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## **Foreword from Editor-in Chief**

Praise be to our gratitude to pray for the presence of Almighty God, for His permission we can publish a International Journal of Regional Innovation (IJORI) Volume 1 Number 2, May 2021.

Along with the increasing advancement of technology and science and human resources, the results of research and scientific refutations of innovation need to be published and can be accessed easily and quickly by readers.

This edition presents 5 (five) journals which include: (1) Agriculture Innovation Strategy to Support Food Security in Padang Pariaman District, West Sumatera Province, (2) The Differences of Urban Innovation Strategies Implementations in Bandung City, West Java and Malang City, East Java, (3) Analysis of Differences Innovation in Regional Development Planning (Case Studies in South Sulawesi and West Sumatera Provinces), (4) Strategy for Improving the Level of Community Health Through Rural Innovation Program (Case Studies in Center Bangka and Banyuwangi), (5) Innovation of Fisheries Cultivation in Pasuruan, East Java.

Our gratitude goes to the researchers and other functionalities who have participated in submitting papers for the continuity of this journal. We do not forget to thank peer-riview who have helped to make this journal published.

We look forward to suggestions and criticism for the improvement of future publications, and hopefully the ongoing cooperation can be improved.

Bandung, May 2021

Redaction

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## ABSTRACT PAGE

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Herman Yaározatulo Harefa (Research and Development Agency, Ministry of Home Affairs Republic Indonesia, Kramat Raya Street No. 132 Central Jakarta)

Agriculture Innovation Strategy to Support Food Security in Padang Pariaman District, West Sumatera Province

*INTERNATIONAL JOURNAL OF REGIONAL INNOVATION,*

*May 2021, vol 1, no 2, p.1-6, 0 ill, 0 tab, 12 ref*

Public service can be defined as providing services (serving) the needs of people or communities who have an interest in accordance with predetermined basic rules and procedures. Public services view the public as a service target so that they are expected to be able to provide the best dedication in serving a more selective and educative public, as well as managing public policies run by the public bureaucracy. In order to create this, an application of innovation is needed. Innovation is an application or an effort to bring new ideas into implementation with a fairly large change of steps, lasts quite a long time and is quite general in scale. Padang Pariaman Regency is one of the rice producers in West Sumatra Province. Not only that, Padang Pariaman also has agricultural potential such as food crops, plantations, and so on. The agricultural sector is a sector that is able to survive and is utilized by the government to overcome the global economic crisis. For this reason, in addition to making innovations related to health and administration, the West Sumatra Provincial Government is focusing on increasing public service innovation in agriculture. This study aims to identify innovations in the West Sumatra Provincial Government related to improving public services within the Government. This research uses descriptive quantitative method. As a result, the Padang Pariaman Regency Government can improve food security, improve agricultural market information services, farm business administration, and increase plantation yields, which can facilitate and improve the lives of

farmers. Suggestions for increasing public service innovation in the agricultural sector of Padang Pariaman Regency are expected that the Government can continue to evaluate the innovations that have been implemented.

(author)

Keywords : Padang Pariaman, public services, agriculture, public service innovation.

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Yusniah Anggraini (Regional Research and Development Planning Agency of Banten Province, Syech Nawawi Albantani Street No 1, Serang City, Banten)

The Differences of Urban Innovation Strategies Implementations in Bandung City, West Java and Malang City, East Java

*INTERNATIONAL JOURNAL OF REGIONAL INNOVATION,*  
*May 2021, vol 1, no 2, p.7-11, 0 ill, 0 tab, 12 ref*

Quality city infrastructure is currently the main requirement. Because the city is a place to live, currently connected globally but not connected locally, so that in order to become a livable city, the city must be able to provide a decent living for its citizens while maintaining environmental quality. One way to improve the quality of the city is to carry out urban innovations, one of which can be by focusing on parks and paying attention to the environment. The two cities studied in this study are Bandung City, West Java, and Malang City, East Java, by looking at government innovation on environmental sustainability in it. The goal is to identify differences in innovation in each city studied. The research was conducted using descriptive qualitative methods. The results show that if the city of Bandung provides more innovation in the form of building thematic parks to increase the capacity of green open space in the city of Bandung, the city of Malang provides more innovation in the form of technology to manage green open space and other urban spaces so that later it can be monitored by the entire city community and if you want to build buildings, can determine a location that does not interfere with managed spaces such as parks. This is

because Malang City has arguably enough RTH to support people's lives and the environment, so that the innovations carried out can be one step ahead of Bandung City. The hope for the future is that every city will always maintain the innovations that have been implemented and carry out real steps and also improve technology, resources, and so on.

(author)

Keywords : Government strategy; City inovations; environment; Bandung; Malang

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Lily Latul (Inspector General, Ministry of Home Affairs Republic Indonesia, Medan Merdeka Timur Street No.8, Central Jakarta)

Analysis of Differences Innovation in Regional Development Planning (Case Studies in South Sulawesi and West Sumatra Provinces)

INTERNATIONAL JOURNAL OF REGIONAL INNOVATION,  
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The existence of this technological development has become a medium used by a state administrator to improve welfare or services for its citizens. In need of an innovation that is used to capture this phenomenon. Local government innovation is very important in the process of implementing good and reliable governance (Good Govrnance). The implementation of regional development always begins with research and development activities, as well as assessment. Development planning is not only done on the table, without looking at the reality on the ground. The core problem of planning is in the planning process itself, which includes a series of procedures and involves many parties. The lengthy process and the many parties involved often make planning ineffective. Based on this, this study aims to analyze the differences in planning innovations carried out in two different regions, namely South Sulawesi and West Sumatra, to compare the innovations of the two regions. This study uses a qualitative descriptive approach. As a result, South Sulawesi and West Sumatra have different development innovations, in which South Sulawesi places more emphasis on improving website-based information systems which will become a reference for development planning, while West Sumatra emphasizes the assessment of construction services that will carry out development planning in the West Sumatra region. Suggestions in the future, each agency allocates a budget to increase the admin capacity of the SIPPD

manager and provide cost consequences as motivation.

(author)

Keywords : planning innovation; regional development; information Systems; performance assessment.

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Andini Putri Titasari (Research and Development Planning Agency of Tabalong Regency, Pandan Arum 3 Street No. 72 Tabalong Regency, South Kalimantan)

Strategy for Improving the Level of Community Health Through Rural Innovation Program (Case Studies in Center Bangka and Banyuwangi)

INTERNATIONAL JOURNAL OF REGIONAL INNOVATION,  
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The health sector is an important part and must be considered by the Government of Indonesia. The people who really need health are the people, both rural and urban. Public health is an indicator of the quality of human life which is strongly influenced by environmental conditions in an area. One sign of low environmental health is air pollution. Air pollution is defined as the presence of foreign materials or substances in the air which causes changes in the composition (composition) of the air from its normal state, which can cause several diseases such as respiratory diseases. Tuberculosis (TB) infection is a disease whose spread is influenced by environmental and behavioral factors. In addition, reduced levels of oxygen in the environment are also caused by air pollution. For that we need innovations that can improve environmental health so that people's welfare can increase. For this reason, a rural innovation program related to the health of rural communities, especially in the health of respiratory diseases, in this case is TB, was created, which can improve the quality of environmental health and also the welfare of the community. In addition, it also identifies the influence of innovative oxygen enhancement programs by planting trees in rural communities. This research was conducted to identify rural innovation programs related to rural public health, especially on respiratory disease health, and also to identify the effects of innovative oxygen enhancement programs by planting trees in rural environments. The method used in this research is descriptive qualitative method. As a result, there was an increase in the percentage of TB sufferers because of the Ketok Pintu Sekaput program. In addition, the Shodaqoh Oxygen program, which was carried out in villages in Banyuwangi Regency, succeeded in planting 7,444,764 trees in 2018. Suggestions for the future, it is better for the community to always practice clean and healthy living, and better prevent preventive and make tree

planting programs. at the RW level so that they can provide seeds according to the needs of each area.

(author)

Keywords : rural innovation, tuberculosis, public health, environmental health.

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Budi Sohibul Hayat and Adi Suhendra (Directorate General of Regional Administration Development, Ministry of Home Affairs Republic Indonesia and Research and Development Agency, Ministry of Home Affairs Republic Indonesia, Medan Merdeka Utara Street No.7, Central Jakarta and Kramat Raya Street No. 132, Central Jakarta)

Innovation of Fisheries Cultivation in Pasuruan, East Java

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The Indonesian government made a new policy which was stated in Government Regulation no. 38 of 2017 concerning regional innovation aims to improve the performance of local government administration. In order to achieve the objectives as intended, the target of regional innovation is directed at accelerating the realization of public welfare through improving public services, empowerment and community participation and increasing regional competitiveness. One of the regional innovations that has become a national priority is Maritime Affairs and Fisheries. This is also in line with one of the visions and missions of the President and Vice President, namely the Realization of a Prosperous Marine and Fisheries Community and Sustainable Marine and Fisheries Resources. So that the marine sector in the regions needs to be developed. One of the areas with marine and fisheries potential is Pasuruan Regency, East Java. The Pasuruan Regency Government, which knows the marine and fisheries potential of its area, needs to support this potential by making programs or innovations to accelerate the development of coastal areas. So this research was conducted to identify the effectiveness of programs or innovations carried out by the Pasuruan Regency government. The fishery innovation in Pasuruan Regency in the form of Mina has been regulated in a regional law, because it has a high potential for the welfare of its people. And from these sources, the Government has developed a number of mini

innovations, such as spawning concrete pond tilapia for mass production of superior tilapia, making new mina systems or technologies, even integrating fisheries with agriculture through mina rice cultivation. These innovations are expected to improve the welfare and economy of the people of Pasuruan Regency, East Java. This study used descriptive qualitative method. The results of this study found that Pasuruan Regency has high marine and fisheries potential. The innovations and programs carried out by the Pasuruan Regency Government provide a lot of advantages and results, where it can not only produce the fishery sector, but can also get results from rice plants grown using the mina method. Suggestions in the future, it is necessary to do further research to find out other factors beyond the factors that have been done in research on the adoption of fisheries business innovation in Pasuruan Regency.

(author)

Keywords : fisheries innovation; fishery potential; mina; Pasuruan Regency.

## ARTICLE

# Agriculture Innovation Strategy to Support Food Security in Padang Pariaman District, West Sumatera Province

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**Abstract:** Public service can be defined as providing services (serving) the needs of people or communities who have an interest in accordance with predetermined basic rules and procedures. Public services view the public as a service target so that they are expected to be able to provide the best dedication in serving a more selective and educative public, as well as managing public policies run by the public bureaucracy. In order to create this, an application of innovation is needed. Innovation is an application or an effort to bring new ideas into implementation with a fairly large change of steps, lasts quite a long time and is quite general in scale. Padang Pariaman Regency is one of the rice producers in West Sumatra Province. Not only that, Padang Pariaman also has agricultural potential such as food crops, plantations, and so on. The agricultural sector is a sector that is able to survive and is utilized by the government to overcome the global economic crisis. For this reason, in addition to making innovations related to health and administration, the West Sumatra Provincial Government is focusing on increasing public service innovation in agriculture. This study aims to identify innovations in the West Sumatra Provincial Government related to improving public services within the Government. This research uses descriptive quantitative method. As a result, the Padang Pariaman Regency Government can improve food security, improve agricultural market information services, farm business administration, and increase plantation yields, which can facilitate and improve the lives of farmers. Suggestions for increasing public service innovation in the agricultural sector of Padang Pariaman Regency are expected that the Government can continue to evaluate the innovations that have been implemented.

