# Public Service Innovation for Eradication of Mosquito Nests Through the Movement Program for Eradicing the Flat with Fish (GERAJI) In the City of Surabaya

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#### Abstract

The eradication of mosquito larvae has used a new thing, namely with fish. This latest innovation has led to a movement called the Movement to Eradicate Mosquito larvae with Fish (GERAJI). Fish are considered natural predators in people's homes. Basically, many fish like to eat larvae, however, there are some that can be used to prey on larvae, namely Black Molly and Betta Fish. The aim of the GERAJI innovation program is to improve the Lontar Health Center's Performance Achievement, namely Larva Free Rate.Research on Public Service Innovations for the Eradication of Mosquito Nests Through the Program to Eradicate Larva With Fish (GERAJI) at Lontar Health Center, Surabaya City aims to describe, analyze, and find supporting and inhibiting factors in the Larva-Fish Movement Eradication Program (GERAJI). This study uses the measurement theory of public service innovation according to Suryani (2008), which contains four indicators, namely innovation characteristics, communication channels, change efforts, and social systems. This research uses a case study research method using a qualitative approach. This data collection technique is done by means of observation, interviews, and documentation.

Based on the results of the analysis, it shows that the innovation of the Larva-Fish Movement Programme (GERAJI) at Lontar Health Center, Surabaya City, can be said to be unsuitable. There are indicators of innovation charactheristics in the complexitu sub-indicator and sosial systems in the adaptation sub-indicator. This can be seen from GERAJI's innovation that is still difficult to run and some people still have not carried out innovations properly and have not actively participated. Judging from the people who are not used to giving fish in the bath, they are afraid that it will smell bad (fishy), and residents of boarding houses who are lazy to monitor fish in the bath.

Keywords: Public Service Innovation, Movement to Eradicate Larvae with Fish (GERAJI).

## INTRODUCTION

Law No. 25 of 2009 concerning Public Services must be based on the public interest, legal certainty, equal rights, balance of rights and obligations, professionalism, participation, equal treatment/non-discrimination, openness, accountability, facilities and special treatment for vulnerable groups, timeliness, and speed., convenience, and affordability. Local governments are obliged and responsible for the availability of health services for citizens and residents. Reforms in the health sector are implemented to improve health services and make them more efficient, effective, and accessible to all levels of society. As stated in the Decree of the Minister of Health of the Republic of Indonesia Number 951/Menkes/SK/VI/2000 that "The aim of health development is to increase awareness, willingness, and ability to live healthy for everyone in order to realize optimal public health degrees". Disclosure of information if it is associated with service activities will encourage people to be aware of their rights and obligations. The implementation of good public services depends on the condition of the bureaucracy in a country. Innovation is needed in the development of a public service. Innovation is present as a new product and its nature replaces the old way. This means that every public service in principle must contain a new innovation. (Prianto, 2006).

The importance of an innovation to realize quality services in the health sector is no exception in basic health services at Community Health Centers (Puskesmas). Puskesmas as the first level health service unit in the health care system, must carry out mandatory health efforts and various health options that are tailored to the conditions, needs, demands, capabilities and innovations as well as local regional policies. Puskesmas in carrying out comprehensive and integrated health efforts are carried out through efforts to improve, heal and

recover accompanied by the necessary supporting efforts. The availability of resources both in terms of quality and quantity greatly affects health services. (Permenkes RI, 2014). Health centers are often underestimated. The existence of the Puskesmas which has not fully contributed to the maximum in providing services to the community and the level of service of the Puskesmas to the community is still low, as a result the services provided by private medical clinics and hospitals are far more complete in providing facilities, besides that the image of Puskesams is still not good. in service quality. Services at the Puskesmas do not only provide services in the building but also provide public health services outside the building in terms of breaking the chain of transmission of diseases such as the case of Dengue Hemorrhagic Fever, where the bite of the Aides Aygepti mosquito is the main vector of the disease.

