

# Community Perception of Effectiveness Climate Village Program Implementation in Overcoming Flood Problems in Surabaya City

Ida Nur I. Sari<sup>1,2\*</sup>, Jerry D.Trijoyo Purnomo<sup>3</sup>

## ABSTRACT

*Surabaya city as the second metropolitan city cannot be separated from flood disaster. According to verification team PROKLIM Lestari 2022, Surabaya is one of the cities designated as a role model for other villages. The appointment of Surabaya city as a role model is not in line with the occurrence of the flood disaster. Studies need to be carried out to measure the effectiveness level of the program. This study aims to measure community perceptions in assessing the effectiveness level of Climate Village Program to overcome the flooding problem in Surabaya using PLS-SEM method. The object of the research is people who felt the effects of flooding in Surabaya. This study uses public perceptions as exogenous variables, while the endogenous variables used were the level of effectiveness and the implementation of PROKLIM. The results showed that the variable of public perception had an effect on the effectiveness and variable effectiveness had an effect on the PROKLIM implementation. So, it can be concluded that the government as a policy maker must always pay attention to the effectiveness of sustainability programs and the community can provide positive evaluations, program can run well, and the flood disaster can resolve.*

**KEYWORDS:** Effectiveness, Perception, PROKLIM, PLS-SEM

<sup>1</sup>Port Analyst, Department of Marine Affairs and Fisheries, Surabaya, Indonesia

<sup>2</sup>Project Management, Interdisciplinary School of Management and Technology, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

<sup>3</sup>Department of Statistics, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

\*Corresponding author: idanurindah12@gmail.com

### 1. INTRODUCTION

Climate change is a problem in the world, including in Indonesia. The United Nations Framework Convention on Climate Change states that developing countries are the countries most negatively affected by climate change (Ilhami, 2019). In order to deal with climate change, a strategy is needed that can minimize and prevent the impacts that will occur, namely through the Climate Village Program (Albar et al., 2017) The Climate Village Program aims to increase welfare at the local level according to regional conditions through community participation in managing the environment around where they live so that the environment is included in an environment that is resistant to the impacts of climate change (Faedlulloh & Wiyani, 2019).

Society is an important component in preserving the environment (Sekar & Muljono, 2020). Communities and government are expected to carry out proper and orderly management of environmental problems. The Climate Village Program has directions and objectives in increasing the effectiveness of climate change adaptation and mitigation (Albar et al., 2017) The effectiveness of a program is the level of ability of an institution or organization to be able to carry out its main tasks in order to achieve the specified goals (Campbell, 1990). Surabaya is one of the cities whose region received the Climate Village Program award. The existence of this award certainly does not rule out the possibility for Surabaya to be free from environmental problems, such as flooding.

Floods always occur in Surabaya every year in every rainy season with various causes (Hidayati & Saibat, 2017). Cited from JawaPos.com until August 2022 there were several flood points in Surabaya with one of the points located at the location designated as a role model. The existence of these problems is not in accordance with the objectives of the effectiveness of the Climate Village Program, which can have a positive impact on the environment. So, it is important to do research to assess the level of effectiveness of the Climate Village Program that has been running in the city of Surabaya in overcoming the problem of flooding.

Through this research indicators will be obtained that influence community perceptions in assessing the effectiveness of the Climate Village Program in overcoming flood problems in Surabaya using PLS-SEM method. The object of research is the flood-affected community in Surabaya from 2021 to 2023 with a minimum height of 20 cm (Badan Nasional Penanggulangan Bencana, 2021). PLS-SEM is used because it can be applied to all data scales, does not require assumptions, does not require a large number of samples, and can be used to determine the relationship between the indicators studied on the effectiveness of the Climate Village Program. Through PLS-SEM analysis, it is hoped that it can assist the government in determining policies regarding increasing the effectiveness of the Climate Village Program in Surabaya, so that it can overcome the problem of flooding in the City of Surabaya.

