



## DINAMIKA GOVERNANCE JURNAL ILMU ADMINISTRASI NEGARA

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### SUSTAINABILITY ANALYSIS OF COMMUNAL IPAL INSTITUTION IN GRANTING STREET 1<sup>ST</sup> BLOCK, SIMOKERTO SUB – DISTRICT IN SURABAYA

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#### ABSTRACT

*Domestic wastewater management is one of the environmental problems in Surabaya. It is not only causing environmental pollution but also health problems. One way to treat wastewater is through communal wastewater management installation (IPAL). One of the Communal IPAL in Surabaya is located in Granting street 1st block Simokerto sub-district in Surabaya. The existence of communal IPAL provides benefits for environmental sustainability, especially the cleanliness of rivers in Simokerto, but the benefits are decreasing due to the weakening of institutional sustainability. Furthermore, this qualitative research uses a case study approach that aims to explain and examine the factors that support and hinder institutions in community-based sanitation management at the community organization for IPAL management community Granting Street 1st Block, Simokerto sub-district. Data collection is conducted through the interview, direct observation, and documentation. The results of the research are obtained by using institutional analysis in three pillars or aspects, namely the regulative, normative, cognitive cultural pillars that communal IPAL requires organizational regeneration so that the sustainability of this institution can continue to serve.*

*Keywords: sustainability, institutional, communal IPAL, wastewater management*

#### ABSTRAKSI

Penanganan air limbah domestik merupakan salah satu permasalahan lingkungan di Surabaya. Selain dapat menyebabkan pencemaran lingkungan, air limbah juga dapat menimbulkan gangguan kesehatan. Salah satu cara untuk mengolah air limbah adalah Instalasi Pengolahan Air Limbah (IPAL) Komunal. Salah satu IPAL Komunal yang ada di Surabaya terletak di Jalan Granting gang 1 Kelurahan Simokerto, Kecamatan Simokerto, Kota Surabaya. Keberadaan IPAL Komunal tersebut memberikan manfaat bagi kelestarian lingkungan hidup, terutama kebersihan sungai di Kelurahan Simokerto namun kemanfaatan tersebut semakin berkurang karena keberlanjutan kelembagaannya yang semakin melemah. Penelitian kualitatif ini menggunakan pendekatan studi kasus yang bertujuan untuk menjelaskan dan mengkaji serta faktor-faktor yang mendukung dan menghambat kelembagaan dalam pengelolaan sanitasi berbasis masyarakat pada kelembagaan Kelompok Swadaya Masyarakat Pengelola IPAL Komunal Jalan Granting gang 1 Kelurahan Simokerto Kecamatan Simokerto Kota Surabaya. Pengambilan data pada penelitian ini dilakukan melalui wawancara, pengamatan langsung dan dokumentasi. Hasil penelitian yang diperoleh dengan menggunakan analisa kelembagaan dalam 3 (tiga) pilar atau aspek, yakni pilar regulatif, pilar normatif, pilar dan pilar kultural kognitif bahwa kelembagaan IPAL Komunal di Jalan Sim Granting gang 1, Kelurahan Simokerto, Kecamatan Simokerto, Kota Surabaya memerlukan regenerasi organisasi agar keberlanjutan kelembagaan IPAL Komunal ini dapat terus berjalan.

Kata Kunci : Keberlanjutan, Kelembagaan, IPAL Komunal

## INTRODUCTION

The existence of IPAL (a wastewater management installation) on a communal scale is one of the solutions to overcome the environmental problems in Surabaya as the second-largest city in Indonesia after the capital city of Jakarta. Surabaya has 3.15 million populations with the density of 9.497 people/km<sup>2</sup> (Source: Kota Surabaya dalam angka, 2020). This has an impact on the amount of effluent/ wastewater discharge from the household which is also getting worse. The issue of environmental health/ sanitation is one of the important things that must be addressed because it involves the lives of many people. The increased level of population density in Surabaya has implications for the emergence of various problems related to sanitation. Poor sanitation systems become the cause of various diseases such as typhoid, diarrhea, and cholera. For this reason, an approach is needed in managing domestic wastewater by using a Communal Wastewater Management Installation (IPAL) to overcome the worst impact of this pollution. The system is carried out by treating domestic (household) wastewater in a particular community, so that the water doesn't flow directly to the water body/ river, but can be initially filtered or treated so that it does not pollute the river.