In accordance with the current community problems, researchers will focus on SME activities (Community Activities Efforts) especially outside buildings which are Government Mandatory or Essential Programs in the P2P (Disease Eradication and Control) field, namely the tropical infectious disease Dengue Hemorrhagic Fever (DHF). which is a serious health problem in some areas. According to the East Java Provincial Health Office, Dengue Hemorrhagic Fever (DHF) often causes extraordinary events that require continuous attention from health workers and the community itself. Dengue Hemorrhagic Fever (DHF) in the city of Surabaya shows that in the last 3 years the number of cases has experienced a stable number of cases of Dengue Hemorrhagic Fever (DHF). However, the data on people who died and the CFR still experienced a not so significant increase. The number of cases in 2017 (451 people), 2018 (321 people), and 2019 (277 people) experienced a steady decline. Meanwhile, people who died in 2017 (10 people), 2018 (1 person), and 2019 (3 people). Then, the CFR or case fatality rate in 2017 (1.8%), 2018 (0.3%), and 2020 (1.1%). So that the number of cases of Dengue Hemorrhagic Fever (DHF) in the city of Surabaya can still be said to have experienced a stable or significant decrease.

The second most public service innovation at the Surabaya City Health Center besides nutrition improvement is the type of Larva Free Rate (ABJ) service for the prevention of dengue fever, including Safari Bumantik, One House One Bumantik (SARU TUMAN), Bumantik Siaga and Responding (BUTIK SIAP), and Movement to Eradicating Larva with Fish (SAW). This innovation is very much needed because it can increase the larva free rate (ABJ) of the Puskesmas which will suppress the breeding of the Aides Aygepti mosquito which is the source of transmission of dengue fever cases. The low larva free rate in the performance of the Puskesmas is caused, among others, by the lack of public awareness about the cleanliness of the surrounding environment, the low level of public knowledge about Dengue Fever and its modes of transmission, the lack of counseling and support services from health workers, and the lack of routine and thoroughness of the Bumantik Cadres to carry out socialization and monitoring of larvae to the community. This innovation is indeed very beneficial for the community, so they can better understand the importance of being free of mosquito larvae and to reduce cases of Dengue Fever in the city of Surabaya.

The innovation of the Movement to eradicate larvae with fish (GERAJI) was chosen by the researchers as the object of research because when viewed from the innovation of public services at the Surabaya City Health Center, Lontar Health Center has an innovation that is different from other health centers because they are eradicating mosquito larvae using new things, namely fish. Before using fish, the community still used 3M and ABATE methods. 3M itself stands for drain, close, and bury. 3M has long been predicted as a powerful way to reduce the spread of dengue hemorrhagic fever (DHF). Meanwhile, ABATE is a non-systemic human disease vector control pesticide in the form of ready-to-use white granules to control mosquito larvae that cause dengue hemorrhagic fever (Aedes Aegypti). ABATE itself also contains chemicals. So, this method is considered less effective because there are still many people who are worried about ABATE which can interfere and be harmful to the body's organs. Eradication of mosquito larvae has changed over time. This latest innovation gave rise to a movement in the eradication of mosquito larvae called the Movement to eradicate mosquito larvae with fish (GERAJI) in which the innovation uses fish. Fish are considered natural predators in people's homes. Basically a lot of fish like to eat larvae but there are some that are very prominent in preying on larvae including 3 types of fish such as Guppi Fish, Black Molly Fish, and Betta Fish.

Surabaya City Lontar Health Center became one of the research locations because based on table 1.3 if we look at the percentage coverage of larva-free numbers at Surabaya City Health Center in 2019 it shows that Lontar Health Center Surabaya City with the GERAJI innovation program shows the lowest percentage of 93.90% compared to other health centers. Meanwhile, the Surabaya City Health Center determines the

percentage of 95%. The Lontar Health Center in its service has 10 service units in the building including registration counters, general medical centers, dental treatment centers, pharmacies, maternal and child health centers, laboratories, sanitation clinics, nutrition poly, psychology poly, TB and leprosy special poly. And there are out-of-building services such as the Elderly Posyandu, Toddler Posyandu, and Youth Posyandu. The existence of the GERAJI innovation that has gotten quite good results is proven even though it was only formed in April 2017 but has received a lot of support from across sectors and all levels of society. have not reached the target set. In contrast to before the innovation, which was lower never reached the percentage of 90%, namely in 2015 it was 88.70% and in 2016 it was 89.55 so it did not reach the set target of 95%. The formation of the GERAJI innovation due to the input of these ideas was also obtained from the monthly Puskesmas Mini Workshop meeting in February, and was determined by making a decree from the Head of the Lontar Health Center in April 2017 after socialization at the Village Community Deliberation and Trimonth Mini Workshop with Cross Sectors.

