# FACTORS AFFECTING PARTICIPATION IN A COMMUNITY-BASED PROGRAM: PADANG CITY-WEST SUMATRA'S EXPERIENCE

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ABSTRACT— Improving the quality of life of a community or an individual is essential for society. This can be accomplished in various ways that require the participation of multiple parties, one of which is through a community-based sanitation program (SANIMAS). However, ensuring the success of promoting participation in a community-based program as one way to improve society's quality of life is another challenge that we should consider. The present study's goal is to identify factors that influence community participation in a SANIMAS program. Community participation was measured in the form of frequency and quantitative descriptive distribution based on the Likert scale. Findings discuss many internal and external factors related to community participation in the SANIMAS program. It contributes to the current literature review of various internal and external factors that promote the participation of the community in improving their quality of life. This study may be used as a reference for the Government and may be established at other locations to develop environmental infrastructure in the context of the participation of the urban community.

Keywords—infrastructure, urban, community, participation, factors

# 1. Introduction

The community's involvement as a whole at all stages of the activities, from a community organisation, planning, implementation, and supervision, is an important effort to improve the community's quality of life [1][2]. This includes participation in developing infrastructure at the community level, e.g. a Community-based sanitation program (SANIMAS). According to Suciati [3] and Budiati [2], the level of community participation in the concept of participatory development is highly anticipated. In other words, the higher the participation of the community, the easier it is to achieve the success rate and vice versa.

Levi and Litwin [5] said that when community participation is very high, the development will be successful. Olajuyigbe [6] has shown that public participation in the Ikaram Millennium Village (MV) impacts the community ownership and sustainability of water projects. Community participation is also the material needed for infrastructure projects to increase satisfaction with housing and increase the level of success [7], which leads to a better

quality of life.

According to Sunarti [8], the barriers encountered in the implementation of community participation are (1) Poverty alleviation-This obstacle may be a key factor because, with poverty, someone will think more about doing something that might not be beneficial to themselves or their group, (2) No Patterns of heterogeneous society — Rising competition and prejudice in the community system, and (3) Bureaucracy system — This factor can be found in the government environment. Bureaucracy often exceeds the standard and is based on complex formal procedures.

Slamet [9] and Akyurek [2] proposed that community participation is influenced by gender, age, educational level, income level, length of stay and livelihood. Socioeconomic and demographic factors determine the level of participation in such projects.

These characteristics of the community determine the form and level of participation of the community in an activity. The influence for each location is not the same, even if it occurs in the adjacent area. The ability of the factors to influence each individual is not the same

because there are also internal factors that influence the participation of the community. Other factors that influence community participation include factors within the community (internal factors), namely the ability and willingness of the community to participate, and factors outside the community (external factors), namely the role of officials and formal institutions that exist [10].

According to Parma [11], community participation's internal factors are gender, age, education, income levels, and livelihoods. The external factors that influence community participation, according to Sunarti [8], are all parties that have an interest and influence on the program. Fundamental influences are those that have an important influence or role to play in the program's success. As factors can be grouped into external and internal factors, enhancing community participation must also be identified. Rogers et al. [12] claim that ties can be enhanced through these interactions, leading to higher levels of social capital and associated positive social outcomes.

As per the above discussion, the present study aims to identify factors affecting the participation of the community in the SANIMAS program in an Indonesian setting. The study methods are discussed in the following section. Findings and discussion will follow this before the final section of this study are concluded.

### 2. Research Methods

### 2.1 Data collection

Both data types, primary and secondary, were used in this study [13] [14]. Secondary data has been compiled from existing reports, documentation, and literature. To collect the primary data, interviews and observations were conducted [15]. The purpose of the interviews is to deeply examine the information that cannot be answered through a questionnaire survey. The interview was conducted by the relevant parties [15], namely the Regional Government, the village administrators and the community leaders directly involved in the SANIMAS program.