## 2. LITERATURE REVIEW

The context of this research refers to the community's assessment of the effectiveness of flood control program in Surabaya. Public perception can be measured through several aspects. According to several studies, indicators that influence people's perceptions are acceptance (Visschers & Siegrist, 2013), perceived environmental benefits (Wang & Li, 2016), trust and information (Tantitaechochart et al., 2019) and risks caused by a program (Ryu et al., 2018). Measurement of effectiveness according to Gibson in the study of (Tangkilisam Hessel. Nogi.S., 2005) is measured through the clarity of the goals to be achieved, the clarity of strategies for achieving goals, the process of analysis and formulation of mature policies, planning, proper programming, availability of facilities and infrastructure, educational monitoring, and control systems. There are two strategies launched by PROKLIM in overcoming floods, namely adaptation and mitigation (Albar et al., 2017) and three indicators originating from legal sources concerning the Implementation of Disaster Management which includes preparedness, early warning, and mitigation (Wahyuni, 2020)

Some research on program effectiveness was researched by (Prihutomo & Atmojo, 2020) using qualitative analysis methods through interviews and documentation with results of the program having gone well and can conclude to be effective. Research on the relationship between perceptions of organizational effectiveness and perceptions of program success was researched by (Hanifah & Barlan, 2021) with the results that perceptions of organizational effectiveness have a positive relationship with perceptions of program success rates. (Fariani, 2014) conducted research on program effectiveness using survey research methods with a quantitative approach and descriptive explanations using the concept of measuring effectiveness according to Gibson with indicators such as clarity of goals to be achieved, clarity of strategy for achieving goals, process of analysis and formulation of policies, planning, programming, availability of facilities and infrastructure, educational supervision, and control systems. Based on the results of the study it was concluded that the effectiveness of the accelerated infrastructure development program has been running effectively with an effectiveness score of 79%.

(Suwito, 2014) conducted research on the effectiveness of empowerment programs using the Structural Equation Modeling with the result that the variables of leadership, governance and government ethics have a significant influence on the effectiveness of empowerment which in turn has an impact on the welfare of poor families in Bekasi City. Research on the relationship between perceptions and program effectiveness was researched by (Dintara, 2010) who measured farmers' perceptions of the effectiveness of the Field School-Integrated Plant Management learning program using a purposive sampling survey method. The results of the study are that there is a negative relationship between farmers' perceptions and the effectiveness of learning programs.

Research relationship between perception and effectiveness was investigated by (Dhokal et al., 2022) who measured students' perceptions of involvement in the effectiveness of Respectful Maternity Care education in Nepal using a survey method of

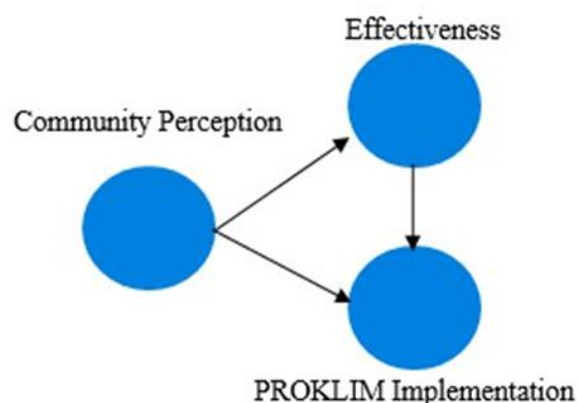
third year students. The result of this research is that there is an educational intervention that can provide a good perception for students so that the effectiveness of the RMC program can be increased and can be developed further.

Research on perception analysis of nuclear reactor research in Thailand using SEM was researched by (Tantitaechochart et al., 2019). This study compares the perceptions between local residents living near the nuclear research reactor site and those living outside the nuclear research reactor area. The results showed that the strongest relationship for internal and external parameters was from perceptions of information technology acceptance through perceptions of trust and benefits.

Researched the analysis of local people's perceptions of TPA using the SEM method using six perception indicators according to (Tantitaechochart et al., 2019), namely social status, perceived information, perceived benefits, perceived risks, perceived trust, and perceived acceptance. The results showed that social status had an effect on perceived benefits, sending perceptions was influenced by perceived information and perceived benefits. For perceptions of trust and perceived risk of the new landfill, there is no significant influence on the perception of acceptance of the new landfill in the community.

