that no more buildings are built without planning from the relevant government.

## LITERATURE REVIEW

### Definition of Urbanization

From a geographical perspective, urbanization is a chain that cannot be separated from its influence on the spatial

system broadly in terms of political, social, and economic aspects. Urbanization is a phenomenon of increasing the number of residents in urban areas in line with the level of welfare and economic development of the population of a region (Widiawaty, 2019).

Urbanization causes the population in urban areas to increase rapidly, therefore urbanization is often associated with developments in a city (Widiawaty, 2019). An increase in the number of residents in a city tends to cause many problems for the city itself. This is because, in urban city areas, the population does not only consist of native residents of the city area but also various other residents who come from outside the city. So that the city consists of various cultures and differences that cause problems.

### Housing and Settlements

UU No. 1 of 2011 housing and settlements are defined as a group of houses that function as an environment for living, which is equipped with environmental facilities and infrastructure. While settlements are part of the environment outside protected areas (cities and villages) which function as living or residential environments and places of activities that support life. Cities that experience development as a result of population growth can cause social, economic, and cultural changes as well as their interactions with other cities and the surrounding area. Most of the population growth in cities cannot be matched by the development of supporting facilities and infrastructure so urban areas experience environmental degradation which can potentially create slums (Niken Fitria & Rulli Pratiwi Setiawan, 2014).

So it can be redefined that housing as a collection of houses as part of a settlement, either in a city or in a village, which is equipped with public facilities that support the feasibility of a place for residents to live. As for the settlement itself, it is part of a residence consisting of more than one housing environment with public facilities supporting the lives of residents in cities and villages.

### Slums

Slums according to UU No. 1 of 2011 are settlements that are unfit for habitation

because of the irregularity of the buildings, the level of overcrowding of buildings, and the quality of facilities and infrastructure that do not meet the requirements. Slum settlements are often seen as identical areas formed because of a population that exceeds residential capacity so that some of them form their own homes using used goods which of course makes their living environment look dirty, cramped, and unhealthy (Marosa, 2013: 14-16). Residents living in slum settlements are usually residents who cannot afford to buy or rent decent housing in the area because they are on average residents who move from one area to another (Snyder et al., 2017).

Slum settlements have been said to be formed as a result of population growth, especially from the urbanization process (Lilford et al., 2019). If slum settlements are allowed to continue, they will certainly have many negative impacts on the environment and its inhabitants, such as environmental pollution, disease outbreaks, damage to the beauty of the area, and the potential for flooding. This is very influential for the indigenous people in the region if it is allowed to continue because it threatens their health and damages the environment where they live. There needs to be an effort to minimize the formation of wider slum settlements for the convenience of residents.

## METHODS

The research method used in this paper is a qualitative method supported by a literature review and previous studies. The object of research is the phenomenon of urbanization in urban areas, especially in DKI Jakarta. The analysis was carried out descriptively to answer the problems studied. First, a literature study of studies with similar themes is carried out, then an in-depth analysis is carried out to find results that are by the problem (Hidayati, 2021). Slum settlements are affected by urbanization and high population mobility in an area. The existence of slum settlements with poor

environmental hygiene and sanitation can cause problems, especially at the health level (Adriadi Ghiffari et al., 2020).

## RESULTS AND DISCUSSION

### The Effect of Urbanization on the Emergence of Slums

The phenomenon of urbanization is always associated with the social and economic conditions of the residents of the area of origin and destination. The motivating factor for villagers to urbanize is the lack of jobs in the area of origin, while the necessities of life cannot be met properly (Widiawaty, 2019). However, the increasing urbanization of course gives birth to many problems in urban areas such as regional management, education, social, economic, and natural disasters that will occur as a result of human activities (Dewi, 2017).

Equitable development is one of the problems in Indonesia, inequality of progress between one region and another causes the phenomenon of urbanization to spread. This is because, uneven development will result in differences in access to social facilities, the standard of living, employment opportunities, and income among people. This inequality makes more developed regions become a magnet for people who live in less developed areas (less advanced) (Dewi, 2017). The dynamics of urbanization in Indonesia show a trend that also occurs in other countries.