**Keywords:** Innovation, Public Service, Community Satisfaction

## 1. Preliminary

The quality of public services is the result of the interaction of various aspects, namely the service system, human resources, service providers, strategies and customers. The quality of public services provided by the ranks of the bureaucratic apparatus is influenced by various factors, such as the level of competence of the officials, the quality of the equipment used to process the type of service, bureaucratic culture and so on. A good public service system will result in good service quality (Sari, 2014). And service improvement can be described by the things that are obtained by service recipients through complementary services that increase, by adding added value (Pratama, 2013).

Public services view the public as a service target so that they are expected to be able to provide the best dedication in serving a more selective and educative public, as well as managing public policies carried out by the public bureaucracy, therefore public reform requires increased performance including public services, through various ways (innovating) with the objectives of effectiveness, efficiency and accountability.

In particular, innovation in public institutions is defined by Mirnasari (2013) as the application (effort to bring) new ideas in implementation, characterized by a change in steps that are quite large, last long enough and on a fairly general scale so that the implementation process has a large enough impact on organizational change. and organizational relations. Innovation in public services has a distinctive characteristic, namely its intangible nature because service and organizational innovation is not only based on products that cannot be seen but on changes in the relationship of the perpetrator, namely between service providers and service receivers (users), or the relationship between various parts within. organization or partner of an organization.

Padang Pariaman Regency is one of the rice producers in West Sumatra Province with 17 districts. Since the Government of the Republic of Indonesia through the Ministry of Agriculture launched the "Go to Organic 2010" program in order to accelerate the development of organic agriculture in Indonesia (Setyorini and Husnain, 2004 in Estuningtyas, 2014), the Regional Government of West Sumatra Province including Padang Pariaman Regency has made the Government's main program in the form of Organic agriculture, especially for lowland rice cultivation. This decision is a strategic step and is considered very accurate in connection with the damage to the environment as a result of contamination of artificial chemicals (Hasanah, 2017).

The agricultural sector is a sector that is able to survive and is utilized by the government to overcome the global economic crisis, because the agricultural sector is still and continues to be an important sector in national economic growth. Most of the Indonesian population (> 60%) live in rural areas and more than half depend on the agricultural sector. Meanwhile, the main contribution of the agricultural sector is the provision of raw materials, creating jobs, increasing community welfare and supporting the non-agricultural sector by providing raw materials for the processing industry (Daniel, 2004 cit Dwi, 2013)

The agricultural sector is used as the main program because the influence of globalization has made changes in behavior and general perceptions of farmers to become instant farmers who like everything that is fast and direct. So that many farmers are dependent on pesticides and chemical fertilizers, causing damage to the environment and disruption of the biological balance, which will leave very unpleasant conditions for future generations, therefore, from now on, natural farming without synthetic chemicals must be the main choice (Hasanah, 2017).

There are many public service innovation strategies implemented by the Padang Pariaman Government in the fields of Agriculture, Health, Administration, and so on. However, at this time, it will be discussed more deeply about public service innovations in agriculture in Padang Pariaman Regency. The Padang Pariaman government has made various efforts to improve innovation strategies for public services in agriculture, such as increasing food security, increasing agricultural market information services, to increasing plantation products. All of this is done to improve the welfare of the community and also to increase the comfort and economy of the community.

## 2. Research Methods

This research uses descriptive qualitative method with descriptive research type. Qualitative research methods are methods that aim to explain phenomena through deep data collection. The purpose of qualitative research is to seek and develop a theory. The essence of qualitative research is to identify the characteristics and structure of phenomena and events in their natural context (Joker, 2011).

Meanwhile, descriptive research (descriptive research) is for exploration and clarification of a phenomenon or social reality by describing a variable with respect to the problem and the unit under study (Faisal, 2005). So that the research method was chosen because it is relevant to journal writing and can make it easier to obtain objective data to understand the events under study.

The focus of this research is various forms of public service innovations in agriculture carried out in the District of Padang Pariangan, which will also see positive impacts and predictions of improving community conditions due to these innovations.

### 3. Results and Discussion

#### 3.1. Agricultural Market Information Services

Agriculture is currently experiencing an increase in innovation which requires farmers to also follow the current of the era. So that currently farmers are not only about producing agricultural products, but also utilizing existing technology to produce agricultural products and market them. The Pariaman District Government, reading about it, made an innovation to provide public services to the community, especially farmers, by making Agricultural Market Information Services (ANSIPP).

One of the efforts to increase farmers' access to markets and market information is the existence of Market Information Services. The role of PIP in supporting the very strategic marketing of agricultural commodities is to increase the bargaining power of farmers, provide input for the formulation of agricultural commodity marketing policies, increase the flow of trade between regions and provide input on agricultural business planning.

One of the successes of agricultural development is largely determined by the quality of policy formulation and marketing development planning, namely the availability of actual, accurate and continuous market information. This requires a professional market information service that can be used as an appropriate policy maker in accordance with market developments. However, because this market information can be accessed online, only farmers and certain market players can access the service, because there are still many farmers who do not understand information technology.

The objective of Agricultural Commodity Market Information Services is to create a Market Information Service System that is fast, precise, continuous and up to date and can be trusted so that information users can immediately benefit from it. Meanwhile, the benefit of this PIP is to facilitate policy makers in formulating agricultural commodity marketing policies.

Basically, Market Information Services are created due to a lack of market information, which results in price fluctuations and significant price differences between regions. The consequence of such a situation is the large business risk and decreased production enthusiasm of the farmers. The scarcity of market information also results in a decrease in the bargaining power of farmers (Zehrfeld, 1980).

To overcome this problem, the Directorate of Business Development and Processing of Food Crops, the Ministry of Agriculture held a Market Information

Service (PIP). This PIP is a technical cooperation project between the German and Indonesian governments, namely Agricultural Technical Assistance in 1985/1986 (ATA 85/86) within the Directorate General of Food Crops Agriculture. The objective of establishing the PIP is to establish a Market Information Services Results Agriculture nationally.

The result of the innovation by the Padang Pariaman Regency Government regarding ANSIPP is that there are several websites from the Ministry of Agriculture that can be accessed by information users. The information on the website is always updated because there are market information reports that must be sent daily to the Food Crops and Horticulture Office of West Sumatra Province which will later be included on the website. And people who need information related to agriculture can access it through:

1. <http://www.pertanian.go.id>
2. <http://aplikasi.pertanian.go.id/smshargaprov/>
3. <http://aplikasi.pertanian.go.id/smshargakab/>

#### 3.2. Innovation to Increase Padang Pariaman Government Food Reserves (CPP-Papa)

Food is one of the basic needs that is absolutely necessary for the community for a healthy and safe life besides clothing and shelter (Kholilulloh, 2013). Food security is a multidimensional and very complex issue, covering social, economic, political and environmental aspects. Political aspects are often the dominant factor in the decision-making process for determining food policy. Realizing sustainable food security has become a priority issue and agenda in various meetings held by various countries and international institutions (Suryana, 2014).

Food Security is a condition for the fulfillment of food for households as reflected by the availability of sufficient food, both in quantity and quality, safe, equitable and affordable.

The definition or definition of food security in the state version of the Republic of Indonesia has been formulated in the Food Law (Suryana, 2013). By referring to the various definitions that apply in Indonesia and in the international community, the drafters of the Food Law have formulated a limit on food security which summarizes the following important points: (1) the fulfillment of food needs for the state to the individual level; (2) benchmarks for the fulfillment of food needs include various aspects, namely: (a) in terms of quantity, the quantity is sufficient, (b) in terms of quality, good quality, safe for consumption, various types of food available, fulfilling

nutritional adequacy, (c) in terms of food safety spiritually, food must not conflict with the rules of religion, belief and culture of the community, and (d) in terms of economic affordability, food is evenly available throughout Indonesia at a price affordable to all components of society; and (3) the provision and affordability of food is intended so that people and individuals can live healthy, active and productive lives in a sustainable manner.

Padang Pariaman Regency, West Sumatra is an area in the highest earthquake zone in the coastal area of West Sumatra (BAPPEDA Padang Pariaman Regency, 2013). With frequent occurrences of problems such as crop failure, natural disasters and social disasters that have an impact on food production and availability. On the other hand, Padang Pariaman Regency, which is located on the coast of Sumatra and is a disaster area, requires food reserves as anticipation.

The purpose of this innovation is to deal with / anticipate food insecurity in emergencies, local specific food insecurity, as well as to anticipate and monitor regional food insecurity.

The result of this government innovation is the availability of food reserves, which are food supplies in the regions for human consumption, control of volatility / stability in food prices, and to deal with emergencies managed by the Regional Government.

### 3.3. Innovation of BPT Kelapa Dalam

Padang Pariaman Regency besides having potential in the food sector, also has potential in the plantation sector, one of which is coconut. The potential of deep coconut in Padang Pariaman Regency currently reaches 40,000 hectares. From this stretch there is a potential stand that can be used as a source of deep coconut seeds.

To be able to become a seed source garden (High Producing Block (BPT)) must refer to the Minister of Agriculture Regulation 322 / Kpts /KB.020/9/2015 regarding guidelines for Production, Certification, Distribution and Quality Control of Coconut Plants and Regulation of the Minister of Agriculture 50 / Kpts /KB.020/9/2015 concerning Guidelines for Production, Certification, Distribution and Supervision of Plantation Plant Seeds.

By assessing the potential and following the MOA's output, it can guarantee the quality of coconut seeds produced for the distribution of Padang Pariaman Regency itself and West Sumatra Province. The principle of sustainable agricultural development

is very much dependent on the quality of seeds. Moreover, the coconut plant commodity is a long-lived annual plant. Improved seed quality really become *pertimbangan* major. Therefore, to ensure the availability of coconut seeds, it is necessary to capture the potential of the region as a superior coconut seed producer.

In addition, by determining the source of the seed garden, it can grow providers and breeders of coconut *beih*. So that in the end it will increase the selling value and added value of the community and will lead to an increase in the economy of the community and the Padang Pariaman area.

The purpose and benefits of this innovation are to maximize the potential of deep coconut stands that have criteria and have the potential to become a coconut seed source garden (BPT), provide high quality and superior inner coconut seeds, increase the added value of coconut plants, improve the community economy and regional economy Padang Pariaman Regency.

The results of this innovation have been determined by the Director General of Plantation on behalf of the Minister of Agriculture for High Producing Block Gardens (BPT) and Selected Mother Trees (PIT) for Coconut Plants in Three Locations, that is 1). BPT and PIT owned by Agus Salim (Keltan Kapuah Jaya) 750 mother trees; 2). Ali Muzir 's BPT and PIT (Keltan Sikukur) 1200 mother trees; and 3). BPT and PIT owned by Keltan Harapan Jaya, 500 mother trees.

