

NYIMAK

Journal of Communication

Published By: Department of Communication Science Faculty of Social and Political Science Universitas Muhammadiyah Tangerang





Journal Address

Program Studi Ilmu Komunikasi Fakultas Ilmu Sosial dan Ilmu Politik UNIVERSITAS MUHAMMADIYAH TANGERANG

Jl. Mayjen Sutoyo No. 2 (depan Lap. A. Yani) Kota Tangerang, Banten, Indonesia

Website: http://jurnal.umt.ac.id/index.php/nyimak

Email: journalnyimak@fisipumt.ac.id

NYIMAK Journal of Communication

DAFTAR ISI (TABLE OF CONTENT)

Governance (Case Study on Corruption of Village Funds in Dasok Village, East Java) —Rachmi Kurnia Siregar, Amin Aminudin—	1 – 10
Social Media Skill in Public Relations and Customer Service for Employers —Arifah Hidayati, Elfitra Desy Surya, Abdul Samad Arief, Achmad Daengs GS, Jose Marco G. Reyes—	17 – 27
Public Service Domain: Exploration Study on The Role of Public Relations in Indonesia —Sugeng Suharto, Prasetyono Hendriarto, Firdaus Yuni Dharta, Marulam MT Simarmata, Mateo Jose A. Vidal—	29 – 40
Family Communication as a Prevention Effort Early Marriage in Pegantenan Village, Madura —Nikmah Suryandari, Irya Nur Holifah—	41 – 54
Social Media Optimization Strategy for Local Fashion Brand Development —Tuti Widiastuti, Adrian Arditiar, Akbar Fauzan Rambe, Eartha Annafi Rasjiddin—	55 – 75
Participatory Communication and Affecting Factors on Empowering Women Farmers in The Urban Farming Program at Bogor City and Bogor Regency —Selly Oktarina, Sumardjo, Ninuk Purnaningsih, Dwi Retno Hapsari—	77 – 93

Evaluating Communication Patterns of Women Legislative Successors	95 – 113
of Karawang in 2019 Election	
—Mayasari, Nani Darmayanti, Yanti Tayo, Zainal Abidin, Kusrin—	
Transformation of Radio Technology in The Digital Age —Ismandianto, Suyanto, Khasna Latifah, Muchid—	115 – 130

Participatory Communication and Affecting Factors on Empowering Women Farmers in The Urban Farming Program at Bogor City and Bogor Regency

Selly Oktarina^{1,2}, Sumardjo³, Ninuk Purnaningsih⁴, Dwi Retno Hapsari⁵

- ¹ Doctoral Student of Development Communication Study Program, Faculty of Human Ecology, Bogor Agricultural University
 - ¹ JL. Raya Darmaga, Darmaga Campus, IPB Graduate School Building, Bogor, Indonesia ² Program Study of Agribusiness, Faculty of Agriculture, Sriwijaya University
- JL. Raya Palembang Prabumulih KM 32, Indralaya, Ogan Ilir District, Indonesia
- 3,4,5 Department of Communication and Community Development, Faculty of Human Ecology, Bogor
 Agricultural University
 - 3,4,5 JL. Raya Darmaga, Darmaga Campus, IPB Graduate School Building, Bogor, Indonesia

Email: 1,2sellymus@yahoo.com, 3sumardjo252@gmail.com, 4npurnaningsih@yahoo.com, 5retnokpm@apps.ipb.ac.id

ABSTRACT

Urban farming is essential as an effort to overcome land limitations and weak productivity in the food supply. Urban farming from a communication perspective is an empowerment effort that directly involves the community in its implementation. This study aims to analyze the participatory communication of women farmers and analyze factors that affect the application. This study was conducted in Bogor City and Bogor Regency. This study is explanatory survey research with a quantitative approach and supported by qualitative data. The data obtained is by cluster sampling with urban, semi-urban, and rural clusters on 231 respondents. Data were analyzed using the score, Difference Test, and Structural Equation Model (SEM). The results show that the participatory communication level in the urban farming program is medium, referring to the dialogue atmosphere, dialogue participation, and convergence level. The factors that significantly influence participatory communication are characteristics, champion competence, the exposure of media communication, and institutional support.

Keywords: Communication, dialogue, participation, urban farming

ABSTRAK

Urban farming penting sebagai upaya mengatasi keterbatasan lahan dan lemahnya produktivitas dalam penyediaan pangan. Urban farming dari perspektif Komunikasi merupakan upaya pemberdayaan yang melibatkan secara langsung masyarakat dalam pelaksanaannya. Fokus penelitian ini adalah menganalisis komunikasi partisipatif wanita tani dan menganalisis faktor-faktor yang berpengaruh terhadap komunikasi partisipatif dalam pelaksanaan program urban farming. Penelitian dilakukan di Kota Bogor dan Kabupaten Bogor. Penelitian ini bersifat survey explanatory research dengan pendekatan kuantitatif dan didukung data kualitatif. Pengambilan sampel secara cluster sampling dengan klaster kelurahan yang dikelompokkan berdasarkan urban, semi urban dan rural terhadap 231 orang wanita tani. Analisa data dilakukan dengan metode skor, uji beda serta analisis structural model (SEM). Hasil penelitian menunjukkan bahwa komunikasi partisipatif wanita tani dalam program urban farming berada pada kriteria sedang yang dilihat dari suasana dialog, partisipasi dialog dan tingkat konvergensi. Faktor yang berpengaruh signifikan terhadap komunikasi partisipatif adalah pendidikan formal, luas lahan, kompetensi pemberdaya, terpaan media komunikasi, dan dukungan lembaga.