Research on public perception of PROKLIM in Tangkerang Labuai was researched by (Setiawan et al., 2015) using a descriptive quantitative research method. The results of this study showed that the better the community's perception of PROKLIM, the better the community's attitude towards PROKLIM which was linear in increasing the community's motivation for the implementation of PROKLIM.

This study became a reference for this research using a different research object, namely the people in Surabaya city who were affected by flooding. Based on theoretical explanations and references from several studies, the relationship between exogenous and endogenous latent variables can be described in a conceptual framework as shown in Figure 1.



**FIGURE 1.** Conceptual Framework

From the conceptual framework formed, three research hypotheses were obtained as follows.

H1 : Community perception variables affect effectiveness

H2 : Community perception variables affect PROKLIM implementation

H3 : Effectiveness variable influences PROKLIM implementation

### 3. METHODS

The data used in this research is primary data obtained through online surveys. Respondents were determined by purposive sampling technique, namely taking samples through certain considerations or criteria (Sugiyono, 2009) The survey was carried out using a snowball sampling technique or sampling with chain references. There are answer choices according to a likert scale of 1 to 7, namely 1 strongly agree, 2 agree, 3 moderately agree, 4 is neutral, 5 less agree, 6 disagree, and 7 strongly disagree. The sample criteria used in this study were people who had experienced the effects of flooding while in Surabaya from 2021 to 2023 with flood heights in the range of 20 cm to 100 cm (Badan Nasional Penanggulangan Bencana, 2021) but in this study using minimum height of 20 cm.

After collecting the data, then do the analysis using Partial Least Square-Structural Equation Modeling. PLS is an analytical method in SEM that can be applied to all data scales, does not require assumptions, and does not have to use large samples (Ghozali, 2011) PLS can analyze as well as constructs formed with reflective indicators and formative indicators. However, there is a weakness in the PLS method, namely the distribution of the data is unknown. The latent variables in this study are community perception variables as exogenous latent variables (giving effect), while effectiveness and PROKLIM Implementation variables as endogenous latent variables (receiving effect). The indicators of each latent variable are described in Table 1.

**TABLE 1.** Variable Indicator

Latent Variable	Indicator
Community Perception*	Information Perception <ul style="list-style-type: none"> <li>- The community knows about PROKLIM</li> <li>- PROKLIM influences environmental changes</li> <li>- Detailed information about the impact of PROKLIM is available</li> <li>- Organized environmental-based activities can be accessed easily</li> <li>- PROKLIM implementation time can be known</li> </ul>
	Perception of Trust <ul style="list-style-type: none"> <li>- Complete information about PROKLIM can be accessed by public</li> <li>- PROKLIM is more efficient</li> <li>- PROKLIM is safer</li> <li>- PROKLIM policies can be trusted</li> <li>- The government openly provides information to the public</li> <li>- The government has ability to deal with negative impacts of PROKLIM</li> <li>- Competent PROKLIM officers</li> <li>- PROKLIM officers are known to the public</li> <li>- The government plays a role in organizing environmentally events</li> </ul>