The results of this innovation have been determined by the Director General of Plantation on behalf of the Minister of Agriculture for High Producing Block Gardens (BPT) and Selected Mother Trees (PIT) for Coconut Plants in three locations, first, BPT and PIT owned by Agus Salim (Keltan Kapuah Jaya) 750 Trees Indu k. Second, Ali Muzir's (Keltan Sikukur) BPT and PIT 1200 mother trees. And the third BPT and PIT belong to Keltan Harapan Jaya, 500 mother trees.

### 3.4. Innovation KATA PAPA (Kartu Tani Padang Pariaman)

In addition to increasing innovations in the field of agricultural products, the Padang Pariaman Regency Government has also made administrative innovations that can help farmers' farming needs, namely by making farmer cards. The farming card is intended for the management of farmer subsidies.

The government's policy in managing subsidy spending is a more targeted and efficient policy. The current condition is not yet fully in line with the subsidy

target, there is potential for irregularities. the subsidy recipient database is not yet integrated, poetensi error occurred. For this reason, the management of fertilizer subsidies is focused through the process of refining and improving data that is aligned with the NIK and the fertilizer subsidy distribution mechanism through the Tani Card.

The aim of this innovation is to help farmers easily obtain fertilizers on time and at affordable prices, and also support increased production and farm income. As a result, a Farmer's Card was created that could be integrated with the e-RDKK, whose data could be updated via the web and accessible to the wider community. And not only making it, the government also socializes this Farmer Card so that farmers' knowledge about this innovation can be evenly distributed.

#### 4. Conclusion

In accordance with the findings of data in the field, it can be concluded that the Padang Pariaman Regency Government can be said to be very good at developing innovation in the area. The reason is that Padang Pariaman Regency has a lot of agricultural potential, both horticultural agriculture, plantations, and so on. In fact, not only innovation in increasing production yields, the Government has also made food security innovations for the welfare of the community and also provided a farming card that can make it easier for farmers to do farming.

In addition, serious efforts to achieve sustainable food security are urgently needed considering the threat of the global food crisis still exists and can suddenly become a reality. By building a resource-based food security and local knowledge, utilizing superior technology to increase food production and productivity in an efficient and competitive, and to build the robustness and resilience of the community response to face the threat of food crisis, Indonesia will be able to overcome the threat of a global food crisis or domestic.

This innovation has many benefits for the community, by taking into account previous agricultural conditions and patterns and maintaining local values that exist in the community. This innovation does not mean innovation in a low level of complexity because it is very possible to be tested and easy to observe. So that if later all innovations can be implemented and developed properly, it is hoped that they can benefit from before and after the implementation of these innovations.

Suggestions for increasing public service innovation in the agricultural sector of Padang Pariaman Regency are expected that the Government can continue to evaluate the innovations that have been implemented, and it is necessary to further introduce it to the community so that farmers' knowledge about this can be evenly distributed.

#### 5. Acknowledgments

The researchers would like to thank the informants and staff of the Padang Pariaman Regency Government, West Sumatra who have provided various kinds of information and data that support the making of this extraordinary research on the innovation strategy of public services in agriculture in Padang Pariaman Regency.

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## ARTICLE

# The Differences of Urban Innovation Strategies Implementations in Bandung City, West Java and Malang City, East Java

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**Abstract:** Quality city infrastructure is currently the main requirement. Because the city is a place to live, currently connected globally but not connected locally, so that in order to become a livable city, the city must be able to provide a decent living for its citizens while maintaining environmental quality. One way to improve the quality of the city is to carry out urban innovations, one of which can be by focusing on parks and paying attention to the environment. The two cities studied in this study are Bandung City, West Java, and Malang City, East Java, by looking at government innovation on environmental sustainability in it. The goal is to identify differences in innovation in each city studied. The research was conducted using descriptive qualitative methods. The results show that if the city of Bandung provides more innovation in the form of building thematic parks to increase the capacity of green open space in the city of Bandung, the city of Malang provides more innovation in the form of technology to manage green open space and other urban spaces so that later it can be monitored by the entire city community and if you want to build buildings, can determine a location that does not interfere with managed spaces such as parks. This is because Malang City has arguably enough RTH to support people's lives and the environment, so that the innovations carried out can be one step ahead of Bandung City. The hope for the future is that every city will always maintain the innovations that have been implemented and carry out real steps and also improve technology, resources, and so on.

**Keywords:** Goverment strategy, City inovations, environment, Bandung, Malang.

## 1. Preliminary

Indonesia is a large country that is very rich in resources, both natural and human resources, which can benefit the welfare of society. In an effort to make this happen, the Republic of Indonesia seeks to carry out a series of developments in the context of regional development and progress, one of which is at the city level.

Cities are places to live, work and play, so the availability of quality infrastructure is a major requirement. Cities are currently connected globally but are not connected locally, so that in order to become a livable city, the city must be able to provide a decent living for its citizens while maintaining environmental quality (Evans, 2002).

In order to improve the welfare and livelihoods of its people, innovations by the government are needed. Innovation is a relatively new term when measured from the history of human civilization. This term comes from the Latin *innovare* which means to change something into a new one. Innovation is a concept that continues to develop from time to time.

The present development of science and technology is an indication of the impact of innovation. Innovation has many impacts on organizational conditions and creativity where innovation originates, both programs and organizations, so that many companies create situations so that innovation in the organization can be created.

In the development of urban innovation, especially in big cities, it would be better if the innovation was carried out by paying attention to environmental aspects and the need for good urban planning in each region. According to Cadwallader in Sadyohutomo (2009), one form of government intervention in managing cities and regions to achieve a equitable balance of resource allocation is in the form of spatial and regional planning.

According to Zuhaidha (2014), environmental aspects must be considered because in large cities in Indonesia, common problems occur such as an increase in high population growth due to urbanization. This phenomenon causes the management of urban space to become increasingly heavy and the carrying capacity of the environment decreases, the problem of land conversion results in the low quality of the urban environment. In fact, low public awareness has also resulted in various problems in urban planning due to congestion on roads, city infrastructure burdens that exceed capacity, socio-economic problems, and so on. Therefore, the government must pay more attention to urban environmental innovation.

One of the urban innovations that can be done is to provide Green Open Space (RTH). Because the concept of an ideal city or livable city is a description of a comfortable city atmosphere where physical and non-physical aspects can support the social and economic activities of residents (Nugraha & Heston, 2017). Green open space is a form of open space that acts as a balance between the built area and the open area. Built areas such as settlements or buildings. Green open space has various roles, including being able to provide a quality environment for healthy air, space for comfortable living and social interactions as well as beautifying the aesthetics of the city environment.

The RTH can be in the form of a city park. The existence of a park in a large city will be an indicator of the city's environmental alignments and can be an assessment of the comfort level of a city because its existence can absorb negative elements arising from urban activities. Greening in the city environment can improve the quality of life because citizens can live

closely with nature and can understand the function of ecosystems (Frick & Mulyani, 2006).

Currently the role of city parks is not only to fulfill social, economic and environmental functions, but city parks can have other functions, namely as a place for recreation, socializing, meditation and even attractions for tourists (Razak, Othman, & Nazir, 2016). Furthermore, Dzhambov and Dimitrova (2014) explain that there is a positive relationship between the availability of green space in urban areas and the improvement of people's physical and mental health.

There are various kinds of gardens that can be used as an option for urban development innovations such as flower gardens, elderly gardens, thematic parks, vertical gardens, and so on. Certainly, cities in Indonesia build various types of parks that are adapted to the conditions of the region and its people. For this reason, this article will identify differences in urban innovations that focus on park development in three large cities located in different provinces, namely Bandung, West Java, Bontang, East Kalimantan, and Makassar, South Sulawesi.

## 2. Research Methods

This research uses descriptive qualitative method. This means that the authors use interviews, report notes, and observations to describe phenomena related to innovation. This is done to describe, record, analyze, and interpret conditions that are happening today. Qualitative research rests fundamentally on phenomenology. Phenomenology is used as the main theoretical basis (Moleong, 2010: 14). This research takes the locus of City Green Open Space Innovation with case studies in Bandung City, West Java and Malang City, East Java.

In selecting informants, researchers used a purposive sampling technique in which the selection of a sample of data sources was based on certain considerations, namely that the person is considered to know the most about what the researcher is asking so that it will be easier to find out the object under study. The types of data used are in the form of words and actions, written data sources, photos, and statistics.

The focus of this research is the type of innovation carried out in each city studied, how its implications are and the differences between the two cities. And also focusing on impact, a best practice must show a positive and tangible impact in improving the living conditions of people and their environment. Besides that, it also looks at its sustainability. Because good innovation is innovation that brings changes to the

basis of the area for the better for the survival of the community and also the surrounding environment.

### 3. Results and Discussion

#### 3.1. Bandung City Innovation Application

In accordance with the fighting motto of "Bandung Champion", the government of Bandung city wants to make Bandung a city that is superior, comfortable and prosperous. For the welfare of the city community, the Bandung City Government also aims to increase the happiness index of its citizens. The reason is that the progress of a region is not only measured by economic growth and per capita income, but currently there is a new theory used to measure the success of a region's development, which is based on the level of happiness of its citizens, which is known as the Index of Happiness. The Index of Happiness is an indicator used to measure people's welfare based on people's happiness level.

In connection with this, various programs were rolled out to increase the happiness index of Bandung residents, including the program to build city parks as public spaces. One of the characteristics that the residents of an area are happy with is when the members of the community are able to do outdoor activities comfortably and safely.

Malls and other entertainment places are no longer the main choice of residents as locations for carrying out their daily activities, but they would prefer to do these activities in public spaces. In order for a city park to become a public space that is safe, comfortable and beautiful for community use, the existence of a city park must have various functions. Apart from having an ecological function as a producer of oxygen, absorbing pollutants, absorbing water, a place to live for animals, etc., the city park must also be able to function as a place for socializing, sports and education or education as well as aesthetics.

The existence of parks in the city of Bandung is not yet present as public spaces that are representative, beautiful, comfortable and safe for the community to enjoy. The problem of garbage and park cleanliness, limited park facilities, security, vandalism and theft of park facilities, park occupation by street vendors, illegal junk traders, homeless people, crazy people, street children are problems that have yet to be resolved in managing parks in cities Bandung.

To overcome the problems mentioned above, a Thematic Park Development Program is made which is expected to be one of the solutions for managing green open space in the city of Bandung by involving various

stakeholders. Increasing the provision of quality and quantity of green open space in the city of Bandung is one of the priority agenda programs of the elected regional heads of Bandung City 2013-2018 in the field of structuring public infrastructure in the form of creative use of vacant lands through the development of thematic city parks. In the 2013–2018 Regional Medium-term Development Plan, the Government of Bandung City through the Housing and Settlement Areas, Land and Landscaping Service plans to build 17 thematic parks.

The purpose of the thematic park development program is to increase the quality and quantity provision of households in the city of Bandung in the field of structuring public infrastructure in the form of creative use of vacant lands, increasing the function of thematic parks apart from having an ecological function but also having a social function, aesthetics can also be used as a one of the tourist destinations in Bandung, creating a beautiful, comfortable and safe city park, and optimizing the city park management program as a public space by involving the active role of the community.