Kata Kunci: Dialog, komunikasi, partisipasi, urban farming

Citation: Oktarina, S., Sumardjo, Purnaningsih, N., & Hapsari, D. R. (2022). Participatory Communication and Affecting Factors on Empowering Women Farmers in The Urban Farming Program at Bogor City and Bogor Regency. *Nyimak Journal of Communication*, 6(1), 77–93.



INTRODUCTION

The increase in population and limited land, which is 1,11 percent per year (BPS 2020), has to led weakening productivity in the sustainable food supply. Increasingly recognized the importance of communicating *urban farming* programs as an alternative solution through program dissemination. It's still limited so the awareness and knowledge of women farmers are still lacking. It is due to the low participation of women farmers in implementing the *urban farming* program, which impacts weak empowerment. According to the results of Fitri & Suhifatullah (2013) that weak participation in terms of knowledge and application of technology in a narrow area.

The program currently being promoted is the *urban farming* program, one of the most popular activities for people from various circles during the pandemic. It is related to the implementation of all activities from home (WFH) to prevent transmission of the Coronavirus and maintain family health. Efforts to implement *urban farming* sustainably continue to be encouraged, so it becomes a source of food for families and the surrounding community. One of the ways to develop urban agriculture is through the use of yards so that women farmers can maintain family food security and increase their income. According to Kurniasih (2015); Ali and Sonderling (2017); Arifin (2018), the issue of food security, food sovereignty, and food independence is still hot because it moves from the bottom, starting from the family-scale through the use of yardland by reducing household food expenditure. According to Sumardjo et al., (2020b) states that sodality in the context of empowerment has a synergistic bond of interests in meeting the needs of life.

Urban farming is a characteristic of intensive use of yards and vacant land, on seasonal plants that are verticulture or polyculture, and are often found in cities and villages. According to UNDP (1996), urban agriculture or urban farming has the meaning of a unitary activity of production, processing, and marketing of food and other products, on water and land, carried out in cities and suburbs. Urban farming applies intensive production methods and recycles (reuse) natural resources and municipal waste to produce various types of livestock and food crops. According to Othman et al. (2018), urban farming is a strategy to overcome social problems, namely poverty by encouraging community participation in maintaining food security to achieve welfare.

In Indonesia, those that promote *urban farming* are the cities of Surabaya, Jakarta, Bandung and followed by other cities, namely Bogor City and Bogor Regency, along with population growth and land conversion that is happening a lot. The City of Bogor has an average yard area of 21 hectares in each sub-district (Distan, 2020). The population of Bogor City continues to experience an increasing trend, namely in 2010 were 958,115 people, in 2016

it jumped to 1,064,687 people, in 2017 were 1,081,009 people (Permana, 2019). The average growth rate was 1.53 percent. Bogor Regency is inhabited by 5.43 million people or 11.24 percent of the total population of West Java were 48.27 million people (BPS, 2021).

The implementation of the *urban farming* program is a form of empowering farmer women to participate in development programs. Studies on empowerment communication generally related to participatory communication, namely communication to understand the dialogue process in forming togetherness. In the implementation of participatory communication, there is an exchange and put forward the idea that communication must activate critical reflexivity, dialogue, and awareness-raising (Wilkins et al., 2014). Muchtar (2014) stated that participatory communication is an innovation with a bottom-up approach in development. In addition, as a place of learning in solving problems and finding solutions.

Through participatory communication, people can exchange ideas, knowledge, and experiences with each other. The link between empowering farmer women in *urban farming* programs and participatory communication is that *urban farming* emerged as a response to community participation. Participatory communication in empowering farmer women is used to assess the extent of community agreement in implementing the *urban farming* program to become empowered. The implementation of this *urban farming* program is a form of the agricultural practice training. Purwanto et al., (2020) stated that the implementation of this agricultural training tends to use transactional communication patterns (convergence). Agricultural training can be carried out by all groups, one of which is in Islamic boarding schools. The implementation of participatory communication cannot be separated from many factors including the characteristics of farmer women, empowerment competencies. Several previous studies stated that the characteristics of farmers affect the communication process.

The characteristics of farmers that have a significant effect on the effectiveness of communication are age, formal education, non-formal education, land area, and intensity of participating in counseling in development programs (Abdalla 2012; Muchtar et al. 2014; Zainal et al. 2014; Aminah et al. 2015; Narti 2015; Adawiyah et al. 2017).