## Community Perception of Effectiveness Climate

Latent Variable	Indicator
	Perception of Risk <ul style="list-style-type: none"> <li>- The risk level of negative impacts is greater than the risks on the highway</li> <li>- Environmental damage and health hazards can occur</li> <li>- The community was worried when PROKLIM was taking place</li> <li>- Errors in implementation can result in environmental damage and health</li> </ul>
Community Perception*	Perception of Benefit <ul style="list-style-type: none"> <li>- PROKLIM can overcome flood problem</li> <li>- PROKLIM can improve community's economy</li> <li>- PROKLIM can overcome environmental problems</li> <li>- PROKLIM can improve public health</li> <li>- PROKLIM helps protected environment</li> </ul>
	Perception of Acceptance <ul style="list-style-type: none"> <li>- PROKLIM must be applied</li> <li>- The community accepts PROKLIM</li> <li>- PROKLIM planning is useful</li> <li>- The application of PROKLIM is beneficial</li> <li>- PROKLIM helps protected environment</li> </ul>
Effectiveness*	Clarity of goals to be achieved <ul style="list-style-type: none"> <li>- PROKLIM is carried out with the participation community</li> <li>- PROKLIM is implemented in the long term</li> <li>- PROKLIM makes community plays a role in the flood prevention process</li> </ul>
	Clarity of strategy for achieving goals <ul style="list-style-type: none"> <li>- PROKLIM absorbs community energy</li> <li>- Implementation of PROKLIM carried out by different people</li> <li>- Implementation of PROKLIM does not use modern equipment</li> <li>- PROKLIM activities cannot be represented by a substitute party</li> </ul>
	The process of analysis and formulation of policies <ul style="list-style-type: none"> <li>- PROKLIM Implementation has been analyzed according to regional conditions</li> <li>- Previously, an analysis of PROKLIM policies was carried out in each region</li> <li>- Implementation of PROKLIM was approved by the community</li> </ul>
	Careful planning <ul style="list-style-type: none"> <li>- The community and officials discussed the plan</li> <li>- PROKLIM Implementation is accordance with community suggestions</li> <li>- Prior to the implementation of PROKLIM, debriefing was carried out</li> <li>- Before PROKLIM started there was socialization</li> <li>- Type of activity in accordance with regional conditions</li> </ul>
	Proper drafting program <ul style="list-style-type: none"> <li>- PROKLIM improves community productivity</li> <li>- PROKLIM meets community expectations</li> <li>- The implementation of PROKLIM is in accordance with the needs</li> <li>- PROKLIM creates environmental balance</li> <li>- PROKLIM can overcome the flood problem</li> </ul>

Latent Variable	Indicator
	Availability facilities and infrastructure - PROKLIM makes it easy to carry out activities - PROKLIM increases the ability to overcome environmental problems - PROKLIM makes community easy to convey environmental problems - PROKLIM give knowledge in overcoming environmental problems
	Educational protection and control system - There is supervision carried out by environmental officers - PROKLIM provides a means of conveying opinion - PROKLIM is carried out on an ongoing process - There is guidance carried out by officers
PROKLIM Implementation*	Adaptation - PROKLIM provides facilities and infrastructure for flood control - PROKLIM elevates the building structure - PROKLIM builds houses on stilts and floating houses
	Preparedness - PROKLIM officers can identify flood-prone areas - PROKLIM officers can inform flood-prone areas - Information dissemination of flood-prone areas was carried out well - Communities are prepared to face flood disasters - Communities immediately report to officers when flooding occurs
	Early Warning - PROKLIM officers set up an early warning system - The early warning system is carried out in a modern way - The early warning system is functioning properly
	Mitigation - There is a flood disaster socialization in the area of residence - Officers use additional media in socializing flood disasters - There is special training provided by officers - The process of division labor has been going well - The community understands how to deal with flood problems

Source:(Albar et al., 2017; Tangkilisam Hessel. Nogi.S., 2005; Tantitaechochart et al., 2019; Wahyuni, 2020)

SEM has two models, namely the outer and the inner model (Wijanto, 2008) The outer model shows the relationship between the latent variables directly, while the inner model shows the relationship between the latent variables and the indicators stated in the loading factor (Chin, 1998) Evaluation of the outer model is carried out to ensure that the measurements taken are feasible, which is indicated by convergent validity through the results of the loading factor ( $\lambda$ ) on the latent variable and its indicators. Loading factor more than 0.7 can be said to be ideal, meaning that indicator is significant, while loading factor is less than 0.7, the indicator is not significant and deletion is carried out (Chin, 1998) Reliability testing is carried out using composite reliability values. Composite reliability values above 0.7 indicate consistency of internal reliability. Evaluation of the inner model is known from the coefficient of determination (R<sup>2</sup>) and predictive relevance (Q<sup>2</sup>). The R<sup>2</sup> value can be classified into 3 parts, namely if the R<sup>2</sup> value is less than 0.3

then it can be said to be low, if the R2 value is between 0.3 to 0.6 then it is said to be sufficient, and if R2 above 0.6 it is said to be high (Sanchez, 2013) The Q2 value is used to validate the model's ability to predict. If the value of Q2 is greater than 0 and closer to 1, it can be said that the structural model is appropriate (Ghozali, 2011).

#### 4. RESULTS

From the data collection process, 96 respondents obtained data, which is according to the recommendation, namely the minimum sample size used in the SEM model is 80 2 shows evaluation of outer model by convergent validity.