The development process in communal IPAL is applied through the concept of community-based development in which the community is involved in every part of development starting from planning, decision making, construction, operation, and maintenance. In the aspects of construction and operation of wastewater treatment facilities, a management institution is usually established at the community level whose members are the community as service users.

The development of sanitation facilities and infrastructure in communal IPAL does not build physical facilities but also establishes the sustainable program. The continuity of the program is important so that buildings are not neglected and become Cipta Karya "MCK" Monument. Besides, sustainability must be seen as a whole, from the technological, economic and social, and institutional aspects (Nilandita, Pribadi, Nengse, Auvaria, & Nurmaningsih, 2019).

The Government in Surabaya creates sanitation development as an important part of the successful development process. This is realized because of the regulation existence in IPAL management in Surabaya. It is regulated in Regional Regulation No. 12 the Year 2016 regarding Water Quality Management and Wastewater Control. This confirms that as governance improves, the benefits of local scale systems will also increase. Local-scale has many benefits compared to centralized systems, such as the easier installation in existing areas; affordable finance, simpler operation, fewer consequences if undesirable events occurred. Furthermore, the installation can also be added because of the increased financial and institutional capacity. According to the data in 2016, there are 40 units of sanitation facilities in Surabaya, including 7 units (18%) underutilized facilities, 7 units (18%) ongoing progress facilities, and 24 units (64%) facilities that are being operated (Nilandita et al., 2019).

One of the Communal IPAL in Surabaya is located at Granting Street 1st Block in Simokerto sub-district. The Communal IPAL was built in 2013 using the funds from the Corporate Social Responsibility (CSR) program in collaboration with the government of Surabaya and the Faculty of Civil Engineering and Planning in Institut Teknologi Sepuluh Nopember (Purwatinigrum, 2018). The existence of communal IPAL provides benefits for environmental sustainability, especially the cleanliness of the rivers in Simokerto. However, when this research was conducted, the benefits of communal IPAL were decreasing because the institutional procession was declining. This happened because of the saturation of the management and the absence of regeneration, causing the Communal IPAL institution to become weaker and weaker and the communal IPAL not maintained and no longer functioning.

Based on the explanation above, the writers conducted a study entitled "SUSTAINABILITY ANALYSIS OF COMMUNAL IPAL INSTITUTION IN GRANTING STREET 1ST BLOCK, SIMOKERTO SUB-DISTRICT IN SURABAYA". The purpose of this study was to describe and examine the institutions in community-based sanitation management as well as

the factors that support and hinder the self-service-based community (KSM) for Communal IPAL Institution in Granting Street 1st Block, Simokerto sub-district in Surabaya. The results of this study are expected to be one of the considerations in terms of institutional sustainability of communal IPAL in Surabaya. Institutional sustainability is important in the operation of communal IPAL. If the institution is weakened, it will result in reduced benefits of communal IPAL.

#### Theoretical Framework

The institution is the whole ideal patterns, organizations, and activities with basic needs-oriented. An institution is established that aims to meet the various needs of farmers so that the institution has its function. The institution is the concept with the integrated structure in which it does not only involve activity patterns from a social perspective to fulfill human needs but also organizational patterns to implement them (Anantanyu, 2011).

The core of the institution is the interaction. The study of institutions pays attention to the interactions that occurred, such as: Are these interactions in formal or informal ways? Is it a horizontal or vertical pattern? Is it economic-based or not (or social-based)? Is it temporary or sustainable? Is it a common or new thing? Is it using a pattern or random? Is it from instruction or not?. Moreover, there are ten principles of interaction that occurred in the institution (Hadi, 2015) in institutional development, namely (1) Based on existing condition, (2) Needs, (3) Thinking in systems, (4) Participatory, (5) Effectiveness, (6) Efficiency, (7) Flexibility, (8) Value added or advantage, (9) Decentralization, (10) Sustainability.