Currently, DKI Jakarta has been inhabited by more than 10 million people with a high level of density. This condition causes traffic jams, unemployment, clay land use, and slum settlements. These conditions occur due to excessive levels of urbanization. In controlling urbanization, the Provincial Government of DKI Jakarta has issued a policy regarding urbanization control, but the implementation of population administration has not been able to handle the problems that arise as a result of urbanization (Zhu et al., 2015).





**Figure 1. One of the slums on the banks of the Ciliwung River**

**Figure 1** is one of the problems that occur due to urbanization that occurs in DKI Jakarta, namely on the banks of the Ciliwung River. These uninhabitable settlements are often referred to as slums. These slum settlements have started to appear even since 2000 and have increased every year following the population increases, the majority of which occur as a result of urbanization ([Zhu et. al, 2015](#)). Slum settlements are usually formed illegally around rivers or under bridges with makeshift items that are very inappropriate and do not meet the requirements for building a house.

If the tendency to expand and organize continues, it will be difficult for the government to move or evict slums. The condition of slum settlements can be said to be very apprehensive because of the dense and piled-up forms of settlements. Therefore, it is not uncommon for slum areas in DKI Jakarta to be areas with very low levels of health. The ever-increasing population makes it quite difficult for health institutions to record or examine the health of all residents living in DKI Jakarta Province

The level of health in slum settlement areas is supported by a dense environment full of garbage as shown in **Figure 1**. In addition,

the quality of the river water they use for MCK activities (Bathing, Washing, and Latrine) and consumed directly is also not very good for their health. It can also be seen in the picture that slum settlements make the environment in DKI Jakarta dirty and polluted, so it is very possible for disasters such as floods or fires to occur. Flood disasters actually occurred even before urbanization, but urban communities were affected because the majority lived in low-lying areas. Whereas fire disasters can occur because slum settlements themselves are built close to one another.

Slum settlements are formed in the city area of DKI Jakarta which also has many buildings and multi-story buildings. This social inequality will increase the crime rate which can threaten the safety of other residents. At present, there are many areas in DKI Jakarta that cannot be used efficiently because they have been polluted and damaged due to slum settlements that are affected by urbanization. ([Sagung Alit W. & Jihan, 2018](#)).

Many areas with slum settlements have high crime rates, especially in terms of violence against women, but sometimes the lack of evidence and unsystematic laws in an area cannot overcome the existence of criminal acts ([Belur, 2017](#)). So that the majority of

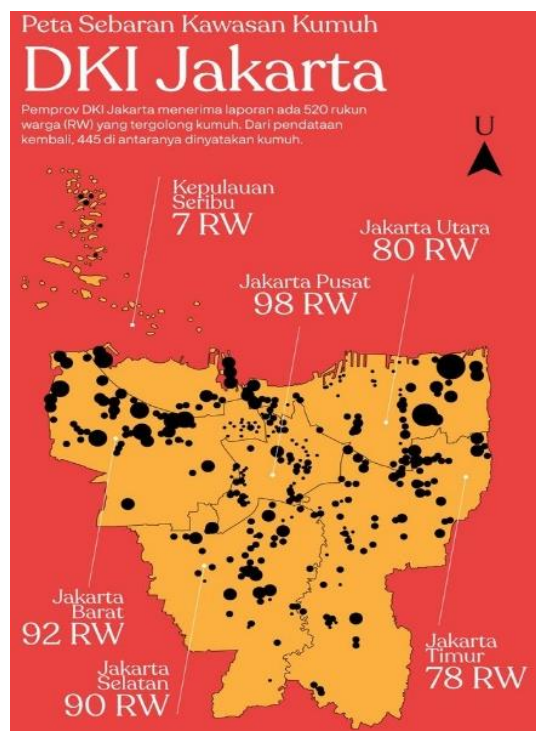
women who experience acts of violence or harassment choose not to report these crimes to the authorities because there is no evidence and they are afraid of the threats that the suspect might give. This certainly threatens the safety of residents who are in areas with high urbanization.