**TABLE 2.** Loading Factor Value

Indicator	$\lambda$	Indicator	$\lambda$	Indicator	$\lambda$	Indicator	$\lambda$
X1.1.2	0.812	X1.5.1	0.800	Y1.5.1	0.811	Y2.2.1	0.787
X1.1.4	0.793	X1.5.2	0.876	Y1.5.2	0.757	Y2.2.2	0.881
X1.2.2	0.848	X1.5.3	0.851	Y1.5.4	0.889	Y2.2.3	0.796
X1.2.3	0.777	X1.5.4	0.858	Y1.5.5	0.812	Y2.2.4	0.859
X1.2.4	0.819	Y1.1.1	0.811	Y1.6.1	0.847	Y2.2.5	0.739
X1.2.6	0.801	Y1.1.2	0.813	Y1.6.2	0.882	Y2.2.6	0.849
X1.2.7	0.828	Y1.1.3	0.793	Y1.6.3	0.780	Y2.3.1	0.844
X1.2.8	0.822	Y1.2.1	0.774	Y1.6.4	0.841	Y2.3.2	0.889
X1.2.9	0.733	Y1.2.4	0.745	Y1.7.1	0.836	Y2.3.3	0.821
X1.4.1	0.815	Y1.3.1	0.794	Y1.7.2	0.858	Y2.4.1	0.786
X1.4.2	0.800	Y1.4.2	0.831	Y1.7.3	0.806	Y2.4.2	0.887
X1.4.3	0.851	Y1.4.3	0.848	Y1.7.4	0.847	Y2.4.3	0.850
X1.4.4	0.891	Y1.4.4	0.784	Y2.1.1	0.835	Y2.4.4	0.835
X1.4.5	0.836	Y1.4.5	0.759	Y2.1.2	0.759	Y2.4.5	0.780

All loading factors are more than 0.7, so these indicators are valid in measuring each variable. Then do evaluation of outer model by composite reliability shown in Table 3.

**TABLE 3.** Composite Reliability

Variable	Composite Reliability
Community Perception (X1)	0.978
Effectiveness (Y1)	0.972
PROKLIM Implementation (Y2)	0.974

The value of composite reliability is more than 0.7, so this shows that the data is reliable or there is consistency of internal reliability. According to the evaluation results of the outer model, it can be said that all variables are valid and reliable. Next, evaluate the inner model as shown in Table 4.

**TABLE 4.** Evaluation of Inner Model

Variable	R2	Q2
Effectiveness (Y1)	0.776	0.960
PROKLIM Implementation (Y2)	0.824	



The value in PROKLIM Implementation variable is high, which means that the community perception and effectiveness can explain the variability in the variable value of 82.4%, while the remaining explained by variations in other variables not included in the model. The value of  $R^2$  of the variable effectiveness is 0.776, which means that the community perception are able to explain the variability in the effectiveness variable of 77.6%. Overall, the value of  $R^2$  is close to 1, it can be said that the PROKLIM Implementation modeling has fit with the data.

Next, test the hypothesis on the inner model using a significance level ( $\alpha$ ) of 0.05 as shown in Table 5. The p-value of the effectiveness variable on the PROKLIM Implementation variable is less than  $\alpha$ , so the decision is reject which means that the effectiveness significantly affects the PROKLIM Implementation. So, if the score on the effectiveness by 1 level, the score on the PROKLIM implementation variable will also increase by 0.777 levels, and vice versa. The p-value of the community perception on the effectiveness variable is less than  $\alpha$ , so the decision is to reject which means that community perception significantly affects effectiveness. The positive T- statistic value means that the community perception will have a positive or direct influence on effectiveness. So, if the score on the community perception variable increases by 1 level, the score on the effectiveness variable will also increase by 0.881 level, and vice versa. However, the p- value of the community perception variable on the PROKLIM implementation variable is more than  $\alpha$  which causes the decision fail to reject or the community perception does not significantly affect PROKLIM implementation.