The results of the Government's Innovation for the development of this Thematic Park are very good. Because not only building thematic parks, but also forming a thematic park management team, supported by thematic park IT, making outreach on thematic park policies to the community, providing technical guidance on thematic parks, even creating complaint services and guidelines for developing and managing thematic park innovations in Bandung.

The provision of public facilities with collaboration is very helpful in meeting the target of providing thematic parks in the city of Bandung. In the 2014-2018 Bandung City RPJMD, it is targeted that as many as 21 thematic parks will be built ([Bandung City Government, 2014](#)).

#### 3.2. Application of Innovation in Malang City

Spatial planning is aimed at creating a safe, comfortable, productive, and sustainable space. To achieve these objectives, one of them is the implementation of spatial planning which includes spatial planning, spatial utilization and control of space utilization.

At the spatial planning stage, the intended spatial structure and spatial pattern are produced, while in the spatial use stage, program preparation, financing and implementation of development are carried out. This space utilization stage is the stage for realizing the

spatial structure and spatial patterns to be targeted. In this case, it is necessary to match the development programming with the planned spatial structure and pattern.

Malang City is the third best livable city in Indonesia. One indicator of the comfort level of a city is green open space in the form of parks. Based on the public perception in Malang City, the availability and distribution of parks have been fulfilled properly. The survey results regarding the Most Liveable City in Indonesia found that 41% of respondents stated that the amount of green open space for parks in Malang City was sufficient. The green open space of the park which functions as a social activity facility is stated to have been fulfilled 91% in quantity, and 57% in quality (Satria and Navitas, 2016).

Malang City has 10 active green open spaces in the form of parks. A number of these parks have been developed into thematic parks, including: Trunojoyo Park and Ronggowarsito Park with the theme Smart Garden; Merbabu Park with the theme of Family Park; and Merjosari Park with the theme of a Child Friendly City Park. In addition, there are 2 parks that are being developed as thematic parks, namely the Merdeka Square Park with the theme Dancing Fountain Park; and Taman Kenededes with the theme Garden of the Mask.

The existence of the existing Malang City Park must be maintained and guarded as well as possible. The development of green open space and the development of everything in Malang City must be considered so as not to reduce the benefits of the park which will affect the comfort of the surrounding community. For this reason, the government of Malang City formed an innovation in the form of Si-Petarung (Malang City Spatial Planning Information System). Spatial Planning Information System Development (SIPETARUNG) is the use of information technology that can optimize decision making in the context of spatial planning management.

Si-Petarung as a vehicle for information disclosure to the public about spatial planning in Malang City in supporting the implementation of e-government in Malang City Government. Spatial Planning Information System (SIPETARUNG) based on webGIS for decision making in spatial planning management with up-to-date spatial and non-spatial data, which has received recommendations from the Geospatial Information Agency.

SIPR is also an application that utilizes digital technology and allows a shift in the spatial monitoring

process from manual to digital / computational. With this application, it is very possible to create a systematic, accurate, precise, and understandable spatial arrangement from operational to managerial levels.

With Si-Petarung, city governance, especially parks, will not be disturbed if there is development. Because SI-PETARUNG provides Spatial Plan data that is open to the public and is intended to create information disclosure for the public. These data are available on the site of the Fighter which is RTR data that has become a legal product (PP, Perpres, Perda Provinsi, Perda Kabupaten / Kota) and is complete in accordance with applicable regulations and as it is.

#### 4. Conclusion

In this study, a comparison was made of government innovations that focus on urban spatial planning, especially parks or green open space in two cities, namely Bandung City, West Java and Malang City, East Java. The aim is to see the effect of urban growth on a given innovation. And the method used is descriptive qualitative method.

The two cities studied have different urban innovations. This is because the growth of the two cities is different. If the city of Bandung provides more innovation in the form of building thematic parks to increase the capacity of green open space in the city of Bandung, Malang City provides more innovation in the form of technology to manage green open space and other urban spaces so that later it can be monitored by all city people and if you want to build buildings, you can determine the location does not interfere with a managed space like a garden.

Recommendations for maintaining this innovation are to carry out real steps as the implementation of supporting strategies, this can be done by holding technology training, maintaining leadership commitment, collecting green open area data with interesting characteristics and potential, communicating with the community formally and informally, increasing the tourist attraction of green open space through the use of the media, implementing the mandate of laws and other regulations related to the environment and green open space, increasing the budget allocation for green open space development and so on.

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## ARTICLE

# Analysis of Differences Innovation in Regional Development Planning (Case Studies in South Sulawesi and West Sumatra Provinces)

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**Abstract:** The existence of this technological development has become a medium used by a state administrator to improve welfare or services for its citizens. In need of an innovation that is used to capture this phenomenon. Local government innovation is very important in the process of implementing good and reliable governance (Good Governance). The implementation of regional development always begins with research and development activities, as well as assessment. Development planning is not only done on the table, without looking at the reality on the ground. The core problem of planning is in the planning process itself, which includes a series of procedures and involves many parties. The lengthy process and the many parties involved often make planning ineffective. Based on this, this study aims to analyze the differences in planning innovations carried out in two different regions, namely South Sulawesi and West Sumatra, to compare the innovations of the two regions. This study uses a qualitative descriptive approach. As a result, South Sulawesi and West Sumatra have different development innovations, in which South Sulawesi places more emphasis on improving website-based information systems which will become a reference for development planning, while West Sumatra emphasizes the assessment of construction services that will carry out development planning in the West Sumatra region. Suggestions in the future, each agency allocates a budget to increase the admin capacity of the SIPP manager and provide cost consequences as motivation.

**Keywords:** Planning Innovation, Regional Development, Information Systems, Performance Assessment.

## 1. Preliminary

Increasing needs and increasingly complex lifestyles require a development that results in easy access to needs. The existence of this technological development has become a medium used by a state administrator to improve welfare or services for its citizens. In need of an innovation that is used to capture this phenomenon. In this case the government must be faced with a condition where it must have new ideas to be able to adapt to existing developments and phenomena (Nainggolan, 2019).

The implementation of regional development always begins with research and development activities. A study conducted by Kurniawansyah (2014), further confirms this. Development planning activities are basically research / research activities, because the implementation process will use a lot of research methods, ranging from data collection techniques, data analysis, to field / feasibility studies in order to obtain accurate data, whether done conceptually / documentation and experimental.

Development planning is not only done on the table, without looking at the reality in the field. This is in line with the results of Hidayat's (2017) study which revealed that regional development planning (PPD) will form 3 (three) main things, namely: a) community planning; b) concerning an area (area); and c) the resources that exist in it. In this study, development planning is defined as a detailed, sequential, structured, systematic, comprehensive, and scientific process to formulate a program / activity according to the right objectives for the sustainable development of an area within a certain period of time and is determined through a regulatory / policy framework. Operationally, regional development planning is the legitimacy of channeling community aspirations as well as establishing affirmative policies for the implementation of inclusive development in the regions. This is important in determining program / activity priorities, determining locus & focus, development planners and actors, implementation time, and allocating development budgets. This means that development planning must be guided by the direction of policies that are measured, planned, and carried out by stakeholders in a professional manner with a predetermined time benchmark. In this context, development planning also includes activities for supervision and evaluation of all aspects and stages of development as well as comprehensive risk management.

Faludi (1973) states that in planning theory there are two views that discuss good planning. First, the theory of rational planning which states that good planning is planning that is prepared based on data accuracy, observations (in-depth observation) and based on experience or evaluation results obtained from previous cases. Second, participatory / communicative planning theory which states that good planning is planning that involves the community in the planning process. In practice, both theories have been implemented by local governments in preparing development planning. Therefore, planning should produce significant and better development achievements from year to year.

Meanwhile, procedural theory (Theory of Planning) views planning as a process related to the capacity of the planner, the operationalization of procedures in planning and the institutions that are responsible for compiling and defining plans. Based on this understanding, when viewed from a procedural theory point of view, the core problem of planning is in the planning process itself, which includes a series of

procedures and involves many parties. The long process and the many parties involved often cause planning to be ineffective (Ginting, 2016).

Based on this, this study aims to analyze the differences in planning innovations carried out in two different regions, namely South Sulawesi and West Sumatra, to compare the innovations of the two regions.

## 2. Research Methods

This study uses a qualitative-descriptive approach. The data used are secondary data from various sources. The use of a qualitative systems thinking approach is used to understand the complexity of the system and to support the intuitive-dialogical thinking process (Ismiatun, 2015).

In this study, the focus of research is the innovation of the planning system created by the Provincial Government of South Sulawesi and the Provincial Government of West Sumatra.

## 3. Results and Discussion

### 3.1. Regional Development Planning Information System (SIPPD) in South Sulawesi Province

Regional development planning is a process of preparing the phases of activities that involve various elements of stakeholders in it, in order to utilize and allocate existing resources in order to improve social welfare in a regional environment for a certain period of time (Jamal, 2019).

Planning is nothing but a systematic arrangement (formulation) of steps (actions) that will be carried out in the future, based on careful consideration of potentials, external factors and interested parties in order to achieve a certain goal. Meanwhile, the planning process is a process carried out in order to achieve stability, so that every activity in it is a focal point to achieve a balance condition in the context of problem solving, future orientation and resource allocation (Abe, 2001).

One of the innovations made by the South Sulawesi provincial government was the creation of a Regional Development Planning Information System (SIPPD). The Regional Development Planning Information System (SIPPD) is a large system that supports the whole development planning process, starting from the planning, controlling, and evaluation processes. For this reason, the development and implementation process needs to be carried out in stages according to existing capabilities and conditions (Jamal, 2019).

The National Development Planning System based on Law Number 25 Year 2004 is a unitary development planning procedure to produce long-term, medium-term, and annual development plans which are implemented by state administrators and the community at the central and regional levels.

Regarding the planning process, regions are required to prepare a Regional Long-Term Development Plan (RPJPD) with a period of 20 (twenty) years. The RPJPD contains the vision, mission and direction of regional development. Furthermore, the long-term planning document is translated into the Regional Medium-Term Development Plan (RPJMD) with a period of 5 (five) years. The RPJMD contains regional financial policies, regional development strategies, general policies, SKPD and cross-SKPD programs, regional programs accompanied by work plans within an indicative regulatory framework and funding framework. Furthermore, the RPJMD is translated into a Regional Government Work Plan (RKPD) for each year which is then implemented into a technical document of the Regional Budget (APBD).

Law Number 25 Year 2004 also states that Planning is a process to determine appropriate future actions, through an order of choice, taking into account available resources, and stipulates that the Development Planning System has the objective of supporting coordination among development actors; guarantee the creation of integration, synchronization and synergy both between regions, between spaces, between time, between government functions and between the central and regional governments; Ensuring linkages and consistency between planning, budgeting, implementation & supervision; Optimizing community participation; and Ensuring the achievement of efficient, equitable & sustainable use of resources.