# RESEARCH METHOD

In accordance with the title of this study, "Public Service Innovation for the Eradication of Mosquito Nests through the Movement Program for the Eradication of Larvae With Fish (GERAJI) at the Lontar Health Center in Surabaya" the purpose of this study was to analyze the problem of eradicating mosquito nests with fish. Based on the formulation of the problem and research objectives, the authors use this type of research with an in-depth case study model with qualitative data processing. According to Sugiyono (2014:9), qualitative methods are used to obtain in-depth data, a data that contains meaning. The descriptive method in in-depth case studies according to Creswell (2007) states that case study research is determined based on the boundaries of the case, such as an individual, several individuals, a group, a program or activity. The type of this research is an in-depth case study (Intrinsic Case Study). Research is carried out on cases that have specificity and uniqueness and the research focus is on the case itself, both as the location of the program, events and activities more specifically, in-depth case study research is research that is very tied to the context or to the locus (site-case).

The data analysis technique used in this qualitative research is clear, namely by using qualitative analysis techniques, where by collecting data, observations, interviews and conclusions of the data taken. The model in data collection used in this study is the Miles and Huberman model. The data was analyzed using several steps according to the theory of Miles, Huberman and Saldana (2014), namely analyzing the data with three steps: data condensation (data condensation), presenting data (data display), and drawing conclusions or verification (conclusion drawing and verification). Data condensation refers to the process of selecting, focusing, simplifying, abstracting, and transforming data.

### RESULTS AND DISCUSSION

## Program for the Eradication of larvae with fish (GERAJI)

Efforts to prevent the transmission of dengue are to break the chain of transmission of dengue fever in the form of prevention of the bite of the Aedes aegypti mosquito. The optimal activity is eradicating mosquito nests (PSN) by 3M+, namely draining and closing water reservoirs and reusing used goods, besides that it can also be done with larvicides and fogging, periodic larva monitoring and using natural predators, namely larvae-eating fish. The Lontar Health Center in Surabaya City has a fairly wide working area of ± 10.35 Km<sup>2</sup>, 27 RW, 177 RT, 180 Bumantik cadres. Sambikerep sub-district, especially Lontar and Sambikerep sub-districts, has a condition where most of the settlements are inhabited by seasonal residents (kos-kosan), houses that are close together, open ditches, plots/vacant land. With the condition of the area, it is possible to become a source of transmission of Dengue Hemorrhagic Fever. It can be seen from the description of these conditions, it is necessary to prevent the transmission of DHF, namely with Periodic Lartic Checks every 1 week (4 times in 1 month) as well as the use of fish innovations such as betta fish, blackmolly fish, guppy fish as natural predators of mosquito larvae which involve cooperation. community, Bumantik cadres and RT or RW, Kelurahan and Subdistrict. Analysis and evaluation of the implementation of activities using fish innovations as natural predators of mosquito larvae are recorded in the evaluation and monitoring form of activities. The results of the use of fish innovations as natural predators of mosquito larvae are recorded by the program implementer and reported to the Head of the UPTD Puskesmas, Sambikerep District, and the Surabaya City Health Office.