The interaction between institutional and organizational theories gives rise to new institutional theories. The new institutional approach includes three pillars (Nuraini, Masyhuri, Jamhari, & Hadi Darwanto, 2016). The three pillars include: (1) The regulative pillar or what is known as the regulative institution or rational choice institutionalism is the pillar that takes into account the existing rules and what benefits will be got by the actors in applying them. This pillar assumes that society is filled with various rules and society behaves by learning from these rules. (2) The normative pillar is a pillar that comes from the

norms that live and are agreed upon by the community. Human behavior, both as an individual and as a group, is determined by the norms that exist in society. (3) Cognitive cultural pillars focus on the cultural knowledge owned by individuals and society. This pillar comprehends that humans interpret everything around them, including norms and regulation, however, humans do not immediately obey them completely.

One of the environmental problems in Surabaya is wastewater. The entry of wastewater is directly into the river without being filtered/ treated that causes pollution to the water. This is resulting in a decreased quality of water in the river. Domestic wastewater treatment is one of the housing health requirements in the Minister of Health Decree Number 892 Year 1999. One of the aspects is the wastewater coming from the household which is not allowed to pollute the water sources, to cause an odor, and to pollute the soil surface. Therefore, we need a management system to treat wastewater, so that it does not have a bad impact on the environment and health. One approach in treating domestic wastewater is the use of an integrated method using communal IPAL. The management system in IPAL is following Kepmen. LH Number 112 Year 2003. The regulation states that the wastewater is treated collectively before being discharged into surface water. Wastewater from each source is connected through the pipe installation and connected through a carrier pipe to a joint or centralized treatment installation (Purwatiningrum, 2018). The waste products of communal IPAL can be used or reused into useful and harmless materials for the surrounding environment. These products are in the form of liquid and solid substances. The waste products of communal IPAL in the form of liquids can be used for recreation, water cultivation, and agriculture, while the waste products of communal IPAL in the form of solid substances can be used to improve soil structure, fodder, and energy (Widiwati, 2018).

The communal IPAL institution is related to the organizational system. The implementation of organizations in IPAL management at the community level is a self-service-based community (KSM) and Utilization and Maintenance Groups (KPP). KSM is the main actor in the implementation of sanitation facilities development,

while KPP has a role in the sustainability of sanitation facilities for the SANIMAS program (community-based sanitation) in the sub-district. KSM and KPP are the representatives of the community users, so the success of this program will depend on the active role of the community (participation) in each activity stage, starting from the process of community preparation, socialization, planning, implementation of development, utilization and maintenance.

The sustainability of communal IPAL highly depends on the condition of KSM where the communal IPAL and KSM have a relation. Therefore, to conduct it sustainably, it is important to have a strategy to strengthen KSM IPAL Communal.

## METHOD

This study uses the qualitative research method by applying a case study approach (Creswell, 2013) in the effort to understand the management of community-based sanitation facilities in Surabaya. This research presents many natural and empirical facts regarding the capacity of the community-based institutional organization in managing environmental sanitation facilities, especially in a non-governmental organization for domestic wastewater management installation (communal IPAL) in Granting Street 1<sup>st</sup> Block, Simokerto Sub-district, in Surabaya.

The data collection technique is conducted in three stages: (1) Open-ended interviews and structured interviews have questions that focused on problems so that the information collected is sufficiently complete and in-depth. Interviews with key informants, namely Simokerto sub-district Officers, the head of neighbourhood in Granting Street 1<sup>st</sup> Block, and the community. (2) Observation is defined as the collection of data through direct or indirect observation in formal or informal ways used to observe activities related to the research theme. (3) Documentation is collected to obtain secondary data in the form of regulation, decision, archives, and other documents which are relevant to the problem under the study.

In qualitative research, data analysis is applied simultaneously using data collection. Thus, the researcher uses an interactive model in analyzing the data (Matthew B. Miles, A. Michael Huberman, 2014), such as (1) Data collection from

the interview, observation, document, and other secondary data as a complement to the use of observation and interview in qualitative research. (2) Data reduction is carried out by sorting out the that is relevant to the problem and continuously used during the qualitative research process. (3) Presentation of data is performed after the data is reduced or summarized. (4) The conclusion is given after the data is reduced and presented which contains the answers to the statement of the problem.