Therefore, it is crucial for the regions to be able to integrate and synergize the program & activity planning processes as well as the budget, starting from the process, MUSRENBANG, RKPD preparation, RENJA-SKPD drafting to KUA-PPAS, which simultaneously maintains consistency with priorities and targets. annual and 5-year performance that have been stipulated in the RPJMD. For this reason, the Regional Development Planning Agency of South Sulawesi Province presents an Innovation in Development Planning, namely the Application of the Regional Development Planning Information System (SIPPD).

The purpose of holding this innovative regional development planning information system in South

Sulawesi is to synchronize Programs and Activities in planning documents starting from the RPJMD, OPD Strategic Plan, RKPD, OPD Renja; Provide tools for regions (Provinces and districts / cities), especially BAPPEDA in preparing RPJMD, RKPD that are efficient and effective and ensure consistency of OPD in the preparation of Programs and Activities; Provide tools for districts / cities in compiling proposed activities on the MUSRENBANG menu, as well as directing the proposals to each OPD in accordance with their respective areas of authority; Provide tools for the preparation of RENJA-SKPD, RKPD and KUA-PPAS at BAPPEDA which are the accumulation of all existing RENJA-SKPD; Creating an effective, efficient and consistent planning system.

The key word above is consistency, consistency of absolute planning is applied, just imagine that if the Planning Document Compilation is compiled manually by paper or manually inputted every year, it is possible for OPD to create a new program which the program is not in the RPJMD, it is very fatal. It can be explained that the sub menus in this application are: 1). RPJMD SIM, containing the Vision, Mission, Goals and Targets, Target Indicators; Policy Direction; RPJMD program; OPD Strategic Plan (Programs and Activities); 2). RKPD SIM containing the Draft OPD Work Plan / RKPD Design; Musrenbang; Final Renja / Final RKPD; 3). KUA / PPAS (General Budget Policy / Temporary Budget Priorities); 4). MONEV SIM, which contains OPD Financial Realization; OPD Performance Evaluation in OPD Renja Documents; Evaluation of Local Government Performance on RKPD Documents.

The explanation why this investment is classified as creative and innovative is because Bappeda imports RPJMD data, vision, mission, objectives, targets and target indicators and primarily the RPJMD Program and Outcomes into the OPD RPJMD SIM defines (inputting) the program into activities and outputs into the OPD Strategic Plan.

Then, if there is an RKPD SIM, At the beginning of the planning year, the OPD Renstra Program and Outcome and Activities in year  $n + 1$  are automatically withdrawn from the OPD Renstra sub menu, so OPD does not need to re-enter because the Renstra Sub Menu and OPD Renja Sub Menu are already connected. The reports on the RKPD SIM are Chapter V RKPD (Program and Activity Indication) and Chapter III OPD Renja (Objectives, Targets, Programs and Activities)

Still on the RKPD SIM, there is a Musrenbang Sub Menu, on this menu the District / City Bappeda is given

access to be able to propose activity proposals to be implemented

in the area. The proposal is confronted with activities in accordance with the OPD Strategic Plan so it is not possible to add new activities if these activities are not urgent.

Furthermore, MONEV SIM, in this menu the Programs and Activities on the RKPDPD SIM are automatically drawn into SIMONEV, SIMONEV is to evaluate the achievements in the main planning documents Outcomes from Programs and Outputs from Activities as well as the physical and financial realization of OPD. This is important because Evaluation Planning and Control is an integral part, it can not be separated or partial.

From this explanation, it can be seen that SIPPDP has a unity in carrying out structured development planning, the mechanism starts from Upstream (RPJMD) to Downstream (Monitoring and Evaluation), this is what we think is very innovative and creative.

In terms of proposals, this SIPPDP is proposed by all planning stakeholders at the OPD, the Head of the Sub-Division of the Program and his staff expect an innovation in planning, the Subag Programs and their staff want that existing applications must be developed and made easier to run. For this reason, the Macro Planning and Development Financing Sector, BAPPEDA Prov. Sulsel redesigned SIMBANGDA which in our opinion is too partial and less user friendly. As a result, we had to work extra hard on how to translate the flow of upstream planning to downstream, from the RPJMD, OPD Renstra, RKPDPD, and PD Renja into one unit in the SIPPDP application.

The solution to the problem of SIPPDP is to make planning document preparation run on time and save time. Just imagine that the main planning document for the Program and Activities Chapter, which is usually done for months, can be saved in a matter of weeks.

Inaccuracy of time to complete the process in the application by the user which leads to inefficiency, filling in the application that seems convoluted, there is still inconsistency in existing document data that slows down data processing, lack of information regarding the application system presented which causes users to be somewhat confused in the process input and appearance or features that seem still conventional.

The SIPPDP application can be accessed on the url [sippd.sulselprov.go.id](http://sippd.sulselprov.go.id). The results of this application are: 1. Consistency from the RPJMD Program to the OPD Strategic Plan, the OPD Strategic Plan to the OPD Renja and Monitoring and Evaluation; 2. Web-based

application, easy to understand application use; 3. Consistency of program targets and outcomes as well as targets and outputs of activities, this is important in order to ensure that the Governor's Vision and Mission is accurately spelled out by OPDs; 4. Time efficiency in preparing Planning Documents; 5. Support the implementation of e-government.

Development planning that already uses this system needs to be maintained and sustainable so that every stage of development planning can be carried out properly, the use of a connected and integrated SIPPDP greatly facilitates planning apparatus and the BAPPEDA in preparing various development planning documents, if possible, it is necessary to develop a system in accordance with the needs and regulations so that planners can carry out their duties properly, maintain consistency between documents and comply with regulations and can overcome various obstacles they face (Jamal, 2019).

### **3.2. Innovation with Performance Assessment of Construction Planning and Development Service Providers in West Sumatra Province)**

Planning and design is an initial stage that has a very big and significant impact on the success of a project, because most of the strategy and project financing decisions depend on project planning. Planning consultants have a role in decision making and as a translator of the owner's needs and direction for executor. The ideas and ideas of the owner are contained in a planning document consisting of specifications and drawings to be implemented by the contractor. The performance of planning consultants can be measured from several factors in terms of document preparation, time, cost and terms of reference (Wala, 2013).

A number of the most influential criteria are adjusted to Law No. 18 of 1999 concerning Construction Services (Article 1 paragraph 4) and Presidential Regulation No. 54 of 2010 concerning Guidelines for the Implementation of Government Goods and Services Procurement (Article 1 paragraphs 16 and 17). Performance is one of the most important factors that can cause the failure of a construction project. This is because performance is assumed as the fuel needed to run an engine. The failure of a project could be the result of a planner's poor performance in communication and coordination. Neglect of performance can be the cause of errors in construction projects. The complexity of the project and the number

of parties involved in it require an effective performance between parties.

Thus, performance appraisal is very important in realizing development in accordance with objectives. Performance appraisal is an assessment of the implementation of work carried out by construction service providers, both in quality and quantity based on certain criteria or indicators (Regent Regulation Kulon Progo, 2014).

The function of performance appraisal for construction service providers is to increase understanding and awareness of the obligation to fulfill an orderly construction implementation, improve the quality of construction work results, and increase the competence of construction service actors

The results of the performance appraisal of the construction service providers are used by the Construction Services Development Team as material in the construction services. And it can also be a reference for SKPD in the procurement of goods / services carried out by direct procurement or direct appointment.

The construction services sector is the main sector in implementing the national development agenda. Construction services as one of the fields in construction facilities, should be legally regulated and protected in order for a situation to occur

that is objective and conducive to implementation. One of the legal references governing construction services is Law no. 2 of 2017 concerning Construction Services. Construction Services are construction work planning consulting services, construction work implementation services, and construction work supervision consulting services. The parties in a construction work consist of service users and service providers. Service users and service providers can be individuals or business entities, both in the form of legal entities and non-legal entities.

The Department of Water Resources Management of West Sumatra Province is one of the technical agencies as service users in the construction service sector. Meanwhile, the service provider is the winner of the auction / selection / direct appointment based on the results of the evaluation carried out by the Procurement Service Unit (ULP) of the Regional Secretariat of West Sumatra Province.

Good construction is very dependent on the performance of the organizer, especially from service providers. To find out the performance of service providers, it is necessary to evaluate their performance. This is the reason why the West Sumatra Province

PSDA Office conducts performance appraisals of Service Providers, especially those who carry out activities at the West Sumatra Province PSDA Office.

The main objective of the service provider performance appraisal is to determine the performance of each service provider on construction work that works at the PSDA Office of West Sumatra Province. So the specific objectives are 1. To assess the performance of the personnel provided by construction work service providers working in the field; 2. Assess the performance of the equipment provided by the construction work service provider in the field; 3. Assessing the timeliness of the construction work service provider in completing the work; 4. Assess the performance of the personnel provided by the supervisory service provider who oversees the work in the field; 5. Assess the performance of the equipment provided by the supervisory service provider in the field; 6. Assess the availability of key personnel as stated in the contract documents for supervision work.

The benefit is that the performance value of service providers is expected to be a guideline for the West Sumatra Provincial Government to find out the professionalism of Service Providers in West Sumatra Province in general and the PSDA Office of West Sumatra Province and in the future it is expected to be one of the references in determining the auction / selection winner in the next construction activity. .

Environmental performance assessment has 2 main aspects, namely project performance appraisal and performance rating against benchmarks. In other words, the assessment tools provide a framework for gathering data on the actual performance of the project on the overall number of indicators selected and the rating tools use that data to provide ratings that can be used to compare it against internal benchmarks and targets (Newman et al, 2014). And the result of the assessment innovation is the availability of performance documents from each construction work service provider within the West Sumatra Province PSDA Office.

#### 4. Conclusion

Based on the results of the research and discussion that has been stated, it can be concluded that the two areas studied, namely South Sulawesi and West Sumatra, have different development innovations, where South Sulawesi places more emphasis on improving website-based information systems which will become a reference for development planning, while West Sumatra emphasizes on the assessment of

construction services that will carry out development planning in the West Sumatra region. These two things are certainly very important because they can help add information and facilitate future development planning.

Suggestions that could be improved further are that it is important for each agency to allocate a budget to increase the capacity of the SIPPD administrators as well as provide cost consequences as motivation in carrying out their work.

## 5. Acknowledgments

Researchers would like to thank the informants and also the Provincial Governments of South Sulawesi and West Sumatra who have provided various kinds of information and data to support the creation of this extraordinary research on the differences in planning innovation in South Sulawesi and West Sumatra Provinces.