Environmental problems including those caused by widespread poverty and industrialisation and population mobility due to urbanization have had a serious impact on urban migrant populations. Children cannot attend the same education as other children, resulting in cases of illiteracy and a lack of knowledge. As previously mentioned, slum settlements have been formed due to the inability of the city government to plan and provide all forms of preparation for increasing population growth in a relatively short time. Therefore, slum housing is the only solution for people to survive in cities with low incomes.

#### Identification of Slum Characteristics

In recent years many regions in various parts of the world have experienced extraordinary population growth, especially in urban areas such as DKI Jakarta Province as the nation's capital. This growth is developing very fast and continues to increase. Increasing urbanization is a major concern for DKI Jakarta Province because an adequate population in this area is not matched by adequate infrastructure. The inability to adequately meet the demands of population growth in areas with these characteristics has led to the emergence of slum settlements that continue to grow. It should be noted that currently there are 1 billion people in the world who are residents of slum areas. The distribution map of DKI Jakarta slum areas is presented in **Figure 2**.

**Figure 2** shows the distribution of slum settlements in the DKI Jakarta area. According to the RTRW (Regional Spatial Planning) of Jakarta on the Regional Housing and Settlement Development and Development Plan, slums are divided into 3 categories, namely light, medium, and heavy slums. These three categories have different characteristics based on eligibility requirements for residents.



**Figure 2. Distribution Map of DKI Jakarta Slum Areas**

#### 1. Light Slums

Light slums have better facilities and infrastructure than other slums (Niken Fitria et.al, 2014). In terms of facilities and infrastructure, this area still has a clean water supply, accessibility, and waste management. Most of the clean water supply comes from the Regional Drinking Water Company. In terms of accessibility, generally the road conditions and the environment are quite good and well maintained. Whereas in solid waste management, the community has trash cans and garbage trucks that manage the existing waste system to keep it organized.

Buildings in slum settlements tend to be close to factories or industries which are the workplaces of most slum communities. From a social perspective, it can be seen that people in low-income slums are immigrants from outside Jakarta who come to work as laborers. Mild slums in DKI Jakarta Province are areas prone to flooding but not too dangerous compared to other categories. This is due to inadequate drainage and sanitation in the area. The community still uses bathrooms and latrines which are directed directly to the rivers around the settlements. So it cannot be denied that the pollution that occurs in river water causes river water to no longer be used



by the community for their daily activities. At least there is a flooding phenomenon that is felt by the community every year.

## 2. Moderate Slums

Medium slum areas are areas consisting of low and heavy slums. Some of the areas already have facilities and infrastructure that are good enough for housing, while some others do not have facilities and infrastructure that support eligibility for housing (Dwiputri et al., 2020). Conditions for fulfilling facilities and infrastructure in slum settlements are not much different from other types of slum settlements.

In terms of the physical condition of the housing, it has semi-permanent characteristics, with most of the building materials coming from remnants of building materials. Meanwhile, in terms of social conditions, the people are residents outside Jakarta who have lived for a long time in building slums due to unfavorable economic conditions. In terms of welfare level, of course in slum settlements, this category is one level below low-income settlements. As with low-lying slums, these settlements are subject to much higher rates of flooding each year due to their low area and lack of goals in waste management.

## 3. Heavy Slums

Meeting the needs for facilities and infrastructure in heavy slums tends to be poor compared to other slums. Severe slum areas are minimal with access to clean water and electricity (Dwiputri et al., 2020). Fulfillment of the need for basic facilities and infrastructure found in slums generally tends to be poor compared to the two previous categories. From the waste management system, only a few people have trash cans, so in the end, there are piles of garbage that, if left unchecked, will cause soil pollution. In terms of sanitation, some people have private bathrooms and toilets with water channels connected to the river as a source of water around them. According to the article 'Building Density Level of Urban Slums Area in Jakarta,' there are 15 RWs that are considered heavy slum areas, each RW has a different number of buildings but the majority

are around 1,000 to 4,000 buildings in each RW (Legarias et al., 2020).