The low participation of farmer women in the implementation of *urban farming* programs which has an impact on low empowerment is a phenomenon that is quite interesting to study. This is allegedly related to the weak dissemination of development programs. Research by Ali and Sonderling (2017); Zainal et al. (2014) stated that the pattern of development communication tends to be vertical due to the low intensity of meetings, which have an impact on public misunderstanding of the development message. Therefore, it is interesting

to examine the application of participatory communication and the factors that influence the empowerment of farmer women in the *urban farming* program.

RESEARCH METHOD

This study uses *explanatory survey research*, which is quantitative research and is also supported by qualitative data. The women farmer groups who participate in the urban farming program are those who receive government program assistance. The samples in this study were 231 people (45%) who were taken by *cluster sampling* with a population of 516 people with consideration of *urban, semi-urban,* and *rural* zones based on population density, accessibility, and land appearance in villages. The samples were 127 people in Bogor City and 104 people in Bogor Regency. This study was carried out in Bogor City and Bogor Regency, West Java Province. The data collected are primary data and secondary data. Primary data was conducted using interview techniques to women farmers with a questionnaire guide and field observations. Primary data is participatory communication indicator data which is measured using scores and transformed with a score index of 0-100. The scale used in this study is an ordinal scale which is ranked along a continuum and then the transformation process is carried out (Sumardjo, 1999). Data analysis was carried out quantitatively (statistically) with Difference Test and *Structural Equation Modeling* (SEM). Secondary data is data obtained from agencies related to the research focus and the journals.

DISCUSSION

Participatory Communication on Empowering Farmer Women in the Urban Farming Program

Participatory communication on empowering farmer women in the *urban farming* program is a process of dialogue between farmer women in groups to reach *urban farming* program decisions which include dialogue atmosphere, dialogue participation, and the level of convergence. The average score of participatory communication on empowering farmer women in the *urban farming* program is moderate, namely at a score of 75,31 which is indicated by a high dialogue atmosphere and the level of convergence and participation in dialogue is in the medium criteria. The average score of participatory communication for empowering farmer women in the *urban farming* program can be seen in detail in Table 1.

There is a significant difference between participation in dialogue and the level of convergence of farmer women in Bogor City and Bogor Regency, while in the dialogue atmosphere there is no difference (Table 1). The difference in dialogue participation is because

not all farmer women are active in group discussions and lack the will and courage to express their opinions. This is indicated by the very low and low criteria for dialogue participation. The research of Muthia et al., (2020) stated that some members rarely ask questions and only follow the results of the meeting.

Table 1. Distribution and The Average Score of Farmer Women Participatory Communication in *Urban Farming* Program Empowerment, 2020

No	Participatory	Category	Bogor	Bogor	Combined	Difference
	Communication Indicator		City	Regency		Test
			(%)	(%)	(%)	(α)
1.	Dialogue atmosphere	Very low	0,00	0,00	0,00	0,987
		Low	5,51	1,92	3,90	
		Medium	34,65	39,18	36,69	
		High	59,84	58,89	59,42	
	Average scores		88,58	89,24	88,88	
2.	Dialogue participation	Very low	13,98	13,28	13,66	0,016*
		Low	24,75	17,67	21,56	
		Medium	33,71	37,98	35,63	
		High	27,56	31,07	29,14	
	Average scores		68,71	71,71	70,06	
3.	Convergence level	Very low	12,91	10,19	11,69	0,024*
		Low	14,49	9,10	12,06	
		Medium	29,24	34,36	31,52	
		High	43,36	46,35	44,73	
	Average scores		75,76	79,21	77,29	
	Total average scores		74,00	76,93	75,31	

Description: Index Score: Very low = 1,00-25,00, Low = 26,00-50,00, Medium = 51,00-75,00, High = 76,00-100,00

Most of the farmer women are housewives with formal education graduating from high school. In addition, farmer women are also active as cadres, meaning that they have multiple roles (multitasking) so that they are more skilled at dividing time in carrying out their duties. From the social side, farmer women in Bogor Regency are more unified so they are more open in discussing and giving suggestions because of their sense of belonging to a group, to achieve the same goal. In line with the research results of Muchtar et al. (2014), farmers are actively dialogued in regular meetings and daily discussions. In addition, the participatory communication can be improved through a counseling approach that can empower farmers (Irwandi et al., 2014). The difference in the level of convergence is caused by differences in

the objectives of the *urban farming* program, namely meeting family needs and improving family nutrition. In addition, farmer women want to increase their knowledge about vegetable cultivation as a hobby, also reduce household expenses, and as additional income.

a. Dialogue Atmosphere

Based on Table 2, the average score of the dialogue atmosphere is in the high criteria where the highest score is involvement in the discussion of group rules. The discussion of group rules is interesting because it relates to the rules that must be agreed upon and implemented together according to the applicable rules. The average score of the dialogue atmosphere in both Bogor City and Bogor Regency is in the high criteria.

The dialogue atmosphere in participatory communication on empowering women farmers means the process of conveying thoughts and activeness of farmer women in asking questions, providing advice in the form of knowledge, experience, and conveying problems and obstacles. The atmosphere of the dialogue is measured based on the involvement of the management and members in group activities such as group rules, meeting schedules, and activity notes. The distribution of the average score of the dialogue atmosphere on participatory communication in empowering farmer women in detail can be seen in Table 2.