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## ARTICLE

# Strategy for Improving the Level of Community Health Through Rural Innovation Program (Case Studies in Center Bangka and Banyuwangi)

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**Abstract:** The health sector is an important part and must be considered by the Government of Indonesia. The people who really need health are the people, both rural and urban. Public health is an indicator of the quality of human life which is strongly influenced by environmental conditions in an area. One sign of low environmental health is air pollution. Air pollution is defined as the presence of foreign materials or substances in the air which causes changes in the composition (composition) of the air from its normal state, which can cause several diseases such as respiratory diseases. Tuberculosis (TB) infection is a disease whose spread is influenced by environmental and behavioral factors. In addition, reduced levels of oxygen in the environment are also caused by air pollution. For that we need innovations that can improve environmental health so that people's welfare can increase. For this reason, a rural innovation program related to the health of rural communities, especially in the health of respiratory diseases, in this case is TB, was created, which can improve the quality of environmental health and also the welfare of the community. In addition, it also identifies the influence of innovative oxygen enhancement programs by planting trees in rural communities. This research was conducted to identify rural innovation programs related to rural public health, especially on respiratory disease health, and also to identify the effects of innovative oxygen enhancement programs by planting trees in rural environments. The method used in this research is descriptive qualitative method. As a result, there was an increase in the percentage of TB sufferers because of the Ketok Pintu Sekaput program. In addition, the Shodaqoh Oxygen program, which was carried out in villages in Banyuwangi Regency, succeeded in planting 7,444,764 trees in 2018. Suggestions for the future, it is better for the community to always practice clean and healthy living, and better prevent preventive and make tree planting programs. at the RW level so that they can provide seeds according to the needs of each area.

**Keywords:** Rural Innovation, Tuberculosis, Public Health, Environmental Health.

## 1. Preliminary

Health is a need of every human being. Therefore, health is very important, this is in accordance with the objectives of development, namely the welfare of the community as an object of development and development. This welfare includes health, because today the medical costs for the sick are very large, so that health becomes an expensive item (Aditianata, 2012). Health is one of the important things that must be considered by central and local governments. Health development as a whole creates a healthy, independent, and just society based on the 1945 Constitution article 28 H paragraph 1 which states that health is a human right and an investment for the success of national development (Aningsih et.al., 2017)

The people who really need health are the people, both rural and urban. Winslow defines public health as the science and art of preventing disease, extending life span and improving health and efficiency through community organizing and empowering efforts. Public health is an indicator of the quality of human life which is strongly influenced by environmental conditions in an area. The progress of a nation is not only measured in terms of military strength, good economic growth, or cities with luxurious buildings but will be measured from the welfare of society in terms of human qualities (Leavel & Clark, 1958).

There is a theory from Blum (1974), which states that the degree of health is determined by 40% environmental factors, 30% behavioral factors, 20% health care factors, and 10% genetic factors (heredity). So in this case, environmental factors are the factors with the highest degree that affect public health, so that environmental health must always be maintained.

Environmental health is one of the dominant factors affecting the activities and level of public health (Syukra, et al., 2015). One sign of low environmental health is air pollution. Air pollution is defined as the presence of foreign materials or substances in the air which causes changes in the composition (composition) of the air from its normal state. The existence of air pollutants is produced by natural processes and human activities, where the contribution due to human activity can come from immovable pollutants such as industry or mobile such as motorized vehicles (BBTKL and PPM, 2009).

Air pollutants that can cause irritation to the respiratory tract are NO<sub>2</sub>, SO<sub>2</sub>, formaldehyde, ozone, and dust particles. These pollutants are irritating to the respiratory tract which can cause lung function disorders. SO<sub>2</sub> gas can cause an irritating effect on the upper respiratory tract because it dissolves easily in water which results in increased mucus production resulting in constriction of the respiratory tract. NO<sub>2</sub> gas is irritant and radical. NO<sub>2</sub> gas is one of the main gases in chemical reactions in the atmosphere because it can produce ozone in the troposphere after reacting with UV UV light (Mukono, 2008).

Air pollution as a sign of declining environmental health can cause several respiratory diseases. Not only that, clean and healthy living habits should continue to be applied by every community. Clean and Healthy Living (PHBS) is good too. To implement PHBS in daily life, contributions from all family members are needed, to increase public awareness about clean and healthy living so that they play an active role in the field of

public health (Raksanagara & Raksanagara, 2015). However, there are still many Indonesians who do not apply PHBS in their daily lives, so that it can increase the risk of disease, one of which is respiratory disorders (Zhafirah, 2020).

Tuberculosis (TB) infection is a disease whose spread is influenced by environmental and behavioral factors (Muslimah, 2019). Tuberculosis is a contagious disease that can develop rapidly due to airborne transmission. TB screening is very necessary considering that TB patients with a positive BTA TB examination have a great potential to become a source of transmission to other people around them (Girsang, 2013). For this reason, the current research will identify rural innovation programs related to rural community health, especially in respiratory disease health, in this case TB, which can improve the quality of environmental health and community welfare. In addition, it also identifies the influence of innovative oxygen enhancement programs by planting trees in rural communities.

## 2. Research Methods

This study uses a qualitative descriptive method, because it aims to describe, explain, analyze the health conditions of rural communities. According to Winartha (2006), a qualitative descriptive analysis method is to analyze, describe, and summarize various conditions, situations, from various data collected in the form of interviews or observations about the problems under study that occur in the field. This research method is often used to examine the conditions of natural objects, namely objects that develop as they are, are not manipulated, and the presence of researchers does not affect the dynamics of these objects.

## 3. Results and Discussion

### 3.1. SEKAPUT Program (Our Attack Main Integrated Program)

Tuberculosis (TB) is one of the infectious respiratory diseases with high cases. TB disease has caused 2,000 deaths per day, where 40% of TB cases worldwide occur in Southeast Asia. Indonesia is a developing country in Southeast Asia which is classified as a high burden country related to pulmonary TB. Indonesia is ranked fifth as a country that contributes to pulmonary TB disease after India, China, South Africa, and Nigeria, namely India (2.0 million), China (1.3 million), South Africa (530 thousand), Nigeria (460 thousand), and Indonesia (460 thousand). In 2013, Indonesia experienced an increase in the number of TB cases,

which was ranked as the third highest TB prevalence in the world, namely (680 thousand) cases after India (2.6 million) cases and China (1.3 million) cases, where most TB cases occur at the age above 15 years (Girsang, 2013).

Tuberculosis can be transmitted through the cough of a TB sufferer. When the patient coughs and sneezes, it will excrete and spread the mycobacterium tuberculosis bacteria through the air in the form of sputum sparks (droplets). If the patient experiences coughs and sneezes in a closed room, it will facilitate the TB transmission process. Where once coughing or sneezing will produce approximately 3000 splashes, efforts to reduce this risk can be done with air flow or ventilation according to standards, this is because the mycobacterium tuberculosis bacteria will die when exposed to sunlight (MOH, 2009).

The discovery of bacteriological confirmed pulmonary TB cases in Indonesia is still below the national target (at least 70%) and tends to decline from 62% in 2011 to 57.1% in 2015. Meanwhile, Prov. Kep. Babel itself, the bacteriological confirmed pulmonary TB discovery rate in 2015 was 60.8%, Central Bangka district was only 40.5% and Sungaiselan puskesmas 60.1% or still below the national target, this diagnosis does not give priority to finding infectious patients in Indonesia (Indonesian Ministry of Health, 2015).

According to data from the 2015 Ministry of Health's Ministry of Health's P2PL Team, "At the 67th WHO session of 2014 a resolution was set on the post-2015 global TB control strategy which aims to stop the global TB epidemic by 2035" which is marked with 1). Decrease in mortality due to TB by 95% from 2015 figures; 2). Decreased TB incidence rate by 90% (10 / 100,000 population)

The strategy that is implemented and developed nationally covers 3 categories, namely 1) Integration of patient- centered TB services refer to universal access and unlimited services and prevention efforts, 2) Clear and clear policies and support systems, and 3) Intensification research and innovation. At point one, there is only a collaborative TB / HIV program, there is no integration with programs at puskesmas that are more preventive and promotive, such as environmental health programs, health promotion programs, and nutrition / immunization programs. (Team of Director General P2PL of the Ministry of Health RI, 2014)

In the Regulation of the Minister of Health of the Republic of Indonesia Number 38 of 2016 concerning Guidelines for Implementing a Healthy Indonesia Program with a Family Approach, in supporting the

successful achievement of health development goals according to the 2015-2019 Renstra the Ministry of Health has set operational policies, among others, namely 1). Health development in the 2015-2019 period will be focused on four priority areas, namely a). Decrease in Maternal and Infant Mortality Rates; b). Improvement of nutrition, especially toddlers control short; c). Controlling infectious diseases, especially HIV-AIDS, Tuberculosis (TB) and malaria; d). Control of Non-Communicable Diseases, especially hypertension, diabetes mellitus, obesity, and cancer (especially cervical and breast cancer) as well as mental health; 2). Increasing the reach of targets, especially in families without neglecting other approaches; 3). Planning and budgeting priorities are directed at meeting the needs for promotional and preventive activities; 4). Human Resources are the main capital in development.

From the above regulations, it is clear that overcoming the problem of pulmonary TB is a matter of priority in the future because of the large cost impact both economically because about 75% of TB patients are at the most economically productive age (15-50 years) and also the negative impact on social stigma. even being excluded from society so that it will add to the burden on the state. The following shows the data on the achievements of the TB Program in Central Bangka Regency in 2015.

**Table 1.** TB Program Achievement Data in Central Bangka Regency in 2015

NO	NAME OF HEALT FACILITY	BTA (+)	CDR
1	Puskesmas Koba	8	12,70 %
2	Puskesmas Pangkalan Baru	8	27,90 %
3	Puskesmas Benteng	18	104. 30 %
4	Puskesmas Simpang Katis	13	31,10 %
5	Puskesmas Sungaiselan	20	60, 10%
6	Puskesmas Namang	18	68,70 %
7	Puskesmas Lubuk Besar	8	18,90 %
8	Puskesmas Lampur	2	8,50 %
9	RSUD Koba	17	0,00 %
Total Kabupaten Bateng		112	40,50 %

Source: Wasor TB Central Bangka 2015

From the data above we can see that the achievements of the TB Control Program in Central Bangka Regency have only reached 40.50% even though the achievements at the Sungaiselan Community Health Center have reached above, namely 60.10% but are still below the national standard of at least 70%. a reference for making a breakthrough in order to achieve it in quality and quantity.

The achievements of the TB control program at the Sungaiselan Community Health Center are still below the standard so far because of 1). Recently, it was oriented towards the screening of pulmonary TB suspects who came for treatment at the general Poli, Pediatric Poli, Emergency Unit and Inpatient Unit (limited to Individual Health Business Services/UKP); 2). Lack of direct socialization to the community; Health cadres; schools; Village government officials as well as in the Puskesmas itself with less varied media; 3). Home visits that do not involve cross programs such as the Promkes/Kesling/Nutrition/Health Center immunization programs. In fact, these cross-programs play a big role in preventing the transmission and morbidity of pulmonary tuberculosis which can accelerate the TB elimination program; 4). Less reaching areas that are far from the Puskesmas such as the Nangka Island hamlet, Tanjung Pura village and Pangkal Raya hamlet whose access has many limitations and sometimes still depends on the weather / tides so it requires a little extra determination to get through such as a ferry to Nangka Island which is far from safety standards because there are no buoys and sometimes people who ride along also increase the risk due to cargo overload.