Surabaya City Lontar Health Center has a public service innovation in eradicating mosquito larvae. This public service innovation is called the Movement to eradicate larvae with fish (GERAJI) program because using fish is considered to be able to eradicate mosquitoes naturally. Therefore, in this chapter, we will present and analyze the field findings related to the Movement to Fight Larva with Fish (GERAJI). The description in this section will describe Public Service Innovations for the Eradication of Mosquito Nests through the Movement Program for the Eradication of Larva with Fish (GERAJI) at the Lontar Health Center in Surabaya City as in the focus of the research, namely the characteristics of innovation, communication channels, change efforts and social systems. The term characteristic is taken from English, namely characteristic, which means that it contains distinctive characteristics. Broadly speaking, a characteristic is a characteristic that is inherent in a person or an object. This will sooner or later acceptance of innovation by the community is very dependent on the characteristics of the innovation itself. Innovation characteristics are characteristics that will determine a person's level of adoption of an innovation, which consists of five characteristics, namely Relative Advantage, Compatibility, Complexity, Trialability, and Observability. The following is an analysis and discussion to measure innovation from indicators of innovation characteristics, including:

## (1) Relative Advantage

Relative advantage, i.e. the degree to which an innovation is perceived as beneficial to its recipients. The level of profit or usefulness of an innovation can be measured based on its economic value, or perhaps from factors of social status (prestige), pleasure, satisfaction, or because it has a very important component. An innovation must have advantages and more value compared to previous innovations. Based on the results of the study, it can be concluded that the extent to which innovation is considered profitable for the recipients, namely the Lontar Health Center in Surabaya City has been using the conventional method, namely 3M (draining, closing, and burying) and the previous community still uses ABATE, especially in the lower middle class because their level of awareness is still low. not enough. Therefore, they came up with an idea or idea on innovation in the main vector for eradicating mosquito larvae using fish. The fish selected were betta fish and black molly fish. With the advantages of new ways to raise fish, it is considered safer than using ABATE so that they can participate and invite other residents to run the GERAJI innovation program.

## (2) Compatibility

Compatibility, namely the level of conformity with values, past experiences, and needs of the recipient. Conformity is the degree to which the innovation is perceived as consistent with the prevailing values, past experiences and needs of the adopter. For example, if a certain innovation or new idea is not in accordance with the prevailing values and norms, then the innovation cannot be adopted as easily as with compatible innovations. Based on the results of the study, it showed that for the level of conformity to the GRAJI innovation, it could indeed be considered successful, the Lontar Health Center in Surabaya City tried this innovation program, seen from the implementation in maintaining fish, the fact that it could prevent the factor of Dengue Fever. Because the type of fish selected is food to eradicate the mosquito larvae. For the innovation recipients, especially the Bumantik Cadre, the level of compatibility has been successful, starting from the expectations, needs, fish procurement, the economic level of the residents, and the energy and abilities of the Bumantik Cadres themselves.

## (3) Complexity

Complexity, namely the level of difficulty to understand and use the innovation for the recipient. Complexity is the degree to which an innovation is perceived as difficult to understand and use. There are certain innovations that are easily understood and used by adopters and some are otherwise or difficult for adopters to understand and use. The easier it is for adopters to understand and understand, the faster an innovation can be adopted. However, if an innovation is difficult to understand and difficult for adopters to understand, the more difficult it is for an innovation to be adopted. Based on the results of the study, it can be concluded that making the latest innovations will cause pros and cons because before it is socialized to the public the concept given for the GERAJI program must be clear. Furthermore, the initial implementation at the Lontar Health Center Surabaya City appointed Bumantik Cadres both agree and disagree and gave reasons why they agreed to support and why they did not support. Because, as a Bumantik Cadre who has

been appointed to hold meetings to discuss the program, it is necessary to filter out problems or complexities that will later result in rejection of GERAJI innovations. For example, the problem is that some residents are afraid to keep fish because the fish are put in the bath, while the bathtub in the water is used for bathing, if during worship the water will become unclean and so on.

## (4) Ability Tried

Trialability, which can be tried or not an innovation by the recipient. The ability to be tested or trialability is the degree to which an innovation can be tested within certain limits. An innovation that can be tested in real settings will generally be adopted more quickly. So, in order to be quickly adopted, an innovation should be able to demonstrate (demonstrate) its advantages. Innovation can only be accepted if it has been tested and proven to have more advantages or value compared to the old innovation.