There is a significant difference between the involvement in discussing the rules of farmer women groups in Bogor City and Bogor Regency, while the involvement in discussing the meeting schedule, group activities, and preparation of activity agenda, there is a significant difference. This is because the rules made by each group tend to be different between Bogor City and Bogor Regency. The rules that apply in Bogor City are the existence of a system of fines if members do not attend without news and there is a monthly fee used for group treasury. This is different from the regulations in Bogor Regency which tend to have voluntary donations in the form of food to be eaten together in meetings.

At the group meeting, discussions were held on various topics ranging from planning the types of vegetables to be planted, picket schedules, cultivation development, group activities, and other agendas, as well as information obtained from PPL, volunteers (*empowerers*), and related agencies. Group meetings have different schedules from each other depending on the agreement starting from once a week, once every two weeks, and once a month. Most of the several farmer women groups have scheduled meetings every Tuesday and Wednesday. Group meetings are usually attended by the *empowerers*, but if they are unable to attend, the group meeting will continue as usual. The large number of women farmers who attend group meetings is a form of participation and high enthusiasm for activities (Jumiatun et al.,

2018). In this dialogue atmosphere, not only the leader and administrators play a role but involve members to be active in group activities. One of them is by taking turns in training, and maintenance pickets every day. From the administrative side, the admin has made complete administrative reports such as attendance, guest books, and minutes of meeting activities.

Table 2. Distribution and The Average Score of Farmer Women Dialogue Atmosphere in Participatory Communication on Empowering *Urban Farming* Programs, 2020

No	Dialogue Atmosphere	Category	Bogor	Bogor	Combined	Difference
	Indicator		City	Regency		Test
			(%)	(%)	(%)	(α)
1.	Involvement in group rules	Very low	0	0	0	0.049*
	discussions	Low	7,09	2,88	5,19	
		Medium	31,50	24,04	28,14	
		High	61,42	73,08	66,67	
	Average scores		88,58	92,55	90,37	
2.	Involvement in meeting	Very low	0	0	0	0,408
	schedule discussions	Low	3,94	0	2,16	
		Medium	38,58	50,00	43,72	
		High	57,48	50,00	54,11	
	Average scores		88,39	87,50	87,99	
3.	Involvement in group	Very low	0	0	0	0,407
	activity discussions	Low	3,15	0	1,73	
		Medium	38,58	37,50	38,10	
		High	58,27	50,00	60,17	
	Average scores		88,78	90,63	89,61	
4.	Involvement in the	Very low	0	0	0	0,132
	preparation of the activity	Low	7,87	4,81	6,49	
	agenda	Medium	29,92	45,19	36,80	
		High	62,20	50,00	56,71	
	Average scores		88,58	86,30	87,55	
	Total average scores		88,58	89,24	88,88	10.

Description: Index Score: Very low = 1,00-25,00, Low = 26,00-50,00, Medium = 51,00-75,00, High = 76,00-100,00

b. Dialogue Participation

The dialogue participation is in medium criteria, both in Bogor City and Bogor Regency (Table 3). This is indicated by the high opportunity to express opinions where members are quite active in providing input or suggestions in meetings. Participation in the dialogue on participatory communication on empowering farmer women is the involvement of dialogue

in the communication process in the *urban farming* program. Participation in dialogue is measured based on the opportunity to express opinions, opportunity in decision making, the ability and willingness to engage in dialogues. The average score distributions of dialogue participation on participatory communication in *urban farming* empowerment are presented in Table 3.

Table 3. Distributions and The Average Scores of Farmer Women Dialogue Participation in Participatory Communication On Empowering *Urban Farming* Program, 2020

No	Dialogue Participation	Category	Bogor	Bogor	Combined	Difference
	Indicator		City	Regency		Test
			(%)	(%)	(%)	(a)
1.	Opportunity to express	Very low	7,48	4,33	6,06	0,040*
	opinions	Low	20,28	11,78	16,45	
		Medium	43,11	46,88	44,81	
		High	29,13	37,02	32,68	
	Average scores		73,47	79,15	76,03	
2.	Opportunity in decision	Very low	7,68	4,81	6,39	0,069
	making	Low	18,90	14,66	16,99	
		Medium	45,47	49,76	47,40	
		High	27,95	30,77	29,22	
	Average scores		73,43	76,62	74,86	
3.	Dialogue skills	Very low	24,21	28,61	26,19	0,912
		Low	30,91	24,52	28,03	
		Medium	24,02	28,13	25,87	
		High	20,87	18,75	19,91	
	Average scores		60,38	59,25	59,88	
4.	Willingness for dialogue	Very low	16,54	15,38	16,02	0,023*
		Low	28,94	19,71	24,78	
		Medium	22,24	27,16	24,46	
		High	32,28	37,74	34,74	
20	Average scores		67,57	71,81	69,48	
	Total average scores		68,71	76,93	70,06	