# 2.2 Study Area

The present study was carried out in a community-based program, the Community-based Sanitation Program (SANIMAS), funded

by the International Development Bank (IDB) (SANIMAS-IDB), which builds a wastewater management facility in the village of Ulak Karang Selatan, Padang (Figure 1), involving the community. The SANIMAS-IDB program is a major government program financed by the International Development Bank and supported by the Ministry of Health and the Ministry of Public Works and Regional Government. The program aims to improve the quality of public health through the provision of communitycommunal sanitation facilities. particularly for women, marginalised groups and the poor.

# 2.3 Data Analysis

Likert Scale [16] was used to measure the level of community participation in this analysis. Using the Likert Scale, the scores of each indicator can be seen from the variables obtained from the respondents' answers so that the level of participation can be determined through the total score of all variables. Variables may be described along with the assessment indicators for the level of community participation in the form of frequency distribution and quantitative descriptive.

Methods used in this study have also previously been used by researchers in this field, for example real estate [17][18][19][20] and facilities management [21][22][23][24].



Figure 1 Map of Ulak Karang Selatan Village in Padang City

# 3. Results and Discussion – Factors Affecting Community Participation

# 3.1 Internal factors

Internal factors that influence the participation of the community are the characteristics of society itself, i.e. individuals and group unity within it. According to Slamet [9], individual behaviour is closely linked or determined by sociological characteristics such as age, sex, knowledge, work and income. Characteristics of the people in Ulak Karang Selatan Village, particularly those who are users of the SANIMAS infrastructure, can be found in Table 1. In general, the characteristics of the Ulak Karang Selatan Village community are very homogeneous in terms of ethnicity, religion, type of work and level of education.

According to the survey results, 25 respondents in Southern Ulak Karang (100 per cent) were Muslims and heads of families. Table 1 shows that female respondents are more dominant in number than male respondents, with female respondents being 14 (56 per cent) and male respondents being 11. Ulak Karang Selatan's female respondents were predominantly housewives (12 respondents, 48%), while the remaining respondents were entrepreneurs (8 respondents, 32%), labourers (4 respondents, 16%) and one fisherman (1 respondent, 4%).

The educational level of the study respondents is still deficient, which is also very influential in the awareness of the SANIMAS-IDB program. Findings show that less than 50 per cent of respondents were well aware and have knowledge of the program (12 respondents, 48 per cent).

Moreover, from Table 1 of the Respondent Characteristics (internal factors), it is known that the majority of respondents have the same or homogeneous characteristics when viewed in terms of ethnicity, religion, gender, age of work, level of income and level of education because, based on the responses of the respondents, the percentage of the seven characteristic frequency distributions reached a high of 80 per cent. In terms of knowledge, respondents have diverse (heterogeneous) characteristics.

Table 1 Internal Factors

No.	Category	Frequency	Percentage
1	Age < 24 years	25	<b>100</b> 0
	25 s/d 34	1	4
	years 35 s/d 44	7	28
	years 45 s/d 54 years	9	36
	> 55 years	8	32
2	Religion Islam	<b>25</b> 25	100 100
	Non Islam	0	0
3	Gender	25	100
	Man	11	44
	Women	14	56
4	Type of job	25	100
	Fisherman	1	4
	Labourer	4	16
	entrepreneur	8	32
	Government employees	0	0
	Government employees	0	0
	Other (Housewife) (Sewing)	12	48
5	Level of	25	100
	education Graduated from elementary school	5	20
	Graduated from junior high school	8	32
	Graduated from high school	9	36
	Graduate Degree	3	12
	No school	0	0
6	Knowledge of SANIMAS - IDB	25	100
	Well aware	2	8
	Already know	10	40
	Know enough	6	24
	Do not know	5	20
	Do not know	2	8

#### 3.2 External Factors

According to Sunarti [8], these external factors may be considered to be stakeholders, i.e. all

parties that have an interest in and influence over this program. Key stakeholders are people who have a very important influence or role to play in the success of the program. In order to determine the role of each stakeholder engagement that influences the community to participate in the SANIMAS-IDB program. respondents were allowed to assess the role of each stakeholder whose interest in the program was local Government, village officials. community leaders and facilitators, as shown in Table 2. From Table 2 on the role of external factors (external factors), it is known that the influence of stakeholders such as local Government, village officials, community leaders and facilitators is a crucial determinant of the success of this program.