## (5) Observability

Observability, which is easy to observe or not an innovation result by the recipient. Observability is the degree to which the results of an innovation can be seen by others. The easier it is for someone to see the results of an innovation, the more likely that person or group of people will adopt it. So, it can be concluded that the greater the relative advantage, compatibility, ability to be tested, and the ability to be observed and the smaller the complexity, the faster the possibility of the innovation can be adopted. An innovation must be observable in terms of how it works and produces something better. Based on the results of my interviews, it can be concluded that it is easy to observe whether or not an innovation result by recipients of the flagship program of the Surabaya City Lontar Health Center has received a lot of support and appreciation from various parties, starting from the cross-sectoral Surabaya City Health Office and especially the community. So that in the process of implementing the GERAJI program, progress has been made in achieving the performance of the health center in terms of mosquito larvae free. The existence of the GERAJI innovation has resulted in reduced mosquito larvae and has been proven to be free from Dengue Fever.

Based on the identification of the characteristics of innovation in the Movement for the Eradication of Mosquito Larvae With Fish (GERAJI) at the Lontar Health Center in Surabaya, it can be concluded that there are 4 sub-indicators that can be said to be successful, including: Relative Excellence, Suitability, Ability to be Tried, and Ability to Observe. Because the Surabaya City Lontar Health Center has an innovation that is different from other health centers, namely eradicating mosquito larvae using fish, with the GERAJI innovation it provides health benefits to reduce mosquito larvae in order to suppress cases of dengue fever. Where, fish procurement is currently carried out independently by the community. So that the achievement of the Puskesmas performance assessment in the Mosquito Larva Free Rate in 2020 is able to exceed the target of 95%. In addition, there are indicators that have not been successful, namely in the complexity sub-indicator. Some people still find it difficult to run the GERAJI innovation program. Some people also still have doubts because they are afraid that the bathtub will smell bad (fishy).

A channel is a boat that carries cargo (messages) from one port (source) to another (receiver). Communication can be understood as the process of delivering messages, ideas, or information to others by using certain means to influence or change the behavior of the recipient of the message. Communication channels are tools and means that facilitate the delivery of messages. Messages here can be in the form of speech symbols such as words, pictures, or actions. The following is an analysis and discussion to measure innovation from communication channel indicators, including:

#### Mass media

Media is the plural form of medium which means middle or intermediary. Mass comes from the English language, namely mass which means group or group. Mass media is a means of mass communication in which the process of delivering messages, ideas, or information to many people (the public) simultaneously. Mass media is a means of conveying messages that allow sources to reach an audience in large numbers, which can penetrate the boundaries of time and space. For example radio, television, movies, newspapers, books, and so on. Based on the results of the study, it can be seen from the flagship program of GERAJI innovation in providing socialization and counseling as a means or channel of communication in the mass media for delivering information to the public with the right target. The mass media used include electronic

media in the form of LED television, print media in the form of pamphlets, brochures, and others, as well as social media on Instagram, Facebook, Puskesmas Lontar, Surabaya City.

## **Interpersonal Network**

An interpersonal channel or network is a channel or network that involves face-to-face meetings (source and receiver) between two or more people. Not only that, interpersonal networks are communication carried out in an interpersonal relationship between two or more people, both verbally and nonverbally, with the aim of achieving the same meaning. Based on the identification in the Movement for the Eradication of Mosquito Larvae with Fish (GERAJI) at the Lontar Health Center in Surabaya, it can be concluded that the communication channel or network in this program is a tool or means that facilitates the process of delivering messages, ideas, or information about the innovation of the GERAJI program. It can be said that the program innovation is very well done because the implementation process provides information needs in the form of mass media consisting of electronic media, print media, and social media. Not only that, the Bumantik Cadre and Puskesmas staff will continue to provide socialization assistance and counseling about the innovation of the GERAJI program to the community and invite them to participate in the GERAJI innovation program.