Description: Index Score: Very low = 1,00-25,00, Low = 26,00-50,00, Medium = 51,00-75,00, High = 76,00-100,00

Table 3 shows that there is a significant difference between the opportunity to express opinions and the willingness to engage in dialogue with women farmers in Bogor City and Bogor Regency, while there is no difference in the opportunity to make decisions and the ability to engage in dialogue. This is because women farmers in Bogor City who become group administrators are those who are active as PKK cadres so they tend to have the courage

and willingness to express opinions compared to women farmers who are less involved in the organization. In addition, each member is always given the freedom to carry out dialogue such as asking questions about problems faced by the group, seeking joint solutions in reaching joint decisions. According to Amalia et al. (2017), good dialogue skills and the opportunity to have an opinion because of the family atmosphere and high tolerance in the group. The states to Sumardjo et al. (2020), one form of participatory technique that can be applied is the discussion method by sharing experiences, exchanging ideas without conflict, deepening insight, and problem-solving skills among group members. In line with the opinion of Tufte & Mefalopulos (2009); Muchtar (2016) that the existence of dialogue in finding solutions by exchanging information is a characteristic of participatory communication.

The problems often faced by women farmers tend to be related to technical problems such as the presence of diseases in chili plants. Therefore, there needs to be an agreement on how to treat and use botanical pesticides. Opportunities in decision-making include moderate where every women farmer has the opportunity to provide views. According to Purnaningsih and Lestari (2021), the decision-making stage is realized by community participation in planning meetings, discussions, and decision-making in each program activity. In addition, there is an agreement to take part in training conducted outside the group. Each member can dialogue, but some take advantage of opportunities, and others only accept every meeting decision. This is different from the results of Hutajulu's (2015) research that the involvement of women farmers in decision-making still tends to be low due to the lack of recognition of women's abilities and insights. This is because paternalist culture is still very closely held by the community so the recognition of gender equality is still not carried out and understood.

c. Convergence Level

Table 4 shows the level of convergence is in the high category where the *urban farming* program aims to meet the needs of themselves and their families and is business-oriented following the objectives of the activities of women farmers. The convergence level of participatory communication on empowering women farmers is a process of understanding the meaning in the information that is mutually agreed upon by the parties communicating in the *urban farming* program between the source and the communicant have the same and equal position. This is following the opinion of Figueroa et al. (2002); Muchtar (2016) that the communication model, which has a cyclical process of sharing information and leading to mutual understanding, agreement, and collective action, can increase public knowledge

which is used as the foundation of a communication model for social change. Based on the results of research Sumardjo (1999) states that the convergent communication model is significantly more effective in increasing the independence of farmers. The level of convergence is measured based on the suitability of the program with the goals of women farmers' activities, the needs of women farmers, and the potential of women farmers. The distribution and average score of convergence level in participatory communication on empowering women farmers' details can be seen in Table 4.

Table 4. Distributions and The Average Scores of Women Farmers' Convergence Level in Participatory Communication on Empowering *Urban Farming* Program, 2020

No	Convergence Level	Category	Bogor	Bogor	Combined	Difference
	Indicator		City	Regency		Test
			(%)	(%)	(%)	(α)
1.	The program's suitability	Very low	21,89	17,12	19,74	0,035*
	with the goals of women	Low	17,32	14,62	16,10	
	farmer's activities	Medium	25,35	29,42	27,19	
		High	35,43	38,85	36,97	
	Average scores		68,58	72,50	70,35	
2.	The program's suitability	Very low	9,29	9,23	9,26	0,569
	with the needs of women	Low	10,87	6,92	9,09	
	farmers	Medium	34,17	37,31	35,58	
		High	45,67	46,54	40,06	
	Average scores		79,06	80,29	79,61	
3.	The program's suitability	Very low	7,56	4,23	6,06	0,030*
	with the potential of	Low	15,28	5,77	11,00	
	women farmers	Medium	28,19	36,35	31,77	
		High	48,98	53,65	51,17	
	Average scores		79,65	84,86	81,93	
	Total average scores		75,76	79,21	77,29	

Description: Index Score: Very low = 1,00-25,00, Low = 26,00-50,00, Medium = 51,00-75,00, High = 76,00-100,00

Table 4 shows that the convergence level of Bogor City is in the medium criteria compared to Bogor Regency which is in the high criteria. This shows that the suitability of the urban farming program is higher so that most of it is carried out based on the goals and potential of women farmers. There is a significant difference between the suitability of the program with the goals and potential of women farmers in Bogor City and Bogor Regency, while the suitability of the program with the need of women farmers is not much different. This is because women farmers in Bogor City tend to have the goal of yard intensification to improve

family nutrition by easily getting healthy vegetables, while in Bogor Regency the use of yards is to increase income. Women farmers have been doing urban farming according to the program's objectives with the need of utilizing the yard to meet a family's needs and increase income. In line with the opinion of Rogers & Kincaid (1981) stated that this program shows convergence (mutual understanding) where there is no difference between messages and feedback between individuals involved in communication.