Their physical conditions are not much different from people in slums and medium-sized settlements. In this residential area with building construction close to each other, the people are also outsiders of DKI Jakarta Province with a low level of education, so the types of work they can do are quite limited. These heavy slums have much higher flood conditions than the 2 categories of slums. If we look at it and analyze it, the heavy slums have the most impact on health and environmental pollution. This is due to the lack of proper management and development of facilities and infrastructure in the form of waste management, clean water supply, and accessibility.

## Efforts to Overcome Slums Formed as a result of Urbanization

Overcoming slum settlements that have been formed for a long time is not an easy thing for the government, especially with the cultural differences of urban residents which cause very low participation and awareness of the environment. Therefore, if not taken seriously, slum settlements will have a significant impact on the government and the people of DKI Jakarta. To overcome problems regarding slum settlements that have been formed for years, the DKI Jakarta government through the DPRD is committed to tackling poverty, unemployment, and other social problems. Then, revive several community empowerment programs such as PPMK (Kelurahan Community Empowerment Program), providing adequate service facilities from the aspects of education, health, and transportation (Eni, 2019).

The commitment of the Provincial Government of DKI Jakarta to tackling poverty, unemployment, and other problems is shown by the existence of several work programs. The first work program is to empower the community to develop their potential in various types of training so that people in slum settlements also have the same opportunity to get jobs with sufficient income. Meanwhile, children in slum settlements need to be given an education that can help in change.

Then, in the next stage, build Rusunawa (Rent Flats) at a low cost, so that people get a decent and comfortable place to live. Relocating people to Rusunawa needs to be done with socialization and an approach that can provide a direct understanding of the importance of getting a decent place to live. In addition, to maintain the facilities inside, it is necessary to have policies for the use of the public facilities that have been provided. Having sufficient income with affordable flat rental prices but still feasible and comfortable to use, will drive a big change for the community so that the impact caused by urbanization can be minimized properly in stages and is expected to create a much cleaner and healthier environment.

Environmental restoration is the final step that can be taken to rejuvenate an environment that has been damaged by the slums that have been formed. Environmental restoration can be done in many ways such as purifying water, managing waste, especially plastic waste that can be recycled, and rehabilitating land that was originally a slum settlement into a park or other type of public facility that can be used by the whole community.

It takes time and effort to deal with urbanization which has an impact on the formation of slums. If this commitment is driven by high community enthusiasm to bring about change, a clean, flood-free and prosperous DKI Jakarta area will be created. Environmental management is very important and has been regulated in UU RI No. 4 of 1982, which states that "Prevention and control of environmental damage and pollution and their supervision are carried out thoroughly and have been stipulated in statutory regulations." So all regions in the State of Indonesia should be properly guarded and protected from all things that are destructive to the survival of the people in the future (Beddu & Yahya, 2015). The settlement categories that have been described can be an illustration of how big the impact is on the area of DKI Jakarta Province.

## CONCLUSION

The urbanization that occurred in DKI Jakarta greatly influenced the emergence of

slums with different characteristics from mild, moderate, to severe slums. The emergence of these slum settlements can hurt the environment and residents in DKI Jakarta. Disorganized slum settlements can pile up garbage and pollute the soil and water, resulting in many disease outbreaks that threaten the health of the inhabitants. Currently, the government of DKI Jakarta is rejuvenating slums where the process of relocation, regional arrangement, and socialization of the work program is carried out which is expected to be able to reduce the number of slum settlements in DKI Jakarta by the end of 2022.

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## Author's declaration

### Authors' contributions and responsibilities

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

### Funding

Write down the research funding, if any.

### Availability of data and materials

All data are available from the authors.

### Competing interests

The authors declare no competing interest.

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