## **Change Effort**

Change is a common thing in an organization. Change implies the transfer of the previous state to the next state. Change in the organization is the act of switching an organization from current conditions to future conditions in order to increase effectiveness. Change is always happening, whether we realize it or not. Change is a word that is often awaited but can also be feared at both an individual and organizational level. Various reasons can be revealed and used to justify the change. Positive thinking directs us that changes (big or small), will be made to improve certain processes, procedures, products, or expected outcomes. Based on the results of the interview, I can show that the flagship innovation program at the Surabaya City Lontar Health Center for this latest innovation can be seen in changes that always occur, whether we realize it or not. The change occurred in the use that previously used ABATE and 3M is now changing to use fish. Because fish are considered as predators of mosquito larvae. So that it will be seen clearly that it has provided a perceived change by producing health benefits, including being able to suppress cases of Dengue Fever, which has been a problem. This change was also experienced by the Puskesmas, Bumantik cadres and especially the community itself. Based on this identification in the innovation program of the Movement for the Eradication of Mosquito Larvae with Fish (GERAJI) at the Lontar Health Center in Surabaya, it can be concluded that previously to reduce mosquito larvae using 3M methods, namely (draining, burying, and closing) and giving ABATE. With the GERAJI innovation at the Lontar Health Center Surabaya, it is considered that the use of fish is much safer and can provide many benefits for each implementer, namely for the Puskesmas where the Performance Assessment of the Health Center for Larval Free Rates at the Lontar Health Center and to suppress cases of dengue fever. The concept of the process of achieving goals is an activity that has a purpose by using planning, directing, organizing, and controlling resources to achieve goals effectively and efficiently. Effective means that the goals can be achieved according to the plan. Efficient means that the existing tasks are carried out correctly, organized, and according to the specified schedule. The system must define and achieve its main objectives. That is, the system is required to narrow the individual's thinking in order to shape the individual's personality and achieve the goals of the system itself. Based on the results of the study, it can be seen from how the goal was achieved. At the beginning, the goal of this flagship innovation program was to achieve the performance target of the Lontar Health Center in Surabaya. Then, as the implementation process is carried out, the reality is that people's homes are freed from mosquito larvae and that becomes a bonus that has a beneficial impact on health in the community and can reduce cases of dengue fever. It is also in the value of the mosquito larvae free rate every year has increased which has been determined with a target of 95% can be exceeded.

Table 1. Identification of the Social System from the Innovation Program for the Eradication of Larva with Fish (GERAJI) at the Lontar Health Center Surabaya

No.	Social System	Conditions Before	Current Condition	Analysis Results
1.	Adaptation	The use of ABATE is still in doubt because it is made from chemicals. Meanwhile, the 3M method is the people who are still indifferent.	Since the GERAJI innovation, some people have participated in running the program and some people have not participated. Because people are not used to giving fish in the bath, and are afraid that later it will smell bad (fishy).	Adjustment to the innovation of GERAJI needs stages because some people have not been active in participating in running the program. According to the researcher, this is considered as no innovation.
2.	Goal Attainment	The initial goal with the innovation of the GERAJI program is to achieve the performance target of the Puskesmas.	The achievement of the goals of the GERAJI program innovation is considered a bonus and along with the implementation process it can provide health benefits and be free from cases of Dengue Fever. This can also increase the value for the Flicker Free Rate by a target of 95%.	The goal of the innovation at the Lontar Health Center in Surabaya has proven to be in accordance with the predetermined target of 95% and can even be exceeded. The community is also free from cases of dengue fever. According to the researcher, this is considered an innovation.
3.	Integration	Before the use of fish, ABATE and 3M were the previous methods that were still used by the community to eradicate mosquito larvae and suppress dengue fever.	The renewal or unification of the GERAJI innovation, namely the use of fish, requires an evaluation from the Head of the Puskesmas who also directly participates in monitoring the GERAJI innovation.	The relationship between one another in the innovation of the GERAJI program can be said to be integrated or overall coordination in the implementation process that has been carried out by the 3 RWs by participating while being quite good. Due to the implementation of the evaluation needs to be carried out as a whole. According to the researcher, this is considered an innovation.
4.	Latency	Pattern maintenance The system using ABATE and 3M is less successful because many people are still lazy and afraid because they are made of chemicals.	Since the GERAJI innovation, pattern maintenance using the fish method has increased the achievement of larva free rates, so that coordination between the Puskesmas, Bumantik cadres, and the community can run well and be responsive if there are obstacles in the field.	This pattern maintenance (Latency) has a system that must complete, maintain and update. Because it can be seen from the coordination between the Puskesmas, Bumantik Cadre, and the community that it is going well so that it can achieve an increase in the larva-free rate at the Lontar Health Center. According to the researcher, this is considered an innovation.