The needs of women farmers in urban farming activities in Bogor City are to fill their spare time and as a hobby, while Bogor Regency is to fill their spare time by providing family food sources. The potential of women farmers in utilizing their yards in the city of Bogor is to make the yard beautiful and healthy for the family by consuming healthy, pesticide-free vegetables from the yard. This is somewhat different from women farmers in Bogor Regency who use their yards as a side income to be independent.

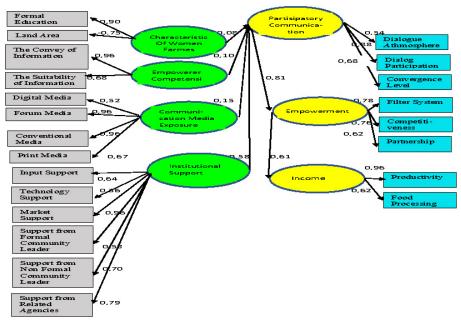
Factors that Influence Participatory Communication on Empowering Women Farmers in *Urban Farming* Programs

The factors that influence the implementation of participatory communication, based on the results of SEM analysis, show that all independent variables (X) have a significant direct effect on participatory communication. Participatory communication is in moderate criteria which are influenced by weak factors that influence the characteristics of women farmers (X_1) , empowerment competence (X_2) , exposure to communication media (X_3) , institutional support (X₂) which affects participatory communication (Y₁) with successive coefficients of influence are 0,08, 0,10, 0,15 and 0,58 respectively. Simultaneously, the influence of the four factors that influence participatory communication contributed 0,48. This means that the diversity of data that can be explained by the model is 48 percent, while the remaining 52 percent is explained by other factors outside the model. This means that every factor that is used as a variable and sub-variable in the study has sufficient determination in increasing the participatory communication of women farmers. Therefore, this model can be a reference in improving participatory communication to play an optimal role in empowering women farmers in urban farming programs. The structural equation model of the factors that influence the participatory communication of women farmers in the empowerment of urban farming programs are:

$$Y1 = 0.08 \times X_1 + 0.10 \times X_2 + 0.15 \times X_3 + 0.58 \times X_4$$
, $R^2 = 0.48$

Figure 1 shows that the institutional support factor is a determining factor that has a greater influence coefficient on participatory communication, which is 0,68 when compared to the magnitude of the influence of other factors. Institutional support is reflected in input support, technology support, support from formal community leaders, support from nonformal community leaders, market support, and support from related agencies. Institutional support that has a dominant influence is market support and related agency support, where the more intensive the dialogue in participatory communication, the better the institutional support. Women farmers hold discussions or dialogues with their respective arguments and opinions so that they can provide solutions to each other regarding the implementation of the urban farming program. In addition, women farmers are active in dialogue, expressing opinions with various parties so that they can get assistance with vegetable seeds, fruit seeds, training, and visits in various activities. So far, relevant agencies have assisted in the production and market access through WA groups and associations managed by KWT such as Aspartan, Aswatani, Appari. According to Hastosaptyadhan et al. (2016) that high participatory communication makes institutional support better.

Empowers competencies are reflected in the ability to convey information and the suitability of the information. Ability to convey information related to urban farming benefits and technology, media and methods used, as well as training and problem-solving. The suitability of information related to planting media, ease of application where they directly come to women farmer groups. Research by Irwandi et al. (2014) stated that participatory communication can be improved through a briefing approach that can empower farmers.



RMSEA = 0,079, GFI = 0,97, AGFI = 0,95, CFI = 0,96, NFI = 0,91

Figure 1. Structural Model of Participatory Communication on Empowering Women Farmers in the *Urban Farming* Program

Communication media exposure to participatory communication is reflected in digital media (Google), forum media (WA Group and KWT), conventional media (face-to-face), and print media (brochures/leaflets). Exposure to communication media has a significant effect on the application of participatory communication, the more knowledge that women farmers get from various communication media, the more willing they are to be involved in participatory communication. This is because they want to share knowledge and experiences gained from media forums (WA Group) and conventional media (face to face at KWT). In line with the opinion of Narti (2015) that the use of various types of media as a source of information makes communication more effective that is broad-minded and active in meetings. This is in line with the opinion of Muchtar et al. (2014), direct meetings and visits make farmers more flexible in conducting dialogue related to agriculture. The research of Yanfika et al., (2017) that the activeness of women farmers in meetings is an effort to obtain more information and help overcome the problems they face. Direct meetings in this study are included in conventional media, which are considered irreplaceable media because face-to-face make someone close.

The characteristics of farmers towards participatory communication are reflected in their formal education (high school graduates) and land area (1-20 m²). The higher the formal education, the more involved in a dialogue that tends to share information and knowledge. Purnaningsih and Lestari (2021) state that the program can run well if the respondents are involved in every stage of the program and have high knowledge about cultivation and experience in participating in the program. The land area has a negative relationship, namely the smaller the land owned, the higher the tendency to participate in dialogue related to urban farming, namely being interested in the technology used in urban farming, especially on limited land. The arable land area has a significant effect on the activities of farmers asking questions in the participatory communication to achieve increasing production (Muchtar et al., 2014).