Based on the data obtained throughout the 2016 period by implementing the Sekaput Door Knockout Program, the data obtained from the TB Control Program in Central Bangka Regency are as follows:

Table 2. . TB Program Achievement Data in Central Bangka Regency in 2015 and 2016

NO	NAME OF HEALTH FACILITY	IN 2015 BTA (+)	CDR	IN 2016 BTA (+)
1	Puskesmas Koba	8	12.70 %	11
2	Puskesmas Pangkalan Baru	8	27,90 %	5
3	Puskesmas Benteng	18	104.30 %	13
4	Puskesmas Simpang Katis	13	31,10 %	10
5	Puskesmas Sungaiselan	20	60,10%	23
6	Puskesmas Namang	18	68,70 %	19
7	Puskesmas Lubuk Besar	8	18,90 %	15
8	Puskesmas Lampur	2	8,50 %	7
9	RSUD Koba	17	0,00 %	14
Total Kabupaten Bateng		112	40,50 %	117

Source: Wasor TB Kab. Central Bangka 2016

The table above shows the comparison of the achievements of the pulmonary TB control program at all government health facilities between 2015 and

2016. It was found that in 2015 the total achievements of the TB control program in Kab. Central Bangka was 40.50% with the highest achievement at the Benteng health center health center reaching 104.30% and the lowest was at the Koba hospital health facility, namely 0.0%. Meanwhile in 2016 there was an increase in the total achievements of the TB Control Program in Kab. Central Bangka that is to be 43.90%. With the highest achievement was at the Puskesmas Sungaiselan health facility and the lowest was at the Koba Hospital, namely 0.0%.

The following shows a graph of the achievements of the TB program at government health facilities in Central Bangka Regency against the minimum standard of achievement of the national TB program set by the Ministry of Health of the Republic of Indonesia in 2016. For the Sungaiselan Puskesmas itself in the table of achievements of the TB Control Program in the District. Central Bangka, it was seen that there was an increase in the achievements of the TB Control Program at the Sungaiselan Health Center from 60.10% in 2015 to 80.80% in 2016. This made the Sungaiselan Health Center the health facility with the highest achievement in the District. Central Bangka and has exceeded the national target (at least 70%). The following is a graph of the improvement in the achievements of the TB control program at the Sungaiselan Community Health Center from 2015 to 2016.

The increase that occurred in the achievements of the TB Control Program at the Sungaiselan Community Health Center in 2016 was due to this due to the implementation of the Ketok Pintu Sekaput program which was carried out by means of 1). Home visits for TB BTA + contact patients involving cross-program of Health Promotion / Kesling / Nutrition / Immunization to improve the quality of public health; 2). Integrated Penjangkaran in PTM Posbindu activities, Posyan du Seniors, Posyandu Toddlers; 3). Home visits of patients with TB symptoms as a result of reports from external networks such as private doctor practices, posyandu cadres / TB cadres, communities, village government without overriding reports from internal networks at Puskesmas. 4). Covering all the working areas of the Puskesmas Sungaiselan including remote areas such as Pangkal Raya hamlet, Tanj ung Pura village and Nangka Island hamlet; 5). Carry out BTA fixation in a location far from the Puskesmas to maintain the quality of laboratory checks; 6). Providing personal and general counseling, including during the Village Community Meeting.

Thus it can be interpreted that the Sungaiselan Health Center Sekaput Door Program has a positive influence in increasing the achievement of the TB Program at the Sungaiselan Health Center, Central Bangka Regency in 2016.

### 3.2. Shodaqoh Oxygen Innovation Program

The increasing number of building construction and the increasing number of vehicles, will automatically affect the increase in air temperature in the area. This can also cause air pollution and green open spaces to be increasingly pushed. One of the negative impacts of environmental pollution experienced by humans on earth is global warming and climate change. To reduce the effects of global warming and climate change is to increase the number of trees through planting activities. Therefore, efforts are needed from various parties to protect and preserve the earth as a form of concern for the environment (Ihsantika, 2013). One of the steps taken to increase a sense of concern for the environment is by planting tree seedlings, where the tree planting program carried out in Banyuwangi is called Shodaqoh Oxygen.

The meaning of Shodaqoh Oxygen is the awareness of every person or body to do good deeds and concern for the availability of oxygen in the form of tree planting movements. Banyuwangi Regency is a district that is located at the easternmost tip on the island of Java which consists of 189 villages and 28 sub-districts spread over 25 districts which have an area of 5,782.50 Km<sup>2</sup> which includes forests, rice fields, plantations, moor, yards and settlements and other facilities. The potential is very supportive, so it is not surprising that most of the population is still growing from the land they own, including the cultivation of timber plants.

On the other hand it is necessary to know that population growth is always increasing every year followed by an increase in the rate of construction of permanent and semi-permanent housing and infrastructure for households and other industries made of wood so that the demand for wood in the community is very significant and the impact is that many timber plants are cut down as well as the price. The more expensive, the barren land will appear and cause global warming which triggers climate change which can increase the risk of floods, landslides, drought and others.

Planting trees has benefits for the survival of various living things. The rapid development has caused many trees to be cut down. By de mikian

geothermal increases and the supply of air in the soil on the wane (Wattimena, 2019). Oleh therefore with Shodaqoh Oxygen is an appropriate measure to deal with the impact of changes in climate by planting trees in order to preservation of the environment in which every living creature on earth, both humans, animals and plants need oxygen to breathe for survival and reduce greenhouse gas emissions.

The purpose is to maintain and guarantee the availability of oxygen, while the benefits are for the continuity of life on earth, whether humans, animals or plants. As a result, with the presence of shodaqoh oxygen in Banyuwangi district, the number of trees planted from 2013 to October 2018 was 7,444,764 trees.

### 4. Conclusion

From this research it can be concluded that public health is largely influenced by environmental health. Due to decreased environmental health, it indicates that there is air pollution in the environment, which can cause diseases in the community, such as tuberculosis. These bad consequences can be reduced by innovation programs carried out in the smallest areas, namely rural areas.

The SEKAPUT program carried out by rural communities in Central Bangka has proven to be able to reduce tuberculosis sufferers and increase the percentage of TB sufferers cured. The increase that occurred in the achievement of the TB Control Program at the Sungaiselan Community Health Center in 2016 was due to this due to the implementation of the Ketok Pintu Sekaput program.

In addition, the innovation program carried out by rural communities in Banyuwangi can improve the quality of environmental health. Because with the oxygen shodaqoh program which is carried out starting from the countryside by planting trees, it can increase the number of trees planted which has reached 7,444,764 trees. This is very good because these trees can contribute oxygen and make the environment fresher and healthier.

The advice that can be given is that the community should always adopt a clean and healthy life, and always protect the surrounding environment. It is better if you experience a contagious disease, both respiratory and other diseases, take preventive prevention and take care not to infect others. And it is also better if the planting of various types of trees is implemented by many local or village governments, which can also be used as community programs at the

RW level so that each region can formulate seed needs so that new business opportunities emerge to provide seeds that are managed by the community independently.

## 5. Acknowledgments

Researchers would like to thank the informants as well as the District Governments of Central Bangka and Banyuwangi who have provided various kinds of information and data to support the creation of this extraordinary research on health innovation strategies in this rural area.

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## ARTICLE

# Innovation Of Fisheries Cultivation In Pasuruan, East Java

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**Abstract:** The Indonesian government made a new policy which was stated in Government Regulation no. 38 of 2017 concerning regional innovation aims to improve the performance of local government administration. In order to achieve the objectives as intended, the target of regional innovation is directed at accelerating the realization of public welfare through improving public services, empowerment and community participation and increasing regional competitiveness. One of the regional innovations that has become a national priority is Maritime Affairs and Fisheries. This is also in line with one of the visions and missions of the President and Vice President, namely the Realization of a Prosperous Marine and Fisheries Community and Sustainable Marine and Fisheries Resources. So that the marine sector in the regions needs to be developed. One of the areas with marine and fisheries potential is Pasuruan Regency, East Java. The Pasuruan Regency Government, which knows the marine and fisheries potential of its area, needs to support this potential by making programs or innovations to accelerate the development of coastal areas. So this research was conducted to identify the effectiveness of programs or innovations carried out by the Pasuruan Regency government. The fishery innovation in Pasuruan Regency in the form of Mina has been regulated in a regional law, because it has a high potential for the welfare of its people. And from these sources, the Government has developed a number of mini innovations, such as spawning concrete pond tilapia for mass production of superior tilapia, making new mina systems or technologies, even integrating fisheries with agriculture through mina rice cultivation. These innovations are expected to improve the welfare and economy of the people of Pasuruan Regency, East Java. This study used descriptive qualitative method. The results of this study found that Pasuruan Regency has high marine and fisheries potential. The innovations and programs carried out by the Pasuruan Regency Government provide a lot of advantages and results, where it can not only produce the fishery sector, but can also get results from rice plants grown using the mina method. Suggestions in the future, it is necessary to do further research to find out other factors beyond the factors that have been done in research on the adoption of fisheries business innovation in Pasuruan Regency.

**Keywords:** Fisheries Innovation; Fishery Potential; Mina; Pasuruan Regency.

## 1. Preliminary

The Indonesian government has the task of structuring the organization of various elements related to regional government as a manifestation of regional autonomy, which is inevitable in changing the old centralistic paradigm towards a more decentralized direction, which is stipulated in Law Number 23 of 2014. ([Government of the Republic of Indonesia, 2014](#)). Especially since the existence of Government Regulation No. 38 of 2017 concerning Regional Innovation.

According to Government Regulation no. 38 of 2017, regional innovation aims to improve the performance of local government administration. In order to achieve the objectives as intended, the target of regional innovation is directed at accelerating the realization of public welfare through improving public services, empowerment and community participation and increasing regional competitiveness. Further explained in regional development, the form of regional innovation includes innovation in regional governance, public service innovation and / or other regional innovations in accordance with government affairs that fall under regional authority ([Government Regulation Number 38 of 2017](#)).

With the existence of government regulations on regional innovation, local governments will seek to strengthen public services for the public interest. One of them is by increasing regional innovation. Innovation useful for society especially in the making of social innovation. In that context, this study seeks to describe the various intervention efforts undertaken by local governments in realizing community welfare through regional innovation.

According to Tan ([2019](#)), regional innovation policies in governance have 5 national priority programs. One of them is connecting large infrastructure with people's production areas: Small Industrial Zones, Special Economic Zones, Tourism Areas, Rice Fields, Plantation Areas and fishery ponds.

This is also in line with the vision of the President and Vice President regarding Maritime Affairs and Fisheries, namely the Realization of a Prosperous Marine and Fisheries Community and Sustainable Marine and Fisheries Resources to create a Sovereign, Independent, and Personality Advanced Indonesia, based on mutual cooperation. And also has a mission to improve the quality of society through increasing the competitiveness of human resources and developing innovation as well as marine and fisheries research, to achieving a sustainable environment through increasing the sustainability of marine and fisheries resources ([Head of Planning Bureau, 2020](#)).

So it can be said that the maritime and fisheries sector is very much needed in economic growth to improve the welfare of the fishery community, including fish product processors and their families ([Kurniawan, 2014](#)).

One area that has marine and fisheries resources and potential is Pasuruan Regency. The potential of marine fisheries and coastal areas of Pasuruan Regency in the form of beaches along approximately

48 km with the condition of the coast is generally dry and muddy and overgrown by mangroves. The area of exploitation for fishing in the sea reaches 112.5 square nautical miles with a sustainable potential in the Madura Strait of 49.51 thousand tons of fish per year ([Kurniawan, 2014](#)). This condition, which tends to have a high profit value, has not been utilized by the Pasuruan City Government ([Dahuri, 2001](#)).