## RESULT AND DISCUSSION

Simokerto sub-district has a 22.952 population consisting of 11.342 males and 11.610 females. The area has a population density of 26.688 per km<sup>2</sup> (Source: Simokerto Sub-district in Figures, 2019). Based on the data on population density, the existence of communal wastewater management installation (IPAL) becomes an important means in supporting cleanliness and environmental preservation in Simokerto sub-district.

One of the Communal IPAL is located in Simokerto Sub-district in Granting Street 1<sup>st</sup> Block. It was built in 2013 established with PT Pembangkitan Jawa Bali (PJB) using Corporate Social Responsibility funds in collaboration with the Government of Surabaya (Widiwati, 2018). The establishment process of communal IPAL involved the faculty of Civil Engineering and Planning in Institut Teknologi Sepuluh Nopember as the expert team, assistant, and program coordinator (Purwatinigrum, 2018).

The type of communal IPAL is ABR filtration (Anaerobic Baffled Reactor) which is a septic tank wastewater treatment, but there is an additional bulkhead in the tank. The grease trap consists of four tanks, namely an equalization tub containing palm fibers, an anaerobic contactor tub containing zeolite, an aerobic contactor tube containing activated carbon, and a final settling tub. The community uses the communal IPAL to water the plants and wash the motorbikes (Widiwati, 2018).

This communal IPAL can accommodate wastewater from 30-40 family members. Domestic wastewater consists of gray and black water (Purwatinigrum, 2018). Gray water is domestic

wastewater that comes from the kitchen (dishwasher), water from washing clothes (water from the washing machine drain, for example), and water from bathing. Meanwhile, black water is the term used for wastewater containing human waste. The type of wastewater in communal IPAL is from domestic households and it is a gray water type.

The existence of communal IPAL in Granting Street 1<sup>st</sup> Block has provided benefits to the community, such as the processed water can be used for washing motorbikes, and watering plants, so that the environment in this area will be cleaner (Source: Reportase Pagi Trans TV, 2016). This has led to many guests from outside of Surabaya who want to see the clean environment in Granting Street 1<sup>st</sup> Block, Simokerto sub-district and to find out the communal IPAL management institution. The success program can be seen in Granting street 1<sup>st</sup> block that holds a clean and green environment competition conducted by the Government of Surabaya who has made the area for the pilot project from various regions both domestically and internationally.

The communal IPAL institution in Granting Street 1<sup>st</sup> Block, Simokerto Sub-district is portrayed in three pillars or aspects, namely the regulative pillars, normative pillars, cognitive cultural pillars (Nuraini et al., 2016):

#### 1. Regulative Pillars

The regulative pillar or what is known as the regulative institution or rational choice institutionalism is a pillar that takes into account the existing rules and what benefits the actors can have. This pillar assumes that society is filled with various rules and society behaves according to the rules.

The basic regulations for managing communal IPAL are:

The Law Number 11 Year 1974 regarding the irrigation in Article 13, which states that water sources and irrigation structures must be protected and secured, maintained, and preserved so that they can fulfill their proper function (have a social function and can be used for the prosperity of many people). These can be conducted through: (a) using some efforts in saving the land and water; (b) doing security system and control the destructive force of water against its sources and the surrounding area; (c) making prevention for water contamination,

which can cause detrimental to its use and environment; (d) providing security and protection for irrigation building so that its function is properly worked.

1. Law No. 32 Year 2009 regarding the protection of environmental management states that the environment is a spatial unit with all objects, forces, conditions, and living things, including the human and their behaviors, which affect nature itself, the continuity of life, and the welfare of human and other living creatures. Whereas, Law Number 32 Year 2009 in article 20 regarding environmental protection and management, it is stated that everyone is allowed to dispose of the waste into environmental media by following the requirements, such as using environmental quality standard and obtaining permission from the minister, governor, or the mayor authority.
2. Government Regulation No. 66 Year 2014 emphasizes that environmental health is an effort to prevent disease or health problems because of environmental risk factors to create healthy environmental quality in terms of physical, chemical, biological, and social aspects.
3. According to Government Regulation Number 82 Year 2001 regarding water quality management and water pollution control in article 20, it is stated that government and provincial government, district government with their respective authorities in the context of controlling water pollution at which water sources are authorized, one of which is to determine requirements for wastewater disposal or water sources.
4. The government of Surabaya places sanitation development as an important part of successful development. This is realized by the control and management of IPAL in Surabaya. It is regulated in the Regional Regulation No. 12 Year 2016 regarding water quality management and wastewater control.