Participatory communication affects empowerment by 81 percent. This is in line with the research results of Jaya (2017) where several influencing factors are the characteristics of farmers, the quality of information, the role of extension workers, institutional support, and the use of social capital. Empowerment also has a significant effect on income by 0,66 means that when empowerment increases, the same goes for the revenue. The coefficient of determination (R Square) of each factor that influences empowerment contributed 66 percent, whereas other factors outside the model explained the remaining 34 percent.

CONCLUSION

The participatory communication of women farmers in Bogor City and Bogor Regency has been quite effective where there is awareness and willingness to discuss, which has an impact on the growth of dialogue participants and the goals of the program are achieved. Dialogue participation can be increased by intensifying discussions outside group meetings to stimulate willingness to dialogue and exercise courage in expressing opinions. Urban farming can be intensified in the yard to meet the needs of healthy vegetables and make processed food a business.

REFERENCES

Abdalla, I. F. (2012). Socioeconomic aspects of urban and peri-urban agriculture: a diagnostic study in Khartoum, Sudan. Kassel University Press.

Adawiyah, C. R., Sumardjo;, & Mulyani, E. S. (2017). Faktor-faktor yang memengaruhi peran komunikasi kelompok tani dalam adopsi inovasi teknologi upaya khusus (padi, jagung dan kedelai) di Jawa Timur. *Jurnal Agro Ekonomi*, *35*(2), 151–170.

- Ali, A. C., & Sonderling, S. (2017). Factors affecting participatory communication for development: the case of a local development organization in Ethiopia. *Jurnal Komunikasi Malaysian Journal of Communication Jilid*, 33(1), 80–97.
- Amalia, R. M., Sarwoprasodjo, S., & Fitri, R. (2017). Komunikasi partisipatif dan jaringan komunikasi dalam membangun aksi kolektif Perkumpulan Petani Pengguna Air (P3A) di daerah Irigasi Papah. *Jurnal Komunikasi Pembangunan*, *15*(1), 15–29. https://doi.org/10.46937/15201722760
- Aminah, S., Sumardjo, Lubis, D. P., & Susanto, D. (2015). Factors affecting peasants 'empowerment in West Halmahera District a case study from Indonesia. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 116(1), 11–25.
- Arifin, H. S. (14 Mei 2018). Melihat perkembangan urban farming dan agrowisata di Margajaya. Radar Bogor. [Internet] [Diunduh 26 Januari 2019].
- Badan Pusat Statistik [BPS]. (2020). Jawa Barat dalam angka. Badan Pusat Statistik.
- Badan Pusat Statistik [BPS]. (2021). *Kabupaten Bogor dalam angka*. Badan Pusat Statistik.
- Dinas Pertanian [Distan]. (2020). Programa Penyuluhan Pertanian Kota Bogor.
- Figueroa, M. E., Kincaid, D. L., Rani, M., & Lewis, G. (2002). Communication for social change: An integrated model for measuring the process and its outcomes. In *Communication for social change*. https://doi.org/10.1097/00006454-198804000-00003
- Fitri, A., & Suhifatullah, M. (2013). Hubungan kualitas komunikasi ketua kelompok wanita tani dengan partisipasi anggota dalam kegiatan program kelompok wanita tani Di Desa Cikarawang Kecamatan Dramaga Kabupaten Bogor. *E-Journal Universitas Ibn Khaldun Bogor*, *13*(1), 1–13.
- Hastosaptyadhan, R. R. G., Sumardjo;, & Sadono, D. (2016). Dalam pengelolaan wisata Gunung Api Purba Nglanggeran Provinsi Daerah Istimewa Yogyakarta. *Jurnal Komunikasi Pembangunan*, 14(1), 65–77.
- Hutajulu, J. (2015). Analisis peran perempuan dalam pertanian di Kecamatan Rasau Jaya Kabupaten Kubujaya. *Jurnal Social Economic of Agriculture*, 4(April), 83–90.
- Irwandi, D., Prajarto, Y. A. N., & Haryadi, F. T. (2014). Peran komunikasi partisipatif dalam membentuk sikap petani menerapkan inovasi teknologi padi di lahan gambut Kalimantan Tengah. *Kawistara*, 1(1), 1. https://repository.ugm.ac.id/137935/1/ilovepdf_jpg_to_pdf17%2C%2C.pdf
- Jaya, M. N. (2017). Peran komunikasi pembangunan partisipatif an pemanfaatan modal sosial untuk keberdayaan kelompok tani di Daerah Istimewa Yogyakarta [disertasi]. Bogor/:Institut Pertanian Bogor.