Currently, the fish product processing units in the coastal area of Pasuruan City include the salting / drying Fish Processing Unit, UPI Pemindangan, UPI smoking / roasting, UPI Fermentation, and other processing UPIs. The condition of fishery processing businesses has experienced a productivity decline for various reasons, including the marketing of processed products is still on a local scale without the development of an increase in consumers and the absence of a special location that supports the development of small industrial centers for processing capture fisheries products ([Business Actors, 2016 in Rini, 2017](#)). The business condition of processed products in Pasuruan City has not been able to develop optimally due to the scale of production on a home industry scale and is scattered in villages on the coast of Pasuruan City.

The Pasuruan Regency Government, which knows the regional marine and fisheries potential, needs to support this potential by making programs or innovations to accelerate the development of coastal areas. One of the innovations that has been published in the Minister of Marine Affairs and Fisheries Regulation Number 12 of 2010 concerning Minapolitan. Efforts to implement the minapolitan concept integrated with marine and fisheries industrialization activities with the Blue Economy approach in the context of sustainable resource management are one of the basic strategies to overcome problems and business efficiency and low income for coastal communities ([Rini, 2017](#)).

The implementation of this concept was developed by the Pasuruan Regency Government through several innovations such as spawning of concrete pond tilapia for mass production of superior tilapia, making new mina systems or technologies, and even integration between fisheries and agriculture through mina rice cultivation. The various innovations that have been produced are intended as a contribution of the Government in providing public services for the welfare of people's lives.

## 2. Research Methods

To obtain the data, researchers shortly NOTICE qualitative approach. The qualitative approach is an approach that provides the opportunity for researchers to do a sharp description of the subject, and gain depth of information and a wealth of interpretation (Rubin, Allen; Babbie 2011).

Research with a qualitative approach is intended to describe the case studies in the area of fisheries potential Pasuruan approach d e skriptif through the process of collecting, presenting and summarizing the various characters istik of data and draw him.

## 3. Results and Discussion

### 3.1. Mina Katon - Tilapia Spawning in Concrete Ponds UPT Fisheries Service Center for Fish Seed Arrangement of Pasuruan Regency

Tilapia (*Oreochromis niloticus*) is a type of freshwater fish that is very popular in Indonesia. This is indicated by the production of tilapia from 2010 to 2013 which has increased quite significantly with an average increase of 34.85%. Seeds are a major factor in cultivation activities. The production of Pasuruan tilapia seeds is sought after by fish farmers because of its good quality. The poor quality is due to the rapid spread of tilapia, which is supported by the speed of reproduction, causing the development of these fish to be uncontrolled. The negative impact is inbreeding which causes decreased phenotypes such as growth, survival and an increase in the number of abnormal individuals (Department of Marine Affairs and Fisheries, East Java Province 2008 in Tjahyani, 2014).

However, the high demand for tilapia seeds cannot be matched by the amount of seed production. This has prompted the Technical Implementation Unit (UPT) of the Fisheries Office, Fish Seed Center (BBI) Arrangement of Pasuruan Regency to make a technological breakthrough by implementing the Tilapia hatchery system with the concrete pond system "MINA KATON" which began in 2013. This effort has produced significant results with the increase in tilapia seed production in 2015 and 2016. Through MINA KATON technology, the Regional Original Income (PAD) of Pasuruan Regency in the tilapia seed sales sector increased between 2015 and 2016.

The utilization of MINA KATON technology has been duplicated and adopted by the People Hatchery Unit (UPR) in Pasuruan Regency. With this MINA KATON technology, tilapia seed production has increased sharply and there are more and more fish cultivators whose seed needs are fulfilled. Such

situation will further strengthen our brand as the center seed Pasuruan indigo excel in Pro v insi East Java.

The purpose of using this Mina Katon technology is to provide benefits for BBI, namely bringing up a new technology to produce tilapia seeds, improving service to consumers on the availability of seeds, being able to change the mindset (mindset) of farmers about tilapia hatchery methods, increasing the number of production from the year 2014, which was 1,312,150 head, in 2016, the production of tilapia seeds was 5,753,000, resulting in a production jump of around 338% within 2 (two) years of applying the MINA KATON method.

Mina katon technology is also beneficial for UPR and its cultivators, because it is able to make optimal use of the land, increase income and production of tilapia seeds, labor and cost efficiency, guarantee the quality of seeds, and fulfill the need for scatter seeds for enlargement cultivation. Apart from that, it is also beneficial for the regions because of the strengthening of the Pasuruan Tilapia brand as a center for quality tilapia seeds in local and regional markets, increasing Regional Original Revenue (PAD) which comes from selling fish seeds.

The UPTD BBI Tata previously conducted trials of spawning tilapia in a concrete pool measuring 3 X 6 since 2013, then continued in 2014 as many as 18 pool units measuring 4x8m. From there, the production of tilapia seeds began to increase until finally building a spawning pond of 22 units of 4x8 concrete ponds. Her productivity increases up to 60%. For example, one female parent can produce 666 larvae from the previous only 416 larvae, and other advantages. The advantage in question is the extraordinary productivity increase of up to 60%. For example, one female parent can produce 666 larvae from only 416 larvae, and other advantages (Emil, 2018).

The result of this innovation is that with the application of this Mina Katon technology, several things can be learned, such as: 1). the creation of a new hatchery system in the spawning of tilapia that is more efficient and optimal in the process of seed production; 2). Necessary to establish a seed production superior to involve the UPR which has a high commitment resulted in improved seed and the seed of Pasuruan increase of in terms of quality and quantity; 3). UPT BBI needs to carry out main development activities and provide superior broodstock that can be accessed by UPR so that the quality of the seeds produced is maintained; 4). It takes good cooperation between the District Fisheries Office. Pasuruan, UPT BBI

Arrangement, Fishery Extension and farmers so that this technology can be used thoroughly, especially in the district area. Pasuruan; 5). Tilapia and UPR cultivators receive good and quality service; 6). The stronger the Pasuruan brand as the center for superior tilapia seeds; 7). Increase public trust and participation in fisheries development; 8). For the fish cultivator community, it can improve their welfare because business activities can run effectively and efficiently; 9). Increasingly open seed markets, both at local and national levels, which can provide opportunities for the hatchery of the people to develop their business; 10). With the success of this tilapia hatchery, hatcheries in UPR will be proposed to carry out Good Fish Hatchery Method (CPIB) certification so that consumer confidence will be stronger.

### **3.2. Mina Katon "Concrete Pond Tilapia Spawning" Smart Solution for Mass Production of Superior Tilapia**

Tilapia (*Oreochromis niloticus*) is one of Indonesia's leading commodities that has the potential to be developed in support of national food security as well as economic resilience and improvement of public welfare. Tilapia is a type of fish that has high economic value, where the need for seeds and fish consumption from the year to year, it tends to increase along with the expansion of cultivation business (Darwisito et al., 2008).

According to Murniyati et al. (2014), tilapia fish production from 2010 to 2013 has increased quite high with an average increase of 34.85%. Total tilapia production amounted to 6.83% of total cultivated fish production in 2013. Comparison of total national tilapia fish production to total world tilapia production shows that in 2011 Indonesia was the 3rd largest producer of tilapia fish products with a percentage of around 20.3% to the total production of tilapia in the world.

In 2013, the need for tilapia seeds in Pasuruan Regency reached 8,337,500 heads. This amount is much higher than the seed production of the Pasuruan Regency Fish Seed Center (BBI) which only amounts to 1,249,500 heads. This indicates that the need for tilapia seed in the community is still supplied from outside the region. The impact of this is low quality seeds.

From this problem, the Technical Production Team at the UPTD BBI Pasuruan tried to find a solution in the effort to produce fish seeds. In 2013, the voluntary team used a 3x6 concrete spawning pond for catfish to spawn tilapia. From the experiments carried

out, it produced significant results. The quality and quantity of seeds are more and of higher quality.

Spawning is the process of releasing eggs by the female parent and sperm by the male parent which is then followed by marriage. Spawning as a process of reproduction is a link in the life cycle that determines the survival of species (Sinjal, 2014). Spawning behavior is closely related to synchronization when the time and conditions are right for spawning (Rahardjo et al. 2011). Therefore, in this case, the Pasuruan Regency Government spawned with concrete ponds.

The results of various MINA KATON studies in 2013-2017 obtained the maximum achievement standards for fish seed production in concrete ponds. In addition, the productivity of larvae per female parent can increase from 416 to 666 individuals. The quality of tilapia seeds can be more controlled and quality guaranteed, and the activities carried out can streamline work both in terms of cost, land, time, and energy. In addition, it can also create new technology in tilapia seeding in concrete ponds, which can also increase farmers' income by up to 90%.

### **3.3. Mina Rice Cultivation Innovation**

Aquaculture production in Indonesia is very promising, this is evidenced by the entry of Indonesia as one of the producers of aquaculture production in the world (FAO Fisheries Department, 2006). One of the aquaculture products in Indonesia is produced from the Minapadi system. Not only Mina Katon, Pasuruan Regency, which also has extensive rice fields, has made an innovation in the form of fish cultivation with Mina Padi. Cultivation of fish in paddy embankments is carried out simultaneously with rice plants in the same area to increase freshwater fish production and increase farmers' income.

Minapadi cultivation is an integrated cultivation that increases the productivity of rice fields that produce rice and fish. Minapadi cultivation is also the best solution in dealing with extreme climate changes like today. Se part of the fish dibudid sieve with cultivation methods are carp and tilapia despite the fact that not only the two commodities that can be cultivated by this method. Other commodities that can be cultivated using this method include patchouli, tawes and giant prawns (Cahyanti, 2014).

The aim of this innovation is that the cultivation of fish in paddy fields is carried out simultaneously with rice plants in the same area to increase freshwater fish production and increase farmers' income. And as a result, the cultivation of fish in paddy fields carried out

simultaneously with rice plants in the same area can increase freshwater fish production and increase farmers' income.

#### 4. Conclusion

From the research results, it was found that Pasuruan Regency is an area with high marine and fisheries potential. Knowing the importance of the marine and fisheries sector, and seeing the high potential, the Pasuruan Regency Government created a fishery program or innovation that focuses on mini systems and technology. And the fish used is tilapia because its growth is better than the fish recommended for other minas, namely goldfish.

The results of the innovations carried out by the Pasuruan Regency Government were not kidding, because there were so many advantages and results obtained. And this can not only benefit the community, but also for the government and also BBI. And of course, this policy can already comply with the Government Regulation in the Law on increasing the yield of the fishery sector in Indonesia.

Suggestions for improvement of innovation fisheries in Pasuruan this is Need to do more research to determine other factors outside factors - factors that have been made in research on fisheries business innovation adoption in Pasuruan. In addition, it is recommended to conduct further research on KLHS or AMDAL studies before the plan to develop a small capture fishery product processing industry in the coastal area of Pasuruan City.

#### 5. Acknowledgments

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