**TABLE 5.** Hypothesis Testing Result

Variable	Original Sample	T-statistic	P-value	Decision
Effectiveness PROKLIM Implementation	0.777	4.877	0.000	Reject H0
Perception Effectiveness	0.881	20.752	0.000	Reject H0
Perception PROKLIM Implementation	0.146	0.914	0.361	Fail to reject H0

Based on the results of hypothesis testing, it can be seen that there is a relationship between the variables of effectiveness, PROKLIM implementation and community perceptions. Therefore, for the PROKLIM implementation to go well, policy makers must always pay attention to the effectiveness of an ongoing program. Through the results of hypothesis testing, it can also be seen that community perceptions have an influence on assessing the effectiveness of an ongoing program. This is in accordance with (Dintara, 2010) research in which there is a relationship between farmers' perceptions and learning effectiveness.

The results of the study show that the community perception in giving an assessment is not a factor that influences the ongoing PROKLIM implementation. The results of the analysis are in contrast to (Setiawan et al., 2015) research which states that perception has a linear relationship to the implementation of PROKLIM, which means that a good perception from the community can support community motivation in participating in carrying out activities. The community only provides an assessment of

the success or failure of a program, which cannot be used as a reference for the community to participate in implementing ongoing programs.

### 5. CONCLUSIONS

Based on the results, it was found that 18 indicators influenced the variable of perception, 22 indicators affected effectiveness and 16 indicators affected PROKLIM implementation. In addition, based on structural model hypothesis testing, it can be seen that effectiveness affects the PROKLIM implementation and community perceptions affect the effectiveness of PROKLIM implementation. Meanwhile, public perception does not affect the ongoing PROKLIM implementation. The government as a policy maker must pay attention to the effectiveness of the ongoing PROKLIM implementation in Surabaya, so that the community can give a positive assessment and the flood problems in Surabaya can be resolved.

### REFERENCES

- Albar, I., Emilda, A., Tray, C. S., Sugiarmo, Aminah, & Haska, H. (2017). Road Map Program Kampung Iklim (ProKlim). In 2017.
- Badan Nasional Penanggulangan Bencana. (2021). *Banjir Kecamatan Kluet Tengah Surut Meski Masih Tergenang 30 cm 22 Des 2021 04:13 WIB*.
- Campbell, J. P. (1990). *Productivity in Organization*. Joey-Bass.
- Chin, W. W. (1998). *The Partial Least Squares Approach to Structural Equation Modeling. Modeling Methods for Business Research* 295 (2nd ed., Vol. 295, pp. 295–336).
- Dhakal, P., Creedy, D. K., Gamble, J., Newnham, E., & McInnes, R. (2022). Effectiveness of An Online Education Intervention to Enhance Student Perceptions of Respectful Maternity Care: A Quasi-Experimental Study. *Nurse Education Today*, 114(November 2021), 105405. <https://doi.org/10.1016/j.nedt.2022.105405>
- Dintara, B. A. (2010). *Hubungan Persepsi Petani dengan Efektivitas Pembelajaran Sekolah Lapang-Pengelolaan Tanaman Terpadu (SL-PTT)*. Universitas Brawijaya.
- Faedlulloh, D., & Wiyani, F. (2019). Promote Good Governance in Public Financial: The Practice of Local Budget (APBD) Transparency Through Open Data Jakarta in Jakarta Provincial Government. *Jurnal Good Governance*, 15(1), 1–9. <https://doi.org/10.32834/gg.v15i1.41>
- Fariani, D. (2014). Efektivitas Program Percepatan Pembangunan Infrastruktur Kelurahan Di Kota Cilegon. *Skripsi*.
- Ghozali, I. (2011). *Model Persamaan Struktural Konsep dan Aplikasi dengan Program Amos 22 Update Bayesian SEM*. Universitas Diponegoro.
- Hanifah, A., & Barlan, A. (2021). Hubungan antara Persepsi Efektivitas Organisasi dengan Persepsi Keberhasilan Program (Studi Kasus : Gapoktan Lestari , Desa Bulakpacing , Kecamatan Dukuhwaru, Kabupaten Tegal). *Jurnal Sains Komunikasi Dan Pengembangan Masyarakat*, 05(04), 645–658.
- Hidayati, S., & Saibat, S. (2017). Analisis Stres Kerja terhadap Kinerja Pegawai Operator Rumah Pompa Penanggulangan Banjir Rayon Jambangan “Dinas Pekerjaan