- Jumiatun, J., Nurunnisa, D. P. J. I., Rahmatika, N. W., Mar'ati, A. C., Aribah, S. A., & Rusdiyana, E. (2018). Dinamika dan partisipasi anggota kelompok wanita tani dalam program diversifikasi olahan pangan fungsional di Desa Jimbaran Margorejo Pati. *Prima: Journal of Community Empowering and Services*, 34–39. https://jurnal.uns.ac.id/prima/index
- Kurniasih, M. (2015). Implementasi Program Urban Farming Sebagai Strategi Pembangunan Ketahanan Pangan Perkotaan (Studi Di Kelurahan Made, Kecamatan Sambikerep, Kota Surabaya). Jurnal Administrasi Publik, 3(3), 52–72. http://administrasipublik.studentjournal.ub.ac.id/index.php/jap/article/view/818
- Muchtar, K. (2014). Komunikasi partisipatif pada sekolah lapang pengelolaan tanaman terpadu (SL-PTT) di Desa Abbokongrng Kabupaten Sidrap Provinsi Sulawesi Selatan [tesis] (Tesis). Sekolah Pasca sarjana IPB.
- Muchtar, K. (2016). Penerapan komunikasi partisipatif pada pembangunan di Indonesia. *Jurnal Makna.*, 1(1), 20–32.
- Muchtar, K., Purnaningsih, N., & Susanto, D. (2014). Komunikasi partisipatif pada sekolah lapangan pengelolaan tanaman terpadu (SL-PTT). *Jurnal Komunikasi Pembangunan*, 12(2), 1–14.
- Muthia, M., Evahelda, E., & Setiawan, I. (2020). Partisipasi anggota Kelompok Wanita Tani (Kwt) dalam Program Kawasan Rumah Pangan Lestari (KRPL) Di Kecamatan Merawang Kabupaten Bangka. *Journal of Integrated Agribusiness*, *2*(1), 47–61. https://doi.org/10.33019/jia.v2i1.1135
- Narti, S. (2015). Hubungan karakteristik petani dengan efektivitas komunikasi penyuluhan pertanian dalam program SL-PTT (Kasus kelompok tani di Kecamatan Kerkap Kabupaten Bengkulu Utara). *Jurnal Professional FIS UNIVED*, *151*(2), 40–52. https://doi.org/10.1145/3132847.3132886
- Othman, N., Mohamad, M., Latip, R., & Arifin, M. (2018). Urban farming activity towards sustainable wellbeing of urban dwellers. *IOP Conf. Series: Earth and Environmental Science*, 117, 1–7. https://doi.org/doi/:10.1088/1755-1315/117/1/012007
- Permana, R. H. (2019). Bima Arya Ingin Perluas Kota Bogor, Begini Pertumbuhan Angka Penduduknya. *Detik News*. https://news.detik.com/berita/d-4650151/bima-arya-ingin-perluas-kota-bogor-begini-angka-pertumbuhan-penduduknya
- Purnaningsih, N., & Lestari, E. (2021). Keberlanjutan program kawasan rumah pangan lestari bagi satu kelompok wanita tani di Kelurahan Beji Kabupaten Wonogiri Provinsi Jawa Tengah. *Jurnal Agro Ekonomi*, *39*(1), 69–80.
- Purwanto, E., Sumardjo, S., Hapsari, D. R., & Wibowo, C. T. (2020). Communication patterns in the development of life skills at the Darul Fallah Islamic Boarding School in Bogor Regency. *Nyimak: Journal of Communication*, *4*(2), 157–294.

- Rogers, M. E., & Kincaid, D. L. (1981). Communication Networks: Toward a New Paradigm for Research. In *The Free Press*. The Free Press.
- Sumardjo. (1999). Transformasi model penyuluhan pertanian menuju pengembangan kemandirian petani (Kasus di Propinsi Jawa Barat) [disertasi]. Bogor (ID)/: Institut Pertanian Bogor.
- Sumardjo, Firmansyah, A., & Manikharda. (2020). Organic medical plants urban farming based on family empowerment on Bekasi, West Java. *Journal of Hunan University*, 47(12), 34–41.
- Sumardjo, S., Firmansyah, A., Dharmawan, L., & Wulandari, Y. . (2020). Sodality in peri-urban community empowerment: perspective of development communication and extension science. *Sodality/: Jurnal Sosiologi Pedesaan*, *09*(02), 29–41. https://doi.org/10.22500/9202135217.
- Tufte, T., & Mefalopulos, P. (2009). *Participatory communication/: a practical guide* (1st ed.). The world bank. https://doi.org/10.1596/978-0-8213-8008-6.
- United Nation Development Program [UNDP]. (1996). Human Development Report. UNDP.
- Wilkins, K. G., Tufte, T., & Obregon, R. (2014). *The handbook of development communication and social change* (First). Wiley Blackwell.
- Yanfika, H., Amanah, S., Tjitropranoto, P., Fatchiya, A., & Harijati, S. (2017). Kemandirian anggota kelompok wanita Sawargi dalam keberlanjutan usaha pengolahan hasil pertanian di Kelurahan Situ Gede Bogor. *Jurnal Penyuluhan Pertanian*, 12(2), 1–16.
- Zainal, M., Lubis, D. P., & Rangkuti, P. A. (2014). Pola komunikasi partisipatif pada program pengembangan usaha agribisnis perdesaan di Kabupaten Bogor. *Jurnal Komunikasi Pembangunan*, 12(2), 80–90.