Source: Processed data, 2021

Based on the identification of the social system in the Movement for the Eradication of Mosquito Larvae with Fish (GERAJI) at the Lontar Health Center in Surabaya, it can be concluded that there are 3 sub-indicators that can be said to be successful, including: Goal Achievement, Integration, and Pattern Maintenance. Due to the achievement of the goal in the innovation of GERAJI Puskesmas Lontar Surabaya City to achieve the target of a predetermined larvae-free rate of 95%, integration and pattern maintenance between the Puskesmas, Bumantik Cadre, and the community in carrying out the program can run well. Meanwhile, there are sub-indicators that have not been successful, namely adaptation. Due to the adaptation of the community in GERAJI innovation, some are less active in participating and are not accustomed to adapting to environmental changes.

## **Supporting Factors and Inhibiting Factors of the GERAJI Program**

Communities who have participated in supporting the GERAJI innovation flagship program by the Lontar Health Center Surabaya City include: RW. 14 Lontar, RW. 01 Jelidro, and RW. 04 Sambikerep. Funds for fish procurement are self-supporting from the community itself because the prices are affordable, cheap, and easy to obtain.

The inhibiting factor in the GERAJI program has been traced because the community when invited to cooperate and coordinate with each other, many complain, complain, have no intention or complaint in carrying out the program, especially for immigrants from outside Surabaya. Not only that, some people are reluctant to keep fish for various reasons such as fear of being dirty, unclean, dead fish, and so on.

### **CONCLUSION**

Based on the results of the study, it can be concluded that Public Service Innovation for the Eradication of Mosquito Nests Through the Movement Program for the Eradication of Larva with Fish (GERAJI) at the Lontar Health Center in Surabaya City uses the innovation measurement from Suryani (2008) with 4 (four) indicators which show that the overall innovation of GERAJI has the goal of achieving performance appraisal in the Mosquito Larva Free Rate at the Lontar Health Center, Surabaya City. This program is run to eradicate mosquito larvae by using the media of living things in the form of fish. The fish used are betta fish, and black molly fish which are predators of mosquito larvae and their use is much safer. So this can reduce cases of dengue fever. Based on the results of the analysis described previously, there are several indicators that are not appropriate and are appropriate or successfully implemented in the GERAJI innovation program including:

First, indicators of innovation characteristics where there are sub-indicators that are appropriate and not appropriate. The indicators that are already appropriate are Relative Advantage, Suitability, Testability, and Observability. Meanwhile, what is not appropriate in the complexity sub-indicator is that the GERAJI innovation is still difficult for some people to carry out because, complaining, they are afraid that the bathtub will smell bad (fishy), and residents of boarding houses are lazy to monitor the fish in the bath. Furthermore, the sub-indicators of communication channels and change efforts can be said to be appropriate. Based on the research that has been explained previously that the communication channel as a tool or means that facilitates the process of delivering messages, or information about the innovation of the GERAJI program. In an effort to change from ABATE and then switch to the use of fish, it can be considered much safer and has the impact of changes in increasing the achievement of the performance assessment of the Puskesmas in the larva free rate, so as to reduce cases of dengue fever. The next sub-indicator is the social system. There are several sub-indicators that are appropriate and not appropriate. The appropriate subindicators are Goal Achievement, Integration, and Pattern Maintenance. Meanwhile, the sub-indicator that is not yet appropriate is Adaptation. Because, there are still some people who have not implemented GERAJI innovation well and have not been active in participating. Judging from the people who are not used to giving fish in the bath, and are afraid that later it will smell bad (fishy). It can be seen from the results of the analysis above that the conclusion of the Public Service Innovation for the Eradication of Mosquito Nests through the Movement Program for the Eradication of Larva with Fish (GERAJI) at the Lontar Health Center in Surabaya City can be said to be not appropriate.

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