- Umum Bina Marga dan Pematusan (DPUBMP)" Kota Surabaya. *Journal Fakultas Ekonomi Universitas ...*, 25, 354–364.  
<https://ejournal.unitomo.ac.id/index.php/fe/article/view/3012%0Ahttps://ejournal.unitomo.ac.id/index.php/fe/article/download/3012/1278>
- Ilhami, M. (2019). *Partisipasi Masyarakat dalam Program Kampung Iklim (Proklim)*. Universitas Brawijaya.
- Prihutomo, N. A., & Atmojo, M. E. (2020). Efektivitas Program Poros dalam Meningkatkan Pelayanan Publik Di BP3TKI Kabupaten Nunukan bagi Calon TKI & TKW pada Tahun 2018. *KEMUDI: Jurnal Ilmu Pemerintahan*, 4(2), 239–255.  
<https://doi.org/10.31629/kemudi.v4i2.1905>
- Ryu, Y., Kim, S., & Kim, S. (2018). Does Trust Matter? Analyzing The Impact of Trust on The Perceived Risk and Acceptance of Nuclear Power Energy. *Sustainability (Switzerland)*, 10(3). <https://doi.org/10.3390/su10030758>
- Sanchez, G. (2013). PLS Path Modeling with R. *R Package Notes*, 235.  
[http://gastonsanchez.com/PLS\\_Path\\_Modeling\\_with\\_R.pdf](http://gastonsanchez.com/PLS_Path_Modeling_with_R.pdf)
- Sekar, D. W., & Muljono, P. (2020). *Hubungan Antara Partisipasi Masyarakat dengan Efektivitas Program Kampung Iklim*. 4(5), 650–662.  
<http://ejournal.skpm.ipb.ac.id/index.php/jskpm>
- Setiawan, R., Alfiandri, & Syukhairi, K. (2015). *Persepsi Masyarakat Terhadap Kualitas Pelayanan Publik Perseroan Terbatas Perusahaan Listrik Negara (Studi Pada Kelurahan Sungai Jang, Kecamatan Bukit Bestari, Kota Tanjungpinang)*. Universitas Maritim Raja Ali Haji Tanjungpinang.
- Sugiyono. (2009). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*.
- Suwito, S. (2014). *The Effectiveness of Empowerment Program*. 1(1).
- Tangkilisam Hessel. Nogi.S. (2005). *Manajemen Publik* (Y. Hardiwati, Ed.). PT. Gramedia Widiasarana Indonesia.
- Tantitaechochart, S., Paoprasert, N., & Silva, K. (2019). Public Perception of The Nuclear Research Reactor in Thailand. *IEEE International Conference on Industrial Engineering and Engineering Management, 2019-Decem*, 1471–1475.  
<https://doi.org/10.1109/IEEM.2018.8607500>
- Visschers, V. H. M., & Siegrist, M. (2013). How a Nuclear Power Plant Accident Influences Acceptance of Nuclear Power: Results of a Longitudinal Study Before and After the Fukushima Disaster. *Risk Analysis*, 33(2), 333–347.  
<https://doi.org/10.1111/j.1539-6924.2012.01861.x>
- Wahyuni, F. (2020). *Efektivitas Kebijakan Penanggulangan Pra Bencana Banjir Badan Penanggulangan Bencana Daerah (BPBD) di Kecamatan Lilirilau, Kabupaten Soppeng*. Universitas Muhammadiyah Makassar.
- Wang, Y., & Li, J. (2016). A Causal Model Explaining Chinese University Students' Acceptance of Nuclear Power. *Progress in Nuclear Energy*, 88, 165–174.  
<https://doi.org/10.1016/j.pnucene.2016.01.002>

Wijanto, S. H. (2008). *Structural Equation Modeling dengan LISREL 8.8: Konsep dan Tutorial*. Graha Ilmu.

**How to cite this article:**

Sari, I. N. I., Purnomo, J.D.T. (2022). Community Perception of Effectiveness Climate Village Program Implementation in Overcoming Flood Problems in Surabaya City. *Jurnal Teknobisnis*, 8(2): 10 - 21. DOI: 10.12962/j24609463.v8i2.1401