In contrast, the government of Surabaya does not have Regional Regulation (Perda) that

specifically regulates domestic wastewater management. This is also the cause related to the unclear treatment and system of communal IPAL in the community at the lower level.

The existence of IPAL in Simokerto sub-district has not been given attention by the government of Surabaya even though this area has often won as a clean and green environment organized by the government of Surabaya, especially in term of funding, so that the chairman takes the initiative and it is approved by the residents for the fees, each house is charged Rp. 5.000.00 per month. The residents' dues are used for operational and maintenance costs for communal IPAL.

## 2. Normative Pillars

The normative pillar is the pillar that is applied according to the norms that live and are agreed upon by the community. That human behavior, as individuals and groups, is determined by the norms that exist in society.

In the life context of community, there is a strong desire from the leaders to create a clean environment in Granting Street 1<sup>st</sup> Block, Simokerto sub-district. The previous condition on this sub-district was a slum area with a lot of garbage scattered around and the littering so that it made an unpleasant smell. This is what makes the Head of neighborhood in Granting Street 1<sup>st</sup> Block, Simokerto sub-district create some changes. Initially, he organized his area at night. After seeing the clean and green changes, finally, the residents of Granting Street 1<sup>st</sup> Block want to make their environment cleaner and greener.

Because of the increase of public awareness concerning healthy living and greening, the Head of neighborhood in Granting Street 1<sup>st</sup> Block, Simokerto sub-district submitted a proposal to get CSR funding from PT Pembangkit Jawa Bali (PJB) and it was finally approved and given 300 plant seeds. Furthermore, it was also obtained assistance manufacture from Communal IPAL. The growing awareness of the community to protect the environment must start with good examples from the leaders in the community. The good examples and norms from the leader motivate the community to create a better and cleaner environment in Granting Street 1<sup>st</sup> Block, Simokerto sub-district.

The existence of norms in society is very important for the formation of good behavior, for example, the cooperation to clean the environment, and care for the cleanliness of the environment. This healthy lifestyle is reflected in all residents in the neighborhood in Granting Street 1<sup>st</sup> Block, Simokerto sub-district.

## 3. Cognitive Cultural Pillars

Cognitive cultural pillars focus on the cultural knowledge owned by the individual and society. This pillar comprehends that human interprets everything around them, including norms and regulation, however, humans do not immediately obey them.

The heterogeneity of the community in Granting Street 1<sup>st</sup> Block, Simokerto sub-district is a challenge for the leaders in the environment to create a clean and safe environment. People used to be afraid, especially at night when they entered Granting Street 1<sup>st</sup> Block, Simokerto sub-district because of the large number of thugs who often demanded money from the community. Finally, the leader had approached the thugs who were in Granting Street 1<sup>st</sup> Block area. As the result, the area becomes more friendly and conducive for the guests and other visitors.

The Head of neighbourhood conducted various socialization methods, such as hanging out or discussing with neighbors about the importance of cleanliness and environmental safety, and it gradually changes the behavior of the residents towards better behavior. This is indicated by the condition of the environment in Granting street 1<sup>st</sup> Block that is getting cleaner and tidy, as well as the increased security in the area. The spirit to be cleaner has made Granting Street 1<sup>st</sup> Block, Simokerto sub-district has received CSR assistance from PT Pembangkit Jawa Bali (PJB) in the form of procuring communal wastewater management installation (IPAL).

The socialization of hygiene knowledge and the existence of good examples from the leadership of the residents in Granting street 1<sup>st</sup> Block make some changes in the lifestyle towards a safe and clean environment. This area was a slum, dirty and unsafe place. Right now, it has become a clean and safe environment. Many residents from other cities have conducted a comparative study in Granting street 1<sup>st</sup> block. The area is visited by

representatives of 20 countries to visit this clean and comfortable place.

The strength of Granting village is currently starting to weaken. This is indicated by the lack of maintenance from communal IPAL and improper implementation of the organizational mechanism within the communal IPAL institution.