Table 2 External Factors

No.	Category	Scale	Frequency	Percentage
1	The role of the Regional Government		25	100
	Very good	5	3	12
	Nice	4	10	40
	Quite good	3	8	32
	Not good Not good	2 1	4 0	16 0
2	Village Management Role		25	100
	Very good	5	1	4
	Nice	4	12	48
	Quite good	3	6	24
	Not good No good	2 1	3 1	12 4
3	Role of Consultant /		25	100
	Field Facilitator Staff	_		20
	Very good	5	7	28
	Nice	4	8	32
	Quite good	3	6	24
	Not good No good	2 1	3 1	12 4
4	Role of Community Leaders /Adat		25	100
	Very good	5	3	12
	Nice	4	10	40
	Quite good	3	8	32
	Not good No good	2	4 0	16 0

The present study is therefore in-line and confirms the findings of previous studies, which show that community participation is affected by both internal and external factors (e.g. [2][4][8][10][11][25][26]).

# 4. Conclusions

Types of job, income level and educational level have been factoring community participation during meetings and community activities (to be present and actively involved in discussions or other activities). The knowledge factor of SANIMAS-IDB affects all variables in the form level of community participation. Community participation in the assistance form is provided for all development stages, while participation in the form of thought and material is provided at the planning and implementation stages of the program. More participation is seen in the implementation and maintenance phases in the form of money and materials. The role of Government and the role of community leaders impact all forms and levels of community participation. Support and the role of local governments as providers can be gradually reduced as they act as facilitators, starting with the planning, design, implementation and maintenance and monitoring phases. The regional Government's role in the development of infrastructure and facilities in the urban environment must be continued continuously, as the response and participation of the population are still relatively low. The model of community empowerment, principles, and patterns of implementation of the SANIMAS-IDB program in the Ulak Karang Selatan Village-Padang City can be adopted and developed in other urban settings and infrastructure development aim of improving community life. This study's internal and external factors may be used in program planning, execution, monitoring, continuous quality improvement.

# References

- [1] Kersey, J., McCue, M., & Skidmore, E. (2020). Domains and dimensions of community participation following traumatic brain injury. *Brain injury*, 34(6), 708-712.
- [2] Akyurek, G., Bumin, G., & Crowe, T. K. (2020). The factors associated with community participation: Employment and education of people with disabilities in Turkey. *Scandinavian Journal of Occupational Therapy*, 27(1), 28-38.
- [3] Suciati. (2005). The strategic role of women's cooperatives in empowering women towards access to productive resources. Jurnal Penelitian Ilmu-Ilmu Sosial, 6 (1), 24–37.

- [4] Maria Bernadetha Ringa, Nyoman Djinar Setiawina, Made Heny Urmila Dewi, A.A.I.N. Marhaeni. (2020). Collaborate Governance in Developing Community-Based Tourism in Kupang, East Nusa Tenggara. International Journal of Psychosocial Rehabilitation, Vol. 24 (6). DOI: 10.37200/JJPR/V24I6/PR260190
- [5] Levi, Y., & Litwin, H. (1986). Community and cooperatives in participatory development. Gower.
- [6] Olajuyigbe, A. E. (2016). Community Participation and Sustainability Issue: An Evaluation of a Donor-Driven Water Sector in Ikaram Millennium Village Project, Nigeria. Open Journal of Social Sciences, 4(6), 90-103.
- [7] Fakere, A. A., Folorunso, C. O., Fadairo, G., & Arayela, O. (2018). Effects of Socioeconomic Characteristics on Residents' Satisfaction with Housing Infrastructural Facilities in Akure, Nigeria. INCLUSIVE CITY GROWTH AND THE POOR: Policies, Challenges and Prospects, 88.
- [8] Sunarti, E. (2012). Partisipasi masyarakat dalam pembangunan masyarakat. Jurnal. IPB: Bogor.
- [9] Slamet, Y. (1984). Factors relating to farmers' participation in farm cooperatives (Doctoral dissertation, Iowa State University of Science and Technology).
- [10] Kinyanjui, M. N. (2011). Jua Kali Strategies for Socio-Economic Change in Nairobi1. Hemispheres, (26), 29.
- [11] Parma, G. (2011). Factors Driving Community Participation in Festival Serangan Island Attack in Denpasar. Journal of Hospitality and Tourism, 1(2), 1.
- [12] Rogers, S. H., Gardner, K. H., & Carlson, C. H. (2013). Social capital and walkability as social aspects of sustainability. Sustainability, 5(8), 3473-3483
- [13] Sugiyono. 2010. Metode Penelitian. Alvabeta Cv. Bandung.
- [14] Sugiyono. 2014. Metode Penelitian. Alvabeta Cv. Bandung
- [15] Lexy, J. Moleong. 2001. Metodologi Penelitian Kualitatif. Bandung: Remaka Rosdakarya
- [16] Vagias, W. M. (2006). Likert-type scale response anchors. Clemson International Institute for Tourism & Research Development, Department of Parks,