Based on the data taken from the observation and interview, it was found that the communal IPAL at Granting Street 1<sup>st</sup> Block had malfunctioning condition because the collection channel, grease trap, and pump was damaged so that the water doesn't flow smoothly. The drainage is clogged with garbage and dominated by leaves and plastic, so the influent is clogged and cannot flow to the inlet pipe. The grease trap cannot treat influent, because the grease trap and collection channel are clogged with garbage so that the outlet pipe cannot remove effluent. The pump is damaged, so it cannot lift the effluent to be channeled into the distribution line. Until now, the pump problem has not been fixed so that the effluent obstructs it.

The condition of communal IPAL components is not working properly because the maintenance activities are not conducted routinely, even though the formulation of policy has already existed. Environmental cadres have formulated the policies in the form of scheduled management mechanisms in written and unwritten rules of use. Operational and maintenance activities in the form of community counseling are carried out by the institution from the village in collaboration with the experts from the environment that need to be held to provide direction to the community about the right time to test the parameters, check components, clean components, repair components and replace components. Moreover, providing socialization of the important contributions that can be made by the residents, especially adult age, female gender, unemployment, and the domicile which will be used for communal IPAL financing

The malfunction of the water pump at the Communal IPAL is a sign that the organizational mechanism is not working properly. The organizational structure of the environmental movement committee in Granting Street 1<sup>st</sup> Block, Simokerto sub-district has been formed. However, the organizational structure is not working properly.

The following is the picture of the organizational structure of the environmental administrator in Granting Street 1<sup>st</sup> Block, Simokerto sub-district:

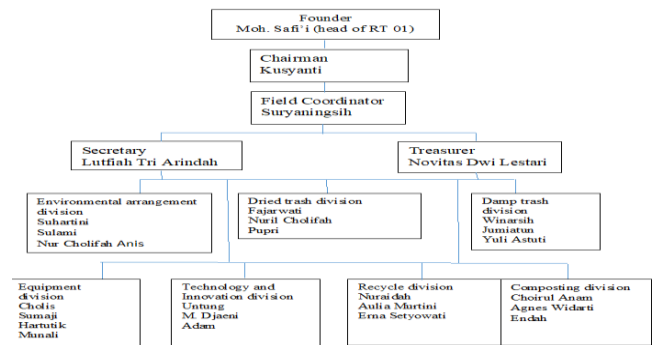


Figure 1. Environmental Activator Management Structure Granting Street 1<sup>st</sup> Block Simokerto Sub-District Surabaya

Source: The head of neighborhood in Granting Street 1<sup>st</sup> Block, 2020

Figure 1 above indicates the organizational structure in which the Head of neighborhood as the coach monitoring the chairman and Field Coordinator, Secretary and Treasurer. There are seven divisions in the environmental movement organization, namely the environmental management division, the dry disposal division, the damp disposal division, the equipment division, the innovation, and technology division, the recycling division, and the compost recycling division. From the organizational structure, a common thread can be seen that environmental organizations not only dealing with domestic waste but also solid waste. For this reason, a trash bank serving residents is available. However, the function is not working properly because there is no place to collect the trash. Piles of rubbish have been exchanged at the trash bank, causing the environment to become less clean and in poor condition.

Granting Street 1<sup>st</sup> Block, Simokerto sub-district also has an environmental cadre organization and its organizational structure:



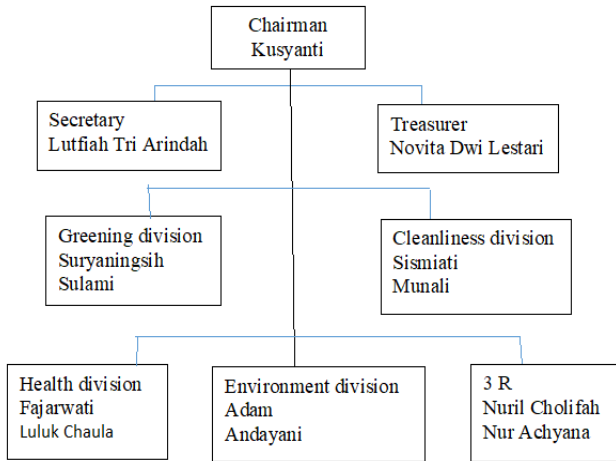


Figure 2. Environmental Cadre Management Structure Granting Street 1<sup>st</sup> Block, Simokerto sub-district

Source: The head of neighborhood in Granting Street 1<sup>st</sup> Block, 2020

Figure 2 indicates the environmental cadre structure under the control of the head of neighbourhood in Granting Street 1<sup>st</sup> Block, Simokerto sub-district. The organization is led by Kusyanti and assisted by a secretary and treasurer. There are five fields in this organization, namely greening, hygiene, health, and environment. It also has 3R (reduce, reuse and recycle).

The operational and maintenance procession of Communal IPAL in Granting Street 1<sup>st</sup> Block, Simokerto sub-district has ten activities, namely policy formulation, community education, the establishment of the institution, community fees, building financing, testing of influent and effluent parameters, checking components, cleaning components, repairing component, and tool replacement. Nine out of ten activities have been carried out, namely policy formulation, community counseling, building institution, building financing, testing influent and effluent parameters, checking components, cleaning components, repairing components, and replacing components. Meanwhile, the operation and maintenance are not carried out due to limited funds available.

The condition of management organization in communal IPAL is caused by the continuation of Communal IPAL. Whether the organization is working properly or not, it becomes the determinant for the operation of communal IPAL.

The fact that the water pump problem at communal IPAL has not been handled is an indicator of the ineffectiveness of communal IPAL as the organization in Granting Street 1<sup>st</sup> Block, Simokerto sub-district. Organizational regeneration can be one solution to the stagnation of IPAL as the communal institutional process.

### Supporting and inhibiting factors

Supporting factors for the sustainability of the communal IPAL in Granting Street 1<sup>st</sup> Block, Simokerto sub-district are:

1. The awareness of the residents in Granting street 1<sup>st</sup> Block, Simokerto Sub-district and the importance of living a healthy life make the surrounding environment to be clean and beautiful.
2. The habit of trash disposing of its place has become a habit for residents in Granting street 1<sup>st</sup> Block, from the children to adulthood, so that they become clean from scattered trash.
3. The cohesiveness of the residents in maintaining cleanliness and greening has made the area often reaches cleanliness champions organized by the government of Surabaya and becomes the successful program of communal IPAL.
4. The residents can save the use of clean water from PDAM by utilizing water treated by communal IPAL. It can be used to water the plants in the yards and wash their vehicles.
5. The fund for maintenance comes from the residents themselves or independently.

The inhibiting factors from the sustainability of communal IPAL institution in Granting Street 1<sup>st</sup> Block, Simokerto sub-district can be seen as follow:

1. The government of Surabaya does not have Regional Regulation (Perda) that specifically regulates domestic wastewater management. It is resulting in the unclear arrangement and the handling of communal IPAL in the community at the lower level.
2. Lack of attention from the government of Surabaya to the sustainability of the existing communal IPAL in terms of assistance and



funding. This causes stagnation management in communal IPAL.

3. The driving force for the environment only comes from one person, namely the head of neighbourhood in Granting Street 1<sup>st</sup> Block, Simokerto sub-district. As consequence, if the person stops the activity, all activities also stop, and no one continues.
4. The absence of regeneration at the communal IPAL institution in Granting Street 1<sup>st</sup> Block, Simokerto sub-district causes stagnation management.
5. The resident's contributions collected every month are not sufficient for the maintenance costs of communal IPAL so that the current pump damage cannot be repaired or purchased a new one.

## CONCLUSION AND RECOMMENDATION

### 1. Conclusion

Based on the result and discussion that have been stated above, it can be concluded that the institutional sustainability of communal IPAL in Granting Street 1<sup>st</sup> Block, Simokerto sub-district is currently experiencing stagnation. This is due to the lack of attention from the government of Surabaya to the sustainability of the existing communal IPAL and the absence of regeneration at communal IPAL institutions in Granting Street 1<sup>st</sup> Block, Simokerto sub-district.

### 2. Recommendation

Based on the above conclusion, the recommendation from this study is the government of Surabaya should pay attention to the sustainability of communal IPAL by providing assistance and funding for its maintenance and management. Regeneration at communal IPAL institution in Granting Street 1<sup>st</sup> Block, Simokerto sub-district, must be carried out for the younger

generation by involving youth organization in the management.

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