- Recreation and Tourism Management. Clemson University.
- [17] Marliah Ab Wahab, Mariah Awang, Aminah Mohsin, Wilson Rangga Anthony Jiram, Siti Radiaton Adawiyah, Mohd Shahril Abdul Rahman. 2020. Competencies framework for the property manager of shopping malls. International Journal Of Scientific & Technology Research, Vol. 9 Issue: 1, pp. 2246-2249, http://www.ijstr.org/paper-references.php?ref=IJSTR-0120-28546
- [18] Ying Li Yap, Mohd Shahril Abdul Rahman. 2019. Quality Management in Real Estate Industries. International Journal of Scientific & Technology Research, Vol. 8 Issue: 12, pp.836-839 DOI/ http://www.ijstr.org/paper-references.php?ref=IJSTR-1219-26590
- [19] Haw Li Ping, Janet Jemes, Lim Kian Fung, Ngoo Pei Yin, Nur Aiza Binti Maidin, Mohd Shahril Abdul Rahman. 2019. Factors Affecting Commercial Property Value. International Journal of Scientific & Technology Research, Vol. 8 Issue: 12, pp.840-846, DOI/http://www.ijstr.org/paper-references.php?ref=IJSTR-1219-26599
- [20] Onuoha, I. J., Aliagha, G. U., & Rahman, M. S. A. (2018). Modelling the effects of green building incentives and green building skills on supply factors affecting green commercial property investment. Renewable and Sustainable Energy Reviews, 90, 814-823.
- [21] Alan Kim Wing Chong, Abdul Hakim Mohammed, Mat Naim Abdullah, Mohd Shahril Abdul Rahman, (2019)
  "Maintenance prioritisation a review on factors and methods", Journal of Facilities Management, Vol. 17 Issue: 1, pp.18-39, doi.org/10.1108/JFM-11-2017-0058
- [22] Awang, Mariah, Mohammad, A. H., Sapri, Maimunah., & Rahman, M. S. A. (2014a). Requisite facilities management competencies for sustainable development at higher education institutions. Journal of Sustainability Science and Management, 9(2), 71-89.
- [23] Awang, M., Mohammad, A. H., Sapri, M., Rahman, M. S. A., & Lah, N. M. I. N. (2014b). Measurement of Facility Management Competencies in Higher Education Institution. Jurnal Teknologi, 71(4).

- [24] Rahman, M. S. A., Ali, H. M., Sipan, I., Awang, M., & Mohammed, A. H. (2015). Factors affecting the space utilisation rate of Malaysian public universities. Jurnal Teknologi, no. 10 (2015).
- [25] Arni Abdul Gani, Mazlina Mahdzar and Intan Rahayu Abd Razak. (2020). Predicting Local Community Participation in Sustainable Tourism Planning for Tourism in Protected Area. International Journal of Psychosocial Rehabilitation, Vol. 24 (2). 10.37200/IJPR/V24I2/PR200479
- [26] Azmi, N.A., Bahrin, NESK., Rozman, A.T., 2020. Housing Affordability Preferences for 'Rumah Selangorku' Scheme. Journal of Sustainable Technology and Applied Science (JSTAS), 1(2), 1-8. https://doi.org/10.36040/jstas.v